# DETECTION MONITORING PROGRAM
# GROUNDWATER STATISTICAL ANALYSIS REPORT

## Third Quarter 2016
## Quarterly Sampling Event

## Bridgeton Landfill, LLC
## Bridgeton Landfill
## Bridgeton, Missouri

## MO DNR PERMIT No. 118912

## November 2016

**Prepared by:**

POSTED
11-9-16




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JETT ENVIRONMENTAL CONSULTING

October 8, 2016

Ms. Charlene Fitch
Missouri Department of Natural Resources
Division of Environmental Quality
1730 East Elm Street
Jefferson City, Missouri 65101

**Re: Detection Monitoring Program Groundwater Statistical Analysis Report**
**Bridgeton Landfill, LLC – Bridgeton Landfill**
**Missouri DNR Permit #MO – 118912**
**Bridgeton, Missouri**

Dear Ms. Fitch:

On behalf of the Bridgeton Landfill, LLC – Bridgeton Landfill, Jett Environmental Consulting is submitting the Detection Monitoring Program Groundwater Statistical Analysis Report for the August 2016 quarterly groundwater monitoring event.

If you have any questions or comments, please contact me at steve.jett@jettenviro.com or 314-496-4654.

Sincerely,

Steve Jett, P.G.
Owner

*Attachment:* *Groundwater Statistical Analysis Report (1 Hardcopy)*

*cc:* *Dana Sincox – Republic Services (1 Hardcopy & PDF via Email)*
*Mark Milward – Saint Louis County Department of Public Health (PDF via Email)*

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# 1.0 INTRODUCTION

On behalf of the Bridgeton Landfill, LLC - Bridgeton Landfill, Jett Environmental Consulting has prepared this Detection Monitoring Program (DMP) Groundwater Statistical Analysis Report for the Third Quarter 2016 quarterly groundwater monitoring event. Sampling for the Third Quarter 2016 event was conducted by Feezor Engineering, Inc. Laboratory analytical testing was performed by Pace Analytical Services, Inc. Statistical evaluations were performed using the statistical analysis software package, Sanitas™, which follows a documented decision logic that incorporates the United States Environmental Protection Agency's (USEPA's) March 2009 Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (hereafter, Unified Guidance).

# 2.0 SITE BACKGROUND AND MONITORING NETWORK

Jett Environmental Consulting statistically evaluated the detection monitoring results from the Third Quarter 2016 event using intra-well prediction limits. Prediction limits are considered a powerful tool for groundwater statistical analysis, when feasible, due to their inherent low false negative and false positive rates utilizing confirmatory resampling, if necessary.

The background period utilized for this report includes samples collected from February 1997 through May 2015. The background period will be updated approximately every two years. Statistical outliers are removed as described **Section 4.1**. Monitoring results from three hydrostratigraphic zones are statistically evaluated at the Bridgeton Landfill. These zones are described in **Section 3.0** below. **Table 1** lists the detection monitoring wells evaluated in this report. The landfill was designed to maintain an inward hydraulic gradient as part of its operation, which would result in each well being located hydraulically upgradient of the landfill.

The facility has prepared statistical power curve graphs to allow Missouri Department of Natural Resources (MDNR) to perform comparisons between the current DMP and USEPA-recommended standards. Under the USEPA's *Unified Guidance*, intra-well prediction limits are constructed to have a site-wide false positive rate (SWFPR) of 10% annually, or 5% per event for a semi-annually sampled facility. The power of the statistical program within each hydrostratigraphic zone is as follows:

**Alluvial Zone:** Based on the smallest pre-screening background size of $n$ = 37 for a parametric prediction limit in the Alluvial Zone, the annual statistical power of the facility's monitoring program under a "1-of-2" verification resampling scheme is approximately 95% for concentration increases of 3 standard deviations and 99% for increase of 4 standard deviations. Based on the smallest pre-screening background size of $n$ = 40 for a non-parametric prediction limit in the Alluvial Zone, the annual power of the program is approximately 63% for increases of 3 standard deviations and 90% for increases of 4 standard deviations.

**St. Louis Formation Zone:** Based on the smallest pre-screening background size of $n$ = 36 for a parametric prediction limit in the St. Louis Formation Zone, the annual statistical power of the facility's monitoring program under a "1-of-2" verification resampling scheme is approximately 90% for concentration increases of 3 standard deviations and 99% for increases of 4 standard deviations. Based on the smallest pre-screening background size of $n$ = 38 for a non-parametric prediction limit in the St. Louis Formation Zone, the annual power of the program is approximately 63% for increases of 3 standard deviations and 90% for increases of 4 standard deviations.

**Salem Formation Zone:** Based on the smallest pre-screening background size of $n$ = 35 for a parametric prediction limit in the Salem Formation Zone, the annual statistical power of the facility's monitoring program under a "1-of-2" verification resampling scheme is approximately 85% for concentration increases of 3 standard deviations and 99% for increases of 4 standard deviations. Based on the smallest pre-screening background size of $n$ = 38 for a non-parametric prediction

limit in the Salem Formation Zone, the annual power of the program is approximately 63% for increases of 3 standard deviations and 90% for increases of 4 standard deviations.

**Appendix A** presents the power curve graphs for the facility's monitoring program. As the size of the background period increases, the statistical power will likewise continue to increase.

A full suite of sample bottles was collected from each well during the Third Quarter 2016 event. For groundwater, a field duplicate was collected at wells D-85, PZ-104-SD, MW-1204. Wells D-85 and MW-1204 are not part of the Detection Monitoring network and were sampled per an MDNR split-sampling request. A field blank was collected at wells PZ-104-SS and PZ-104-KS. Six trip blanks were shipped to the laboratory with the samples.

For constituents where both the original and field duplicate results were greater than five times the reporting limit (RL), each result exhibited a relative percent difference (RPD) of 20% or less. For all constituents where the original and/or field duplicate results were less than five times the RL, the results exhibited a difference that was less than or equal to the RL.

There were no detections above laboratory RLs in the trip blanks. The field blank at PZ-104-SS exhibited one detection above the laboratory RL, acetone (11 ug/L; RL = 10 ug/L).

## 3.0 SITE HYDROGEOLOGY

The hydrogeologic setting for the Bridgeton Landfill was described in the 1995 *Hydrogeologic Characterization Report*, 1995 *Groundwater Monitoring Plan*, 1996 *Physical Characterization Technical Memorandum*, and 1997 *Site Characterization Summary Report*, all prepared by Golder Associates Inc. According to these reports, three general hydrostratigraphic zones are identifiable at the site. These zones are described below.

**Alluvium:** This zone consists of alluvium and loess. The loess was picked up from braided glacial melt-out drainages. The thickness of the loess deposits is greatest in the eastern regions of the drainages and diminishes rapidly to the west. Thus, the bluffs and hills immediately east of the site are composed of loess deposits up to 80 feet thick. Loess was identified in deposits from 13 to 22 feet thick along the eastern edge of the landfill.

Loess is not commonly present along the western portion of the landfill. Where encountered, the loess deposits in the western portion of the site were about 10 to 15 feet thick. The alluvial deposits along the western edge of the site range in thickness up to about 120 feet. Alluvial deposits at the site typically consist of clay and silt materials overlying sands and gravels.

**St. Louis Formation:** The St. Louis Formation is the uppermost bedrock formation at the site. The St. Louis Formation is a limestone and dolomite. The depth to the top of the St. Louis Formation ranges from about 14 to 52 feet below ground surface along the western edge of the landfill. The top of the St. Louis Formation ranges between 425 and 460 feet MSL elevation in the eastern portion of the site, and between 379 and 422 feet MSL elevation in the western portion of the site. This variation reflects the buried edge of the Missouri River valley and limestone bluffs upon which the quarry was sited. The thickness of the St. Louis Formation ranges from about 65 to 130 feet.

**Salem Formation:** The Salem Formation is a limestone. Interbedded dolomite layers are common, and chert clasts, nodules, and layers are scattered throughout the formation at varying frequencies. The top of the Salem Formation is present at a depth of about 165 feet along the eastern edge of the landfill, at an elevation of about 320 feet MSL. Depth to the top of the Salem Formation along the western edge of the landfill ranges between 115 and 135 feet, with a corresponding elevation of about 328 to 340 feet MSL. The thickness of the Salem Formation is about 70 to 80 feet. The Salem Formation is adjacent to the lower portion of the landfill.

**Appendix B** presents a groundwater potentiometric surface map based on depth to water data measured on August 22, 2016. **Appendix B** also includes tables presenting the elevation data for both the groundwater monitoring wells and leachate collection sumps.

## 4.0 STATISTICAL PROCEDURES

The *Sanitas*™ program was utilized to compile and statistically evaluate the data for the Third Quarter 2016 monitoring event.

### 4.1 Outliers

Prior to the determination of intra-well prediction limits, the background data were evaluated for the presence of statistical outliers. Where the background data size was $n < 20$, Dixon's outlier test was utilized with a Type I error rate of $\alpha = 0.05$, and where the background data size was $n \geq 20$, Rosner's outlier test was utilized with a Type I error rate of $\alpha = 0.01$. Dixon's and Rosner's tests are not appropriate for background data that are not normally or log-normally distributed. Accordingly, the data sets were evaluated for normality prior to outlier evaluation. The normality of background data was evaluated using the Shapiro-Wilk test with a Type I error rate of $\alpha = 0.1$ where $n < 10$, $\alpha = 0.05$ where $10 \leq n < 20$, and $\alpha = 0.05$ where $n \geq 20$. In those cases where the background data were determined to not be normally or log-normally distributed, outlier evaluation was not performed.

Statistical outliers identified by the outlier tests were removed from the background data prior to the determination of intra-well prediction limits. Outlier evaluation results are presented on the individual prediction limits graphs presented in **Appendices C**, **D**, and **E**.

### 4.2 Screening for Statistical Trends

Prior to the determination of intra-well prediction limits, the background data were evaluated for increasing statistical trends. Statistical trends were evaluated using the Mann-Kendall trend test at a 98% confidence (Type I error rate of $\alpha = 0.01$ per tail). In those cases where the background data were determined to exhibit an increasing statistical trend (or either an increasing or decreasing statistical trend for field pH), the most recent background data were excluded until the data no longer exhibited a statistical trend. For each constituent-well pair that exhibited an increasing statistical trend, this modified background data period was utilized in the determination of the intra-well prediction limit. Trend evaluation results, including a summary of the constituent-well pairs that utilized modified background data periods, are presented in **Appendices C**, **D**, and **E**.

### 4.3 Intra-Well Prediction Limits

The prediction limit is a statistical method used to compare a single observation to a group of observations. The prediction limit is calculated to include observations from the same population with a specified confidence. In groundwater monitoring, a prediction limit approach may be used to make comparisons between background and compliance data. The limit is developed to contain all future observations, within a certain probability. If any future observation exceeds the prediction limit, this is considered statistically significant evidence that the observation is not representative of background.

The background data were first evaluated for normality using the Shapiro-Wilk test with at Type I error rate of $\alpha = 0.1$ where $n < 10$, $\alpha = 0.05$ where $10 \leq n < 20$, and $\alpha = 0.05$ where $n \geq 20$. In those instances where the background data were not normally distributed, the data were transformed using each of the possible transformations in the "ladder of powers": $x^{1/2}$, $x^2$, $x^{1/3}$, $x^3$, $ln(x)$, $x^4$, $x^5$, $x^6$. Each transformed data set was then re-evaluated for normality. The first transformation that resulted in a normal distribution was utilized for the determination of the intra-well prediction limit. In those instances where the background data were normal or transformed-normal and also

consisted of less than 50% non-detects, a parametric intra-well prediction limit was determined. If 15% or less of the background data consisted of non-detects, the non-detects were replaced with concentrations equal to one-half of the reporting limit prior to the determination of parametric intra-well prediction limits. If greater than 15%, but less than 50% of the background data consisted of non-detects, then the mean and standard deviation utilized in the determination of the parametric intra-well prediction limit were estimated according to the Kaplan-Meier method.

In those instances where the background data were not normal or transformed-normal, or where the background data consisted of 50% or greater non-detects, a non-parametric intra-well prediction limit was determined.

**Table 2** lists the prediction limit exceedances observed for the Third Quarter 2016 event. Intra-well prediction limit summary tables and graphs are presented in **Appendices C**, **D**, and **E**.

For the Third Quarter 2016 event, there were no results that exceeded an intra-well prediction limit in the Alluvial Zone.

There were 13 results that exceeded their respective intra-well prediction limits in the St. Louis Formation Zone: total calcium, chloride, total magnesium, total manganese, sulfate, and total dissolved solids (TDS) at PZ-105-SS; total barium, chloride, total iron, and total sodium at PZ-106-SS; total barium at PZ-110-SS; and ammonia and total magnesium at PZ-115-SS.

There were 15 results that exceeded their respective intra-well prediction limits in the Salem Formation Zone: total barium, chloride, total chromium, total hardness, total magnesium, total nickel, total sodium, field specific conductance, TDS, and TOC at PZ-104-SD; and ammonia, total barium, total magnesium, field specific conductance, and TDS at PZ-106-SD.

Of the 28 prediction limit exceedances observed for the Third Quarter 2016 event, 26 were also observed for the previous monitoring event in Second Quarter 2016. Two new prediction limit exceedances were observed for the Third Quarter 2016 event: total barium at PZ-106-SS and total manganese at PZ-115-SS. In accordance with MDNR correspondence to Bridgeton Landfill, LLC date October 23, 2003, the next sampling event (November/December 2016) will be used to confirm the new exceedances.

The Third Quarter 2016 event served as a confirmatory event for the 6 new prediction limit exceedances that were observed for the Second Quarter 2016 event. Five of the new exceedances observed for the Second Quarter 2016 event were not confirmed as exceedances for the Third Quarter 2016 event: total barium at PZ-105-SS; total hardness at PZ-105-SS; total magnesium at PZ-115-SS; and total organic carbon (TOC) at PZ-110-SS and PZ-205-SS. One of the new exceedances observed for the Second Quarter 2016 event was confirmed as an exceedance for the Third Quarter 2016 event: total barium at PZ-110-SS.

## 4.4 Statistical Trends in Exceeding Constituents

Each constituent that exceeded its intra-well prediction limit was evaluated for increasing statistical trends. Statistical trends were evaluated using the Mann-Kendall trend test with a 98% confidence (Type I error rate of $\alpha = 0.01$ per tail).

Trend evaluation indicated that of the 28 constituent-well pairs that exceeded intra-well prediction limits for the Third Quarter 2016 event, 24 also exhibited increasing statistical trends. The following constituent-well pairs did not exhibit an upward statistical trend: total manganese at PZ-105-SS; total barium at PZ-106-SS; field specific conductance at PZ-106-SD; and TDS at PZ-106-SD.

Trend evaluation results for constituents that exceeded intra-well prediction limits are presented in **Appendices C**, **D**, and **E**. Also presented in **Appendices C**, **D**, and **E** are time series plots for each of the constituents that were statistically evaluated in this report.

## 4.5 Organic Constituent Results

During the Third Quarter 2016 monitoring event, organic constituents were detected at four wells: PZ-114-AS, PZ-104-SS, PZ-104-SD, and PZ-110-SS. Wells PZ-114-AS, PZ-104-SS, and PZ-104-SD have previously exhibited confirmed organic constituent detections. Benzene at well PZ-110-SS was initially detected during the Second Quarter 2016 event (14.1 ug/L) and was confirmed detected during the Third Quarter 2016 event (5.2 ug/L). Well PZ-110-SS was resampled on October 19, 2016. Benzene was reported as non-detect (<5 ug/L) during the October 2016 resampling event.

Benzene, chlorobenzene and 1,4-dichlorobenzene were detected at upgradient Alluvial Zone well PZ-114-AS at concentrations of 5.2 ug/L, 44.9 ug/L, and 6.3 ug/L, respectively. Benzene has been detected at PZ-114-AS since at least 2003. Chlorobenzene has been detected at PZ-114-AS since at least 1997. 1,4-Dichlorobenzene has been detected at PZ-114-AS since at least 2002. **Table 3** presents the historical results for organic constituents detected at PZ-114-AS. As described in the MDNR's aforementioned October 23, 2003 letter, organic constituent detections at PZ-114-AS appear to be related to impacts from the upgradient PM Resources, Inc. property.

The following organic constituents were detected at well PZ-104-SS: 1,4-dichlorobenzene (9.0 ug/L), benzene (221 ug/L), ethylbenzene (7.8 ug/L), toluene (17.1 ug/L), and total xylenes (22.1 ug/L). Detections of each of these VOCs were first observed at PZ-104-SS in November 2012. **Table 4** presents the historical results for organic constituents that have been detected at PZ-104-SS from November 2012 onward. The confirmed organic constituent detections at PZ-104-SS are currently being evaluated under the assessment monitoring program, as detailed in the December 17, 2013 Assessment Monitoring Plan (AMP).

The following organic constituents were detected at well PZ-104-SD: 1,4-dichlorobenzene (8.9 ug/L), benzene (451 ug/L), ethylbenzene (7.3 ug/L), toluene (9.3 ug/L), and total xylenes (33.7 ug/L). Detections of benzene and toluene were first observed at PZ-104-SD in May 2012. Detections of 1,4-dichlorobenzene, ethylbenzene, and total xylenes were first observed in November 2012. **Table 4** presents this historical results for organic constituents that have been detected at PZ-104-SD from May 2012 onward. The confirmed organic constituent detections at PZ-104-SS are currently being evaluated under the assessment monitoring program, as detailed in the AMP.

# 5.0 STATISTICAL RESULTS SUMMARY

For the Third Quarter 2016 monitoring event, there were no results that exceeded an intra-well prediction limit in the Alluvial Zone. There were 13 results that exceeded their respective limits in the St. Louis Formation Zone. There were 15 results that exceeded their respective limits in the Salem Formation Zone.

Two new prediction limit exceedances were observed for the Third Quarter 2016 event: total barium at PZ-106-SS and total manganese at PZ-115-SS. In accordance with MDNR correspondence to Bridgeton Landfill, LLC date October 23, 2003, the next sampling event (November/December 2016) will be used to confirm the new exceedances.

The Third Quarter 2016 event served as a confirmatory event for the 6 new prediction limit exceedances that were observed for the Second Quarter 2016 event. Five of the new exceedances observed for the Second Quarter 2016 event were not confirmed as exceedances for the Third Quarter 2016 event: total barium at PZ-105-SS; total hardness at PZ-105-SS; total magnesium at PZ-115-SS; and total organic carbon (TOC) at PZ-110-SS and PZ-205-SS. One of the new exceedances observed for the Second Quarter 2016 event was confirmed as an exceedance for the Third Quarter 2016 event: total barium at PZ-110-SS.

Well PZ-104-SD exhibited confirmed exceedances and upward trends for the following inorganic constituents in Third Quarter 2016: total barium, chloride, total chromium, total hardness, total magnesium, total nickel, total sodium, field specific conductance, TDS, and TOC. PZ-104-SD also exhibited confirmed detections for the following organic constituents: 1,4-dichlorobenzene, benzene, ethylbenzene, toluene, and total xylenes.

Pursuant to Title 10 of the Missouri Code of State Regulations (CSR) 80-3.010 (11)(C)6.C, the facility submitted an AMP on December 17, 2013 in response to the confirmed exceedances, upward trends, and confirmed organic detections that were first observed at well PZ-104-SD in November 2012 and at PZ-104-SS in April 2013. In accordance with the AMP and a July 30, 2014 comment letter from the MDNR, the facility performs assessment monitoring events at PZ-104-SS and PZ-104-SD semi-annually in the second and fourth quarters. The results of assessment monitoring were most recently discussed in the August 29, 2016 Annual Assessment Monitoring Report with the next annual report scheduled to be submitted by August 31, 2017. Potential remedial alternatives to address the groundwater quality issues at wells PZ-104-SS and PZ-104-SD were discussed and evaluated in a February 19, 2016 Assessment of Corrective Measures Report Addendum by Feezor Engineering, Inc.

**Appendix F** presents a copy of the laboratory analytical report and field information forms for the Third Quarter 2016 event.

## 6.0 REVISED STATISTICAL ANALYSIS PLAN

On November 23, 2010, the Bridgeton Landfill submitted a revised Statistical Analysis Plan to the MDNR. This Plan was intended to update and supersede the current statistical evaluation procedures at the facility, and was prepared according to the USEPA's Unified Guidance and recommendations provided by the MDNR. The Plan is currently under review by the MDNR. The statistical evaluation methods described in the Plan will be implemented following MDNR approval.

# TABLES

| TABLE 1<br>Detection Monitoring Wells – Third Quarter 2016<br>Bridgeton Landfill, LLC<br>Bridgeton Landfill | |
|---|---|
| **Zone** | **Groundwater Detection Monitoring Wells** |
| Ailuvial | PZ-114-AS |
| St. Louis Formation | PZ-100-SS, PZ-104-SS, PZ-105-SS, PZ-106-SS, PZ-109-SS<br>PZ-110-SS, PZ-115-SS, PZ-201A-SS, PZ-205-SS |
| Salem Formation | PZ-100-SD, PZ-104-SD, PZ-106-SD, PZ-111-SD |

# TABLE 2
## Prediction Limit Exceedances - Third Quarter 2016
## Bridgeton Landfill, LLC
## Bridgeton Landfill

| Zone | Well | Constituent | Units | Result | Prediction Limit | Repeat from June 2016? | Trend |
|---|---|---|---|---|---|---|---|
| Alluvial | None | | | | | | |
| St. Louis Formation | PZ-105-SS | Calcium, Total | mg/L | 107 | 87 | Yes | Increasing |
| | | Chloride | mg/L | 65.0 | 26 | Yes | Increasing |
| | | Magnesium, Total | mg/L | 57.5 | 47 | Yes | Increasing |
| | | Manganese, Total | mg/L | 0.133 | 0.068 | Yes | None |
| | | Sulfate as $SO_4$ | mg/L | 49.5 | 47 | Yes | Increasing |
| | | Total Dissolved Solids | mg/L | 608 | 540 | Yes | Increasing |
| | PZ-106-SS | Barium, Total | mg/L | 0.176 | 0.170 | No | None |
| | | Chloride | mg/L | 37.7 | 17 | Yes | Increasing |
| | | Iron, Total | mg/L | 2.31 | 1.40 | Yes | Increasing |
| | | Sodium, Total | mg/L | 22.6 | 17.0 | Yes | Increasing |
| | PZ-110-SS | Barium, Total | mg/L | 0.281 | 0.280 | Yes | Increasing |
| | PZ-115-SS | Ammonia | mg/L | 0.99 | 0.34 | Yes | Increasing |
| | | Manganese, Total | mg/L | 0.0739 | 0.019 | No | Increasing |
| Salem Formation | PZ-104-SD | Barium, Total | mg/L | 0.628 | 0.230 | Yes | Increasing |
| | | Chloride | mg/L | 356 | 110 | Yes | Increasing |
| | | Chromium, Total | mg/L | 0.0169 | 0.0130 | Yes | Increasing |
| | | Hardness, Total | mg/L | 590 | 570 | Yes | Increasing |
| | | Magnesium, Total | mg/L | 72.9 | 66 | Yes | Increasing |
| | | Nickel, Total | mg/L | 0.0701 | 0.0600 | Yes | Increasing |
| | | Sodium, Total | mg/L | 197 | 34 | Yes | Increasing |
| | | Specific Condutance, Field | umhos/cm | 2,030 | 1,500 | Yes | Increasing |
| | | Total Dissolved Solids | mg/L | 1,370 | 780 | Yes | Increasing |
| | | Total Organic Carbon | mg/L | 110 | 32 | Yes | Increasing |
| | PZ-106-SD | Ammonia | mg/L | 58.6 | 1.4 | Yes | Increasing |
| | | Barium, Total | mg/L | 0.664 | 0.15 | Yes | Increasing |
| | | Magnesium, Total | mg/L | 75.6 | 63 | Yes | Increasing |
| | | Specific Condutance, Field | mg/L | 2,680 | 1,200 | Yes | None |
| | | Total Dissolved Solids | mg/L | 1,360 | 700 | Yes | None |

**Table 3**
**Organic Constituent Detections at PZ-114-AS - Third Quarter 2016**
**Bridgeton Landfill, LLC**
**Bridgeton Landfill**

| Sampling Date | Constituent | | |
|---|---|---|---|
| | Benzene | Chlorobenzene | p-Dichlorobenzene (1,4 Dichlorobenzene) |
| 8/25/1997 | <5.0 | 7 | <5.0 |
| 11/10/1997 | <5.0 | 5.1 | <5.0 |
| 2/16/1998 | <5.0 | <5.0 | <5.0 |
| 5/27/1998 | <5.0 | <5.0 | <5.0 |
| 11/12/1998 | <5.0 | 7.2 | <5.0 |
| 5/19/1999 | <5.0 | <5.0 | <5.0 |
| 11/19/1999 | <5.0 | <5.0 | <5.0 |
| 5/23/2000 | <5.0 | <5.0 | <5.0 |
| 11/13/2000 | <5.0 | <5.0 | <5.0 |
| 5/15/2001 | <5.0 | 7.70 | <5.0 |
| 11/7/2001 | <5.0 | 5.0 | <5.0 |
| 5/21/2002 | <5.0 | 130 | <5.0 |
| 7/24/2002* | NA | 150 | NA |
| 11/19/2002 | <5.0 | 120 | 5.5 |
| 5/28/2003 | <5.0 | 110 | 6.2 |
| 11/20/2003 | 6.1 | 120 | 14 |
| 5/11/2004 | 5.4 | 130 | 18 |
| 11/17/2004 | <5.0 | 96 | 11 |
| 5/25/2005 | <5.0 | 102 | 12.2 |
| 11/30/2005 | <5.0 | 120 | 16 |
| 5/23/2006 | <5.0 | 95 | 17 |
| 11/8/2006 | <5.0 | 87 | 12 |
| 5/17/2007 | <5.0 | 76 | 8.7 |
| 11/7/2007 | <5.0 | 95 | 11 |
| 5/7/2008 | <5.0 | 64 | 9.0 |
| 11/5/2008 | <5.0 | 72 | 9.4 |
| 5/8/2009 | <5.0 | 43 | <5.0 |
| 11/4/2009 | <5.0 | 19 | <5.0 |
| 5/20/2010 | <5.0 | 24 | <5.0 |
| 11/11/2010 | <5.0 | 64 | 7.0 |
| 5/11/2011 | <5.0 | 17 | <5.0 |
| 11/18/2011 | <5.0 | 14 | <5.0 |
| 5/10/2012 | <5.0 | 9.6 | <5.0 |
| 11/27/2012 | <5.0 | 42 | <5.0 |
| 4/8/2013 | 8.9 | 86 | 5.4 |
| 10/8/2013 | <5.0 | 69 | 6.3 |
| 5/28/2014 | 6.7 | 68 | 6.5 |
| 9/23/2014 | 5.0 | 58 | 5.9 |
| 11/20/2014 | <5.0 | 46.0 | 5.5 |
| 2/4/2015 | <5.0 | 41.1 | <5.0 |
| 5/13/2015 | <5.0 | 34.0 | <5.0 |
| 8/24/2015 | <5.0 | 49.6 | 5.6 |
| 11/20/2015 | 9.1 | 67.9 | 7.1 |
| 3/9/2016 | 6.2 | 58.8 | 8.5 |
| 6/1/2016 | 6.7 | 65.7 | 8.7 |
| 9/6/2016 | 5.2 | 44.9 | 6.3 |

*Notes*

*All results are presented in units of ug/L.*

*Result above laboratory Reporting Limit (RL).*

** Confirmation sampling event.*

*NA: Not analyzed. Benzene and p-dichlorobenzene not detected during the previous event, and confirmation not required.*

*As described in an October 23, 2003 letter from the MDNR, organic constituent detections at well PZ-114-AS appear to be related to impacts from the upgradient PM Resources, Inc. property.*

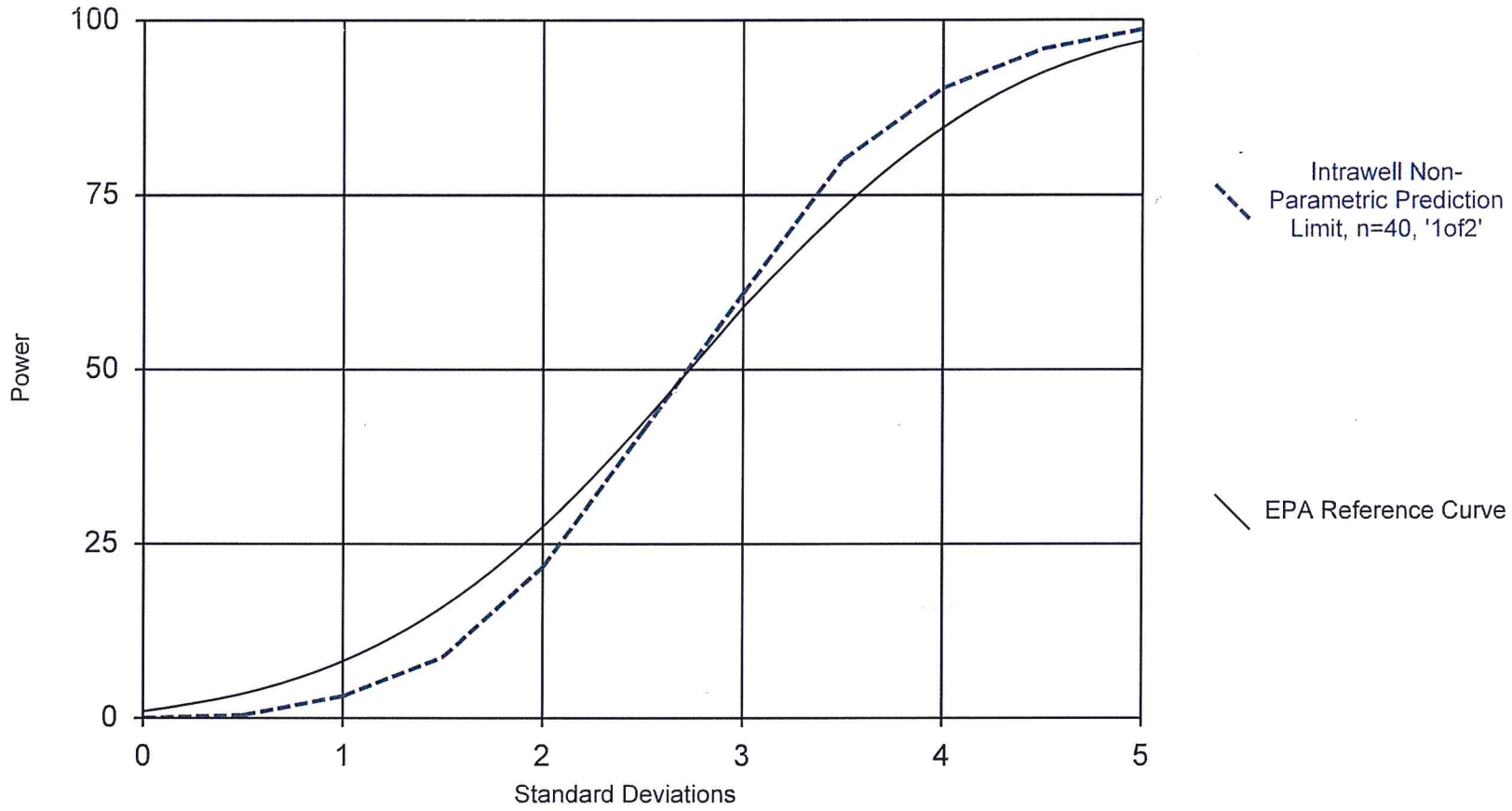
**Table 4**
**Organic Constituent Detections at PZ-104-SS & PZ-104-SD - Third Quarter 2016**
**Bridgeton Landfill, LLC**
**Bridgeton Landfill**

| Well | Date | 124-Trimethylbenzene | 12-Dichloroethane | 14-Dichlorobenzene | 1-Chlorobutane | 2-Hexanone | Acetone | Aroclor 1221 (PCB-1221) | Benzene | Chloroethane | Ethylbenzene | Isopropylbenzene | m+p-Cresols | Methyl ethyl ketone (2-Butanone) | Methyl-iso-butyl ketone | Methyl-tert-butyl ether | p-Isopropyltoluene | Tetrahydrofuran | Toluene | Xylenes [Total] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 104-SD | 5/11/2012 | n/a | <5 | <5 | n/a | <10 | <10 | n/a | 57 | <10 | <5 | n/a | n/a | <10 | <10 | n/a | n/a | n/a | 5.5 | <5 |
| | 11/27/2012 | 6.56 | 6.7 | 6 | 3.44 | <10 | <10 | n/a | 350 | <10 | 11 | 1.36 | n/a | <10 | <10 | 4.4 | 12.2 | 617 | 140 | 31 |
| | 4/11/2013 | n/a | 24 | <0.66 | n/a | <3.1 | 59 | n/a | 1000 | <0.8 | 24 | n/a | n/a | 37 | <2.7 | n/a | n/a | n/a | 1800 | 58 |
| | 10/7/2013 | n/a | <5 | 5.4 | n/a | 19 | 3000 | n/a | 920 | <10 | 18 | n/a | n/a | 1900 | 47 | n/a | n/a | n/a | 250 | 42 |
| | 5/28/2014 | n/a | <5 | <5 | n/a | <10 | <10 | n/a | 1300 | <10 | 20 | n/a | n/a | <10 | <10 | n/a | n/a | n/a | 73 | 46 |
| | 9/24/2014 | <5 | <5 | <5 | n/a | <10 | 11 | <0.1 | 1200 | <10 | 13 | <10 | 21 | <10 | <10 | <10 | <10 | 63 | 34 | 25 |
| | 11/20/2014 | <5 | <5 | <5 | n/a | <10 | <10 | <0.1 | 820 | <10 | 11 | <5 | <10 | <10 | <10 | <5 | <5 | 231 | 36.5 | 21 |
| | 2/3/2015 | <5 | <5 | <5 | n/a | <10 | <10 | <0.099 | 542 | <10 | 10 | <5 | 34 | <10 | <10 | <5 | <5 | 420 | 26.1 | 20.4 |
| | 5/13/2015 | <5 | <5 | <5 | <5 | <10 | <10 | <0.2 | 672 | <10 | 9.4 | <5 | 20.4 | <10 | <10 | <5 | <5 | 301 | 25.1 | 22.7 |
| | 8/25/2015 | n/a | <5 | <5 | <5 | <10 | 109 | n/a | 564 | <10 | 7.3 | n/a | n/a | 70.9 | <10 | n/a | n/a | n/a | 84.3 | 22 |
| | 11/18/2015 | <5 | <5 | <5 | <5 | <10 | <10 | <0.2 | 640 | <10 | 5.4 | <5 | 67.6 | <10 | <10 | 5.4 | <5 | 1560 | 10.5 | 19.1 |
| | 3/1/2016 | n/a | <5 | <5 | <50 | <10 | <10 | n/a | 426 | <10 | <5 | n/a | <10 | <10 | <10 | n/a | n/a | n/a | 9.6 | 19.3 |
| | 6/3/2016 | <5 | <5 | <5 | <5 | <10 | <10 | <0.2 | 554 | <10 | <5 | <5 | <10 | <10 | <10 | 5.2 | <5 | <1000 | 8.5 | 24.4 |
| | 8/24/2016 | n/a | <5 | 8.9 | n/a | <10 | <10 | n/a | 451 | <10 | 7.3 | n/a | n/a | <10 | <10 | n/a | n/a | n/a | 9.3 | 33.7 |
| 104-SS | 5/11/2012 | n/a | <5 | <5 | n/a | <10 | <10 | n/a | <5 | <10 | <5 | n/a | n/a | <10 | <10 | n/a | n/a | n/a | <5 | <5 |
| | 11/27/2012 | n/a | 20 | 8.2 | n/a | <10 | <10 | n/a | 1100 | <10 | 18 | n/a | n/a | <10 | 63 | n/a | n/a | n/a | 78 | 48 |
| | 4/11/2013 | n/a | 43 | 6.3 | n/a | 72 | <4 | n/a | 2400 | 11 | 26 | n/a | n/a | 110 | 220 | n/a | n/a | n/a | 140 | 66 |
| | 10/9/2013 | n/a | 43 | 7.5 | n/a | 52 | <10 | n/a | 2200 | <10 | 35 | n/a | n/a | <10 | 210 | n/a | n/a | n/a | 150 | 78 |
| | 5/28/2014 | n/a | <5 | 6.8 | n/a | <10 | <10 | n/a | 1200 | <10 | 24 | n/a | n/a | <10 | <10 | n/a | n/a | n/a | 87 | 59 |
| | 9/24/2014 | 6.3 | <5 | 5.5 | n/a | <10 | <10 | 0.18 | 1500 | <10 | 29 | <10 | <10 | <10 | <10 | <10 | 10 | 2000 | 130 | 65 |
| | 11/20/2014 | <5 | <5 | <5 | n/a | <10 | <10 | <0.099 | 1280 | <10 | 20.2 | <5 | <10 | <10 | <10 | <5 | <5 | <100 | 106 | 47.7 |
| | 2/3/2015 | 5.5 | <5 | <5 | n/a | <10 | <10 | <0.1 | 1020 | <10 | 22.6 | <5 | <10 | <10 | <10 | <5 | 5.5 | <100 | 91.9 | 49.9 |
| | 5/14/2015 | <5 | <5 | <5 | <5 | <10 | <10 | <0.2 | 935 | <10 | 20.3 | <5 | <10.1 | <10 | <10 | <5 | <5 | <100 | 71.3 | 32.8 |
| | 8/25/2015 | n/a | <5 | <5 | <5 | <10 | <10 | n/a | 357 | <10 | 13.2 | n/a | n/a | <10 | <10 | n/a | n/a | n/a | 14.7 | 21.2 |
| | 11/18/2015 | <5 | <5 | <5 | <5 | <10 | <10 | <0.2 | 469 | <10 | 8.7 | <5 | <10 | <10 | <10 | <5 | <5 | <100 | 5.2 | 23.1 |
| | 3/1/2016 | n/a | <5 | <5 | <5 | <10 | <10 | n/a | 8.3 | <10 | <5 | n/a | <10 | <10 | <10 | n/a | n/a | n/a | <5 | 15.4 |
| | 6/3/2016 | <5 | <5 | 5.8 | <5 | <10 | <10 | <0.2 | 44.1 | <10 | <5 | <5 | <10 | <10 | <10 | <5 | <5 | <100 | 5.7 | 8.7 |
| | 8/24/2016 | n/a | <5 | 9 | n/a | <10 | <10 | n/a | 221 | <10 | 7.8 | n/a | n/a | <10 | <10 | n/a | n/a | n/a | 17.1 | 22.1 |

*Notes:*
*All results are presented in units of ug/L.*
*Constituent detected above laboratory reporting limit.*
*n/a: Detection monitoring wells not analyzed for this constituent during routine detection monitoring events.*
*p-Cresol reported by laboratory as m+p-Cresols.*

# APPENDIX A
# STATISTICAL POWER CURVES

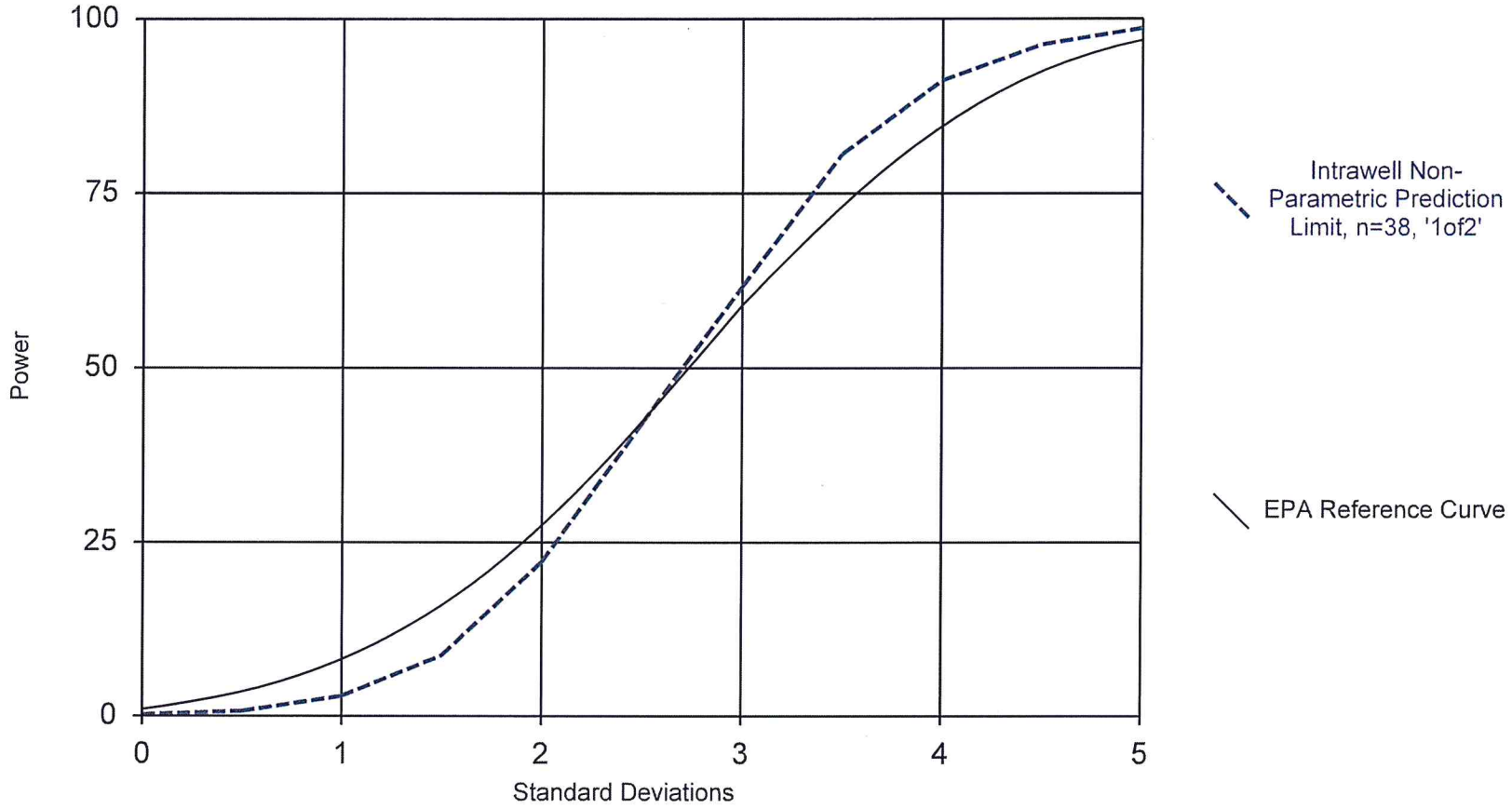
# Power Curve




Analysis Run 1/7/2016 4:15 PM

Bridgeton LF Client: RSI Data: BRIDGETON

# Power Curve

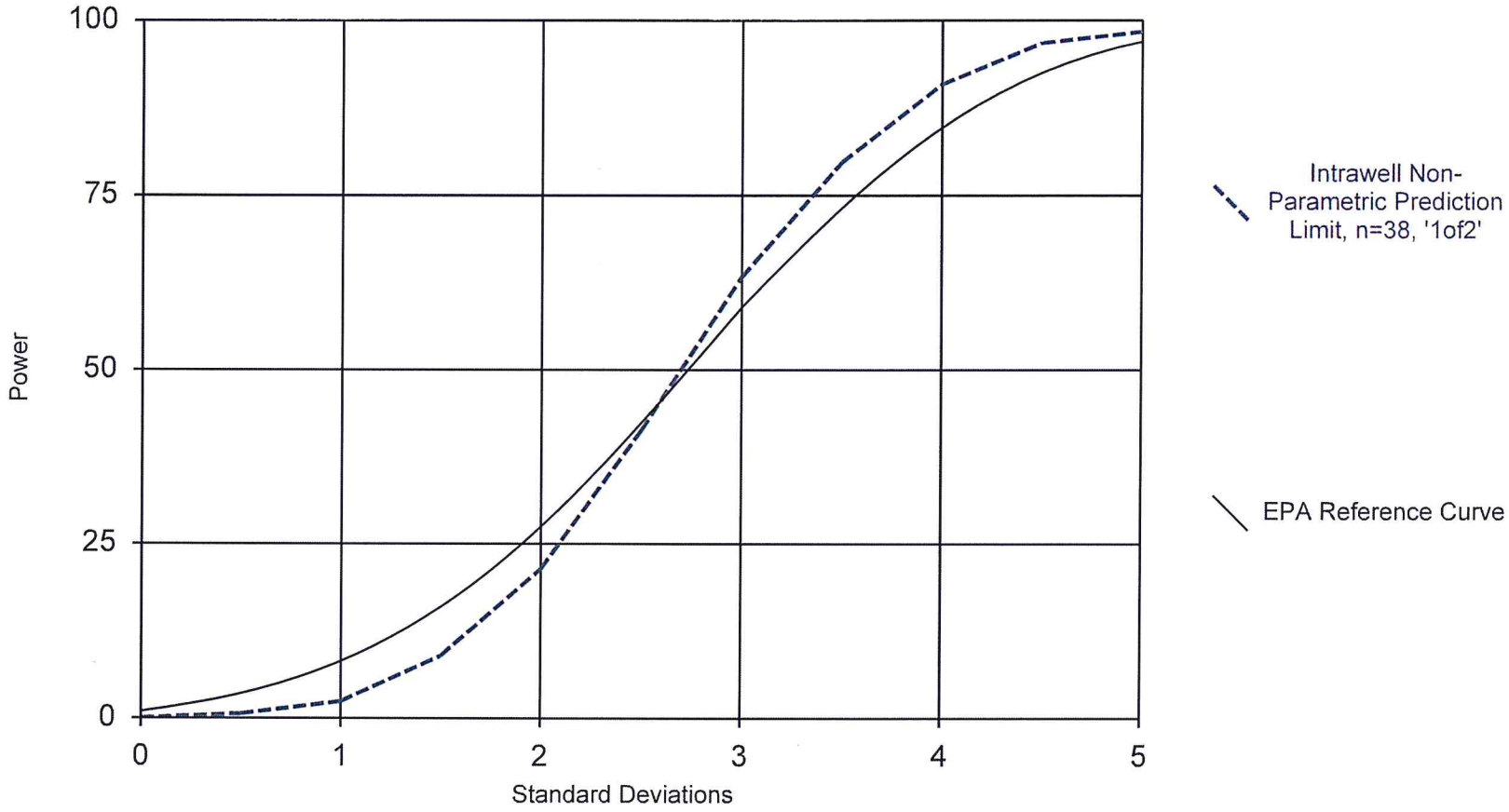



Analysis Run 1/7/2016 4:16 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

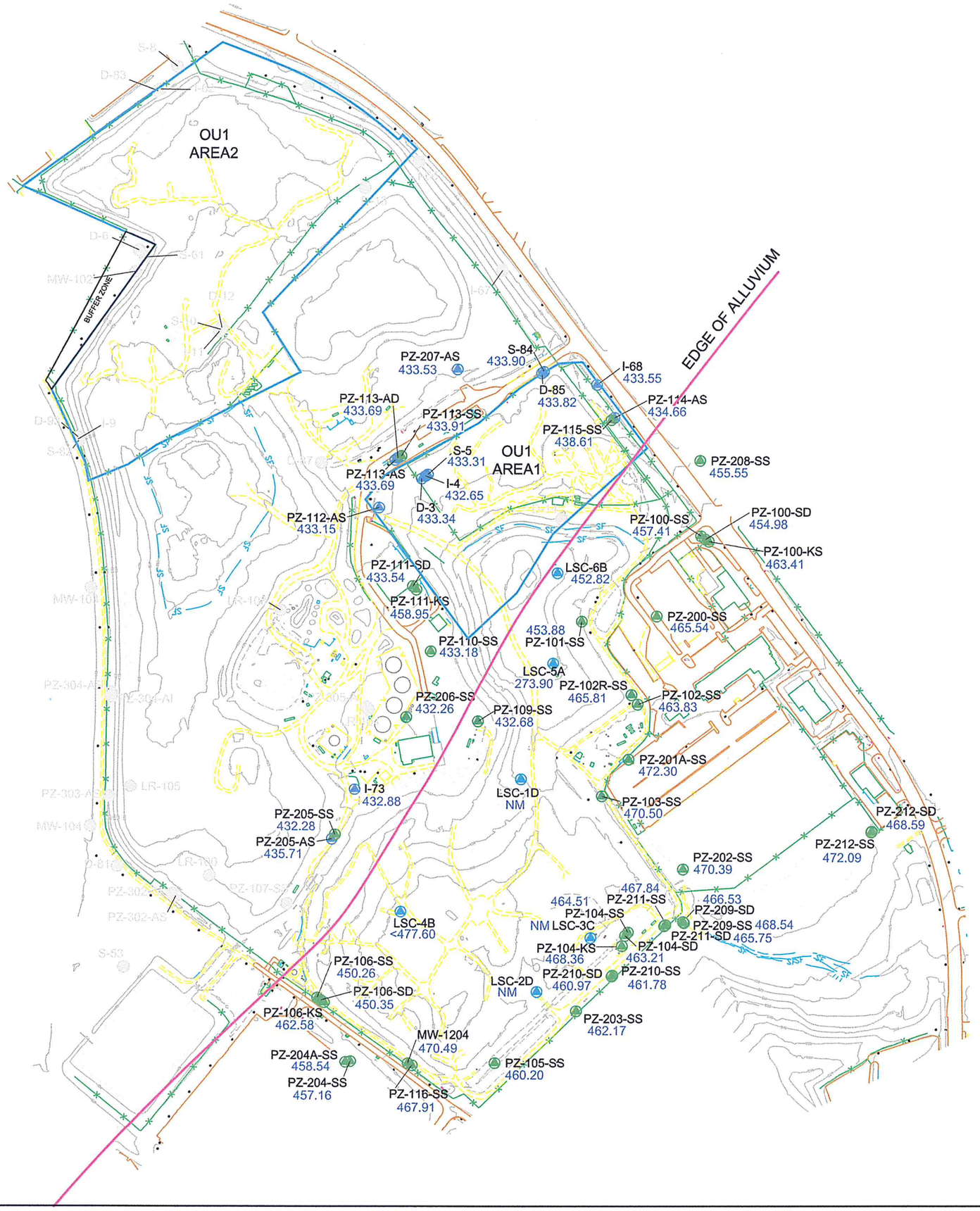
# Power Curve




Analysis Run 1/7/2016 4:16 PM

Bridgeton LF Client: RSI Data: BRIDGETON

# APPENDIX B
# POTENTIOMETRIC SURFACE MAP




WELL PREFIX/SUFFIX EXPLANATION

| | |
|---|---|
| SS = ST. LOUIS UPPER SALEM UNIT | AS = SHALLOW ALLUVIUM |
| SD = DEEP SALEM UNIT | AI = INTERMEDIATE ALLUVIUM |
| KS = KEOKUK UNIT | AD = DEEP ALLUVIUM |
| LCS = LEACHATE COLLECTION SUMP | LR - LEACHATE RISER |

Notes: Depth to water measurements collected on 8/22 & 8/31/16 by Feezor Engineering, Inc.;
LCS measurements collected on 8/22/16 by Bridgeton Landfill, LLC.
Aerial toporgraphy provided Cooper Aerial Surveys Co. dated 2/27/16.

LEGEND

- LEACHATE COLLECTION SUMP
- ALLUVIUM GROUNDWATER WELL
- BEDROCK GROUNDWATER WELL
- 462.17 GROUNDWATER ELEVATION (FMSL)

NORTH

0 100 200 400 800
Scale in Feet
Graphic Scale: 1 inch = 400 feet

JETT ENVIRONMENTAL CONSULTING
10 Quiet Brook Court
St. Charles, MO 63303
314-496-4654
www.jettenviro.com

# Third Quarter 2016
# Potentiometric Surface Map
# Bridgeton Landfill, LLC - Bridgeton, Missouri

**Groundwater Elevation Summary Table**
**Bridgeton Landfill, LLC**

| Well | Top of PVC Casing Elevation[1] (fmsl) | Depth to Water[2] (ft) | Groundwater Elevation (fmsl) |
|---|---|---|---|
| D-3 | 468.74 | 35.30 | 433.44 |
| D-85 | 457.67 | 23.85 | 433.82 |
| I-4 | 465.32 | 32.67 | 432.65 |
| I-68 | 450.60 | 17.05 | 433.55 |
| I-73 | 461.96 | 29.08 | 432.88 |
| LR-103 | 470.64 | 37.71 | 432.93 |
| MW-1204 | 478.04 | 7.55 | 470.49 |
| PZ-100-KS | 486.36 | 22.95 | 463.41 |
| PZ-100-SD | 486.49 | 31.51 | 454.98 |
| PZ-100-SS | 486.55 | 29.14 | 457.41 |
| PZ-101-SS | 491.56 | 37.68 | 453.88 |
| PZ-102R-SS | 486.45 | 20.64 | 465.81 |
| PZ-102-SS | 484.65 | 20.82 | 463.83 |
| PZ-103-SS | 484.21 | 13.71 | 470.50 |
| PZ-104-KS | 484.60 | 16.24 | 468.36 |
| PZ-104-SD | 484.15 | 20.94 | 463.21 |
| PZ-104-SS | 484.00 | 19.49 | 464.51 |
| PZ-105-SS | 484.04 | 23.84 | 460.20 |
| PZ-106-KS | 464.73 | 2.15 | 462.58 |
| PZ-106-SD | 463.84 | 13.49 | 450.35 |
| PZ-106-SS | 463.11 | 12.85 | 450.26 |
| PZ-107-SS | 465.41 | 31.39 | 434.02 |
| PZ-109-SS | 457.65 | 24.97 | 432.68 |
| PZ-110-SS | 461.46 | 28.28 | 433.18 |
| PZ-111-KS | 465.80 | 6.85 | 458.95 |
| PZ-111-SD | 466.57 | 33.03 | 433.54 |
| PZ-112-AS | 462.53 | 29.38 | 433.15 |
| PZ-113-AD | 462.24 | 28.55 | 433.69 |
| PZ-113-AS | 462.19 | 28.50 | 433.69 |
| PZ-113-SS | 462.66 | 28.75 | 433.91 |
| PZ-114-AS | 452.14 | 17.48 | 434.66 |
| PZ-115-SS | 452.90 | 14.29 | 438.61 |
| PZ-116-SS | 478.21 | 10.30 | 467.91 |
| PZ-200-SS | 486.23 | 20.69 | 465.54 |
| PZ-201A-SS | 482.33 | 10.03 | 472.30 |
| PZ-202-SS | 481.82 | 11.43 | 470.39 |
| PZ-203-SS | 487.19 | 25.02 | 462.17 |
| PZ-204A-SS | 463.09 | 4.55 | 458.54 |
| PZ-204-SS | 465.28 | 8.12 | 457.16 |
| PZ-205-AS | 464.77 | 29.06 | 435.71 |
| PZ-205-SS | 461.80 | 29.52 | 432.28 |
| PZ-206-SS | 460.20 | 27.94 | 432.26 |
| PZ-207-AS | 462.65 | 29.12 | 433.53 |
| PZ-208-SS | 475.19 | 19.64 | 455.55 |
| PZ-209-SS | 489.68 | 21.14 | 468.54 |
| PZ-209-SD | 489.58 | 23.05 | 466.53 |
| PZ-210-SS | 486.90 | 25.12 | 461.78 |
| PZ-210-SD | 487.00 | 26.03 | 460.97 |
| PZ-211-SS | 487.41 | 19.57 | 467.84 |
| PZ-211-SD | 487.46 | 21.71 | 465.75 |
| PZ-212-SS | 482.79 | 10.72 | 472.07 |
| PZ-212-SD | 482.72 | 14.13 | 468.59 |
| S-5 | 465.75 | 32.44 | 433.31 |
| S-84 | 457.45 | 23.55 | 433.90 |

*Notes:*

*1 - Top of PVC casing elevations are from surveys performed on 8/13, 8/21-22, 8/29, and 8/31/2012; 10/21-10/22/2013; 9/15/2014; 11/12/2014; 4/7/2016; and 9/18/2016.*

*2 - Depth to water measurements recorded by Feezor Engineering, Inc. on 8/22/16, except for D-3, I-4, and S-5, which were measured on 8/31/16.*

**Leachate Elevation Summary Table**
**Bridgeton Landfill, LLC**

| Sumps Where Depth to Leachate from Surface is Measured | | | | | |
|---|---|---|---|---|---|
| Leachate Collection Sump | Ground Surface Elevation[1] (fmsl) | Total Depth of Sump[1] (ft) | Depth to Leachate (ft) | Height of Leachate Above Base of Sump (ft) | Elevation of Leachate (fmsl) |
| LCS-1D | 499.22 | 247.00 | NM[5] | NM[5] | NM[5] |
| LCS-3D | ---[3] | 140.00[3] | > 63.00[3] | NM[3] | NM[3] |
| LCS-4B | 551.60 | 256.60 | > 74.00[2] | < 182.60[2] | < 477.60[2] |

| Sumps Where Height of Leachate Above Transducer is Measured | | | | | |
|---|---|---|---|---|---|
| Leachate Collection Sump | Elevation of Base of Sump[1] (fmsl) | Height of Transducer Above Base of Sump (ft) | Height of Leachate Above Transducer (ft) | Height of Leachate Above Base of Sump (ft) | Elevation of Leachate (fmsl) |
| LCS-2D | 235.92 | 14.40 | NM[4] | NM[4] | NM[4] |
| LCS-5A | 235.40 | 15.00 | 23.50 | 38.50 | 273.90 |
| LCS-6B | 430.02 | 9.40 | 13.40 | 22.80 | 452.82 |

*Notes:*
*Depths and heights of leachate recorded by Bridgeton Landfill personnel on 8/22/2016.*
*1 - Ground surface elevations, sump total depths, and base of sump elevations are from as-built diagrams unless otherwise noted: LCS-1D - Aquaterra, 10/7/2009; LCS-2D - Aquaterra, 12/19/2008; LCS-4B - Aquaterra, 1/22/2010; LCS-5A - Aquaterra, 11/21/2005; LCS-6B - Aquaterra, 1/4/2010.*
*2 - Depth to leachate at LCS-4B was greater than the transducer during 8/22/2016 event. Exact depths and elevations not available.*
*3 - LCS-3D not surveyed. As-built not available. Total depth provided by Bridgeton landfill, LLC.*
*4 - The transducer at LCS-2D was not operational during the 8/22/2016 event. Scheduled for maintenance.*
*5 - The transducer at LCS-1D has been temporarily disconnected due to a construction project.*

FEEZOR ENGINEERING, INC.

# GROUNDWATER ELEVATION MEASUREMENTS

Site: Bridgeton Landfill, Bridgeton, Missouri

Personnel: Michael Spurgeon & Jonathan Wilkinson

| Well ID | Date | Time | Depth to Water (ft) | Depth to Water Previous Event (ft) | Total Depth (ft) | Total Depth Previous Event (ft) | Notes |
|---|---|---|---|---|---|---|---|
| D-3 | N/A | NA | NA | 37.50 | NA | 107.86 | Previous Event = Sept 2013 |
| D-81 | 8/22/16 | 1136 | 18.25 | 17.64 | 62.53 | 62.54 | |
| D-85 | ? | 0813 | 23.85 | 23.09 | 77.19 | 77.20 | |
| D-87 | 8/22/16 | 0842 | 31.67 | 44.05 | 114.61 | 112.75 | Previous Event = Sept 2013 |
| I-4 | NA | NA | NA | 35.39 | NA | 78.66 | Previous Event = Sept 2013 |
| I-68 | 8/22/16 | 0818 | 17.05 | 16.48 | 40.45 | 40.47 | |
| I-73 | | 1337 | 29.08 | 28.69 | 50.75 | 50.79 | |
| LR-100 | | 1332 | 15.76 | 15.69 | 26.99 | 27.01 | |
| LR-103 | | 1325 | 37.71 | 37.10 | 49.87 | 49.84 | |
| MW-104 | | 1142 | 8.35 | 7.78 | 19.15 | 19.12 | |
| MW-120 | | 1059 | 7.55 | 5.39 | 215.19 | 215.00 | |
| PZ-100-KS | | 1434 | 22.95 | 22.65 | 383.90 | 384.65 | TD Measured @ 1005 on 9/7/16 |
| PZ-100-SD | | 1435 | 31.51 | 31.00 | 96.19 (Top of Pump) | 96.19 (Top of Pump) | top of pump = 96.19 |
| PZ-100-SS | | 1438 | 29.14 | 29.31 | 89.13 (Top of Pump) | 89.09 (Top of Pump) | |
| PZ-101-SS | | 0919 | 37.68 | 37.06 | 155.49 | 155.10 | |
| PZ-102-SS | | 0924 | 20.82 | 21.19 | 91.25 | 91.25 | |
| PZ-102R-SS | | 0928 | 20.64 | 20.25 | 91.10 | 91.14 | |
| PZ-103-SS | | 0934 | 13.71 | 11.52 | 149.66 | 149.65 | |
| PZ-104-KS | | 1013 | 16.24 | 16.00 | 93.09 (Top of Pump) | 93.05 (Top of Pump) | |
| PZ-104-SD | | 1010 | 20.94 | 20.43 | 120.66 (Top of Pump) | 120.64 (Top of Pump) | |
| PZ-104-SS | | 1006 | 19.49 | 19.10 | 140.35 (Top of Pump) | 140.30 (Top of Pump) | |
| PZ-105-SS | | 1036 | 23.84 | 23.81 | ~~103.78~~ (Top of Pump) | ~~144.90~~ (Top of Pump) | Remeasure TD = 144.93 |
| PZ-106-KS | | 1058 | 2.15 | 2.09 | 374.99 | 375.02 | TD Measured @ 1315 on 9/17/16 |
| PZ-106-SD | | 1059 | 13.49 | 12.68 | 196.29 (Top of Pump) | 196.25 (Top of Pump) | |
| PZ-106-SS | | 1104 | 12.85 | 12.14 | 161.42 (Top of Pump) | 161.40 (Top of Pump) | |
| PZ-107-SS * | | 1036 | 23.84 | 30.82 | 103.78 | 103.70 | ~~top of pump~~ (JD) |
| PZ-109-SS | | 1412 | 24.97 | 22.42 | 130.99 (Top of Pump) | 131.04 (Top of Pump) | |
| PZ-110-SS | | 1417 | 28.28 | 27.68 | 107.23 (Top of Pump) | 107.23 (Top of Pump) | |
| PZ-111-KS | 8/22/16 | 1422 | 6.85 | 6.67 | 374.80 | 374.59 | TD measured @ 1046 on 9/7/16 |

*1351 WL-31.39 TD: 103.67 PZ-107-SS

FEEZOR ENGINEERING, INC.

# GROUNDWATER ELEVATION MEASUREMENTS

Site: Bridgeton Landfill, Bridgeton, Missouri

Personnel: Michael Spurgeon & Jonathan Wilkinson

| Well ID | Date | Time | Depth to Water (ft) | Depth to Water Previous Event (ft) | Total Depth (ft) | Total Depth Previous Event (ft) | Notes |
|---|---|---|---|---|---|---|---|
| PZ-111-SD | 8/22/16 | 1423 | 33.03 | 32.98 | 198.83 (Top of Pump) | 199.13 (Top of Pump) | |
| PZ-112-AS | | 0905 | 29.38 | 28.83 | 38.41 | 38.38 | |
| PZ-113-AD | | 0855 | 28.55 | 27.97 | 110.11 | 110.13 | |
| PZ-113-AS | | 0858 | 28.50 | 27.90 | 39.17 | 39.25 | |
| PZ-113-SS | | 0852 | 28.75 | 28.16 | 160.21 | 160.25 | |
| PZ-114-AS | | 0823 | 17.48 | 16.78 | 26.32 (Top of Pump) | 26.20 (Top of Pump) | |
| PZ-115-SS | | 0824 | 14.29 | 13.15 | 81.04 (Top of Pump) | 81.05 (Top of Pump) | |
| PZ-116-SS | | 1045 | 10.30 | 6.19 | 142.64 (Top of Pump) | 142.85 (Top of Pump) | |
| PZ-200-SS | | 1443 | 20.69 | 20.80 | 99.30 | 99.31 | Labeled as GMP-7. |
| PZ-201A-SS | | 1448 | 10.03 | 9.61 | 86.34 (Top of Pump) | 86.10 (Top of Pump) | WL: 10.03 |
| PZ-202-SS | | 0949 | 11.43 | 11.10 | 85.22 (Top of Pump) | 85.13 (Top of Pump) | |
| PZ-203-SS | | (N) 1030 | 25.02 | 24.49 | 111.10 | 111.34 | |
| PZ-204-SS | | 1463 | 8.12 | 7.62 | 87.98 | 87.98 | |
| PZ-204A-SS | | 1113 | 4.55 | 4.04 | 84.33 | 84.23 | |
| PZ-205-AS | | 1342 | 29.06 | 30.24 | 53.88 | 54.03 | |
| PZ-205-SS | | 1346 | 29.52 | 29.07 | 93.00 (Top of Pump) | 93.02 (Top of Pump) | |
| PZ-206-SS | | 1402 | 27.94 | 27.14 | 129.74 | 129.82 | |
| PZ-207-AS | | 0835 | 29.12 | 28.57 | 38.92 | 38.95 | |
| PZ-208-SS | | 1455 | 19.64 | 19.40 | 100.30 | 100.35 | |
| PZ-209-SD | | 0941 | 23.05 | 22.73 | 101.40 (Top of Pump) | 101.44 (Top of Pump) | |
| PZ-209-SS | | 0943 | 21.14 | 20.90 | 99.80 (Top of Pump) | 99.70 (Top of Pump) | |
| PZ-210-SD | | 1022 | 26.03 | 25.78 | 101.57 (Top of Pump) | 101.55 (Top of Pump) | |
| PZ-210-SS | | 1019 | 25.12 | 24.86 | 101.50 (Top of Pump) | 101.51 (Top of Pump) | |
| PZ-211-SD | | 0959 | 21.71 | 21.36 | 99.35 (Top of Pump) | 99.40 (Top of Pump) | |
| PZ-211-SS | | 0956 | 19.57 | 19.36 | 98.15 (Top of Pump) | 98.14 (Top of Pump) | |
| PZ-212-SD | | 1507 | 14.13 | 13.79 | 92.80 (Top of Pump) | 92.89 (Top of Pump) | |
| PZ-212-SS | | 1509 | 10.72 | 8.74 | 93.76 (Top of Pump) | 93.92 (Top of Pump) | |
| PZ-302-AI | | 1125 | 18.44 | 17.83 | 44.09 | 44.10 | |
| PZ-302-AS | 8/22/16 | 1123 | 18.46 | 17.58 | 24.51 | 24.51 | no pump |

FEEZOR ENGINEERING, INC.

# GROUNDWATER ELEVATION MEASUREMENTS

Site: Bridgeton Landfill, Bridgeton, Missouri

Personnel: Michael Spurgeon & Jonathan Wilkinson

| Well ID | Date | Time | Depth to Water (ft) | Depth to Water Previous Event (ft) | Total Depth (ft) | Total Depth Previous Event (ft) | Notes |
|---|---|---|---|---|---|---|---|
| PZ-303-AS | 8/22/16 | 1149 | 21.85 | 21.03 | 28.30 | 28.31 | no pump present |
| PZ-304-AI | " | 1159 | 21.34 | 20.76 | 51.99 | 51.99 | |
| PZ-304-AS | 8/22/16 | 1157 | 21.09 | 20.46 | 29.21 | 29.20 | |
| S-5 | NA | NA | NA | 35.76 | NA | 44.34 | Previous Event = Sept 2013 |
| S-53 | 8/22/16 | 1221 | 11.59 | 13.70 | 18.00 | 17.00 | Previous Event = Sept 2013 |
| S-84 | 8/22/16 | 0812 | 23.55 | 23.09 | 32.90 | 32.89 | |

FEEZOR ENGINEERING, INC.

# GROUNDWATER ELEVATION MEASUREMENTS

Site: Bridgeton Landfill, Bridgeton, Missouri

Personnel: Michael Spurgeon & Jonathan Wilkinson

| Well ID | Date | Time | Depth to Water (ft) | Depth to Water Previous Event (ft) | Total Depth (ft) | Total Depth Previous Event (ft) | Notes |
|---|---|---|---|---|---|---|---|
| D-3 | 8/31/2016 | 0834 | 35.30 | 37.50 | 107.70 | 107.86 | Previous Event = Sept 2013 |
| D-85 | | 0800 | 24.27 | 23.09 | N/A | 77.20 | |
| D-87 | | 0808 | 31.94 | 44.05 | N/A | 112.75 | Previous Event = Sept 2013 |
| I-4 | | 0851 | 32.67 | 35.39 | 35.95* | 78.66 | Previous Event = Sept 2013 |
| PZ-112-AS | | 0821 | 29.75 | 28.83 | N/A | 38.38 | |
| PZ-113-AD | | 0815 | 28.85 | 27.97 | N/A | 110.13 | |
| PZ-113-AS | | 0816 | 28.82 | 27.90 | N/A | 39.25 | |
| PZ-113-SS | | 0814 | 29.09 | 28.16 | N/A | 160.25 | |
| PZ-207-AS | | 0804 | 29.53 | 28.57 | N/A | 38.95 | |
| S-5 | | 0849 | 32.44 | 35.76 | 43.54 | 44.34 | Previous Event = Sept 2013 |
| S-84 | 8/31/2016 | 0758 | 24.02 | 23.09 | N/A | 32.89 | |
| | | | | | | | |
| | * Apparent | phase | in PVC | casing | | | |

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# APPENDIX C
# STATISTICAL EVALUATIONS
# ALLUVIAL ZONE

# TREND EVALUATION OF BACKGROUND DATA

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:02 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ammonia as N (mg/L)** | **114-AS (bg)** | **0.1801** | **228** | **201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Antimony Total (ug/L) | 114-AS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| **Arsenic Total (ug/L)** | **114-AS (bg)** | **8.736** | **461** | **201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Barium Total (ug/L) | 114-AS (bg) | -5.956 | -105 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 114-AS (bg) | 0 | 48 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Boron Total (ug/L) | 114-AS (bg) | 1.752 | 97 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 114-AS (bg) | 0 | -23 | -201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| **Calcium Total (ug/L)** | **114-AS (bg)** | **-5729** | **-357** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Chemical Oxygen Demand [COD] (m... | 114-AS (bg) | 1.213 | 105 | 201 | No | 40 | 7.5 | n/a | n/a | 0.02 | NP |
| Chloride (mg/L) | 114-AS (bg) | 0.3415 | 24 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 114-AS (bg) | 0 | -26 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| **Cobalt Total (ug/L)** | **114-AS (bg)** | **-0.5659** | **-257** | **-201** | **Yes** | **40** | **37.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Copper Total (ug/L) | 114-AS (bg) | 0 | -63 | -201 | No | 40 | 87.5 | n/a | n/a | 0.02 | NP |
| Fluoride (mg/L) | 114-AS (bg) | -0.00... | -78 | -186 | No | 38 | 18.42 | n/a | n/a | 0.02 | NP |
| **Hardness Total (mg/L)** | **114-AS (bg)** | **-21.28** | **-349** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Iron Total (ug/L)** | **114-AS (bg)** | **4003** | **315** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Lead Total (ug/L) | 114-AS (bg) | 0 | -28 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| **Magnesium Total (ug/L)** | **114-AS (bg)** | **-1865** | **-374** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Manganese Total (ug/L)** | **114-AS (bg)** | **-200.1** | **-316** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Mercury Total (ug/L) | 114-AS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 114-AS (bg) | 0 | -18 | -201 | No | 40 | 62.5 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 114-AS (bg) | 0 | -70 | -201 | No | 40 | 82.5 | n/a | n/a | 0.02 | NP |
| pH [Field] (su) | 114-AS (bg) | 0.009101 | 132 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Phosphorus Total (mg/L)** | **114-AS (bg)** | **0.09466** | **401** | **201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Selenium Total (ug/L) | 114-AS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 114-AS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Sodium Total (ug/L) | 114-AS (bg) | -1530 | -101 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Specific Conductance [Field] (u... | 114-AS (bg) | -24.95 | -118 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Sulfate as SO4 (mg/L)** | **114-AS (bg)** | **-1.916** | **-459** | **-201** | **Yes** | **40** | **37.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **114-AS (bg)** | **-0.08238** | **-378** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Total Dissolved Solids [TDS] (m...** | **114-AS (bg)** | **-21.33** | **-230** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Organic Carbon [TOC] (mg/L) | 114-AS (bg) | 0.2132 | 83 | 201 | No | 40 | 10 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 114-AS (bg) | 0 | 30 | 201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 114-AS (bg) | 0 | -135 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |

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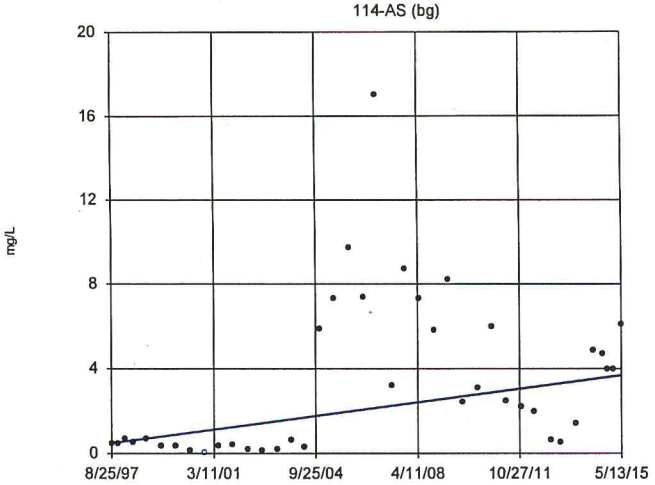
Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = 0.1801 units per year.

Mann-Kendall statistic = 228
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Ammonia as N Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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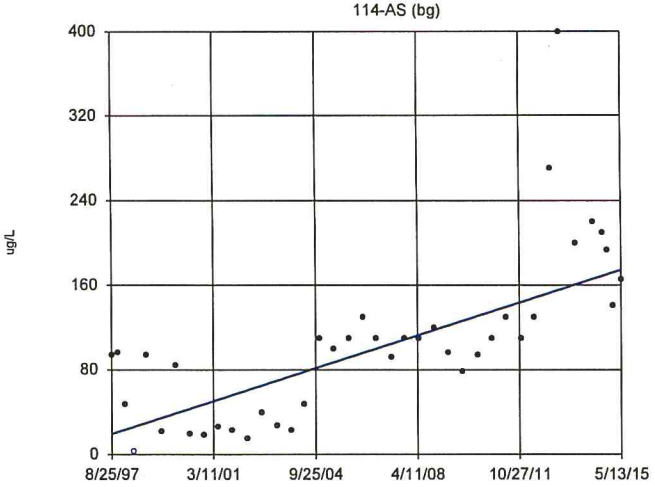
Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = 8.736 units per year.

Mann-Kendall statistic = 461
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Arsenic Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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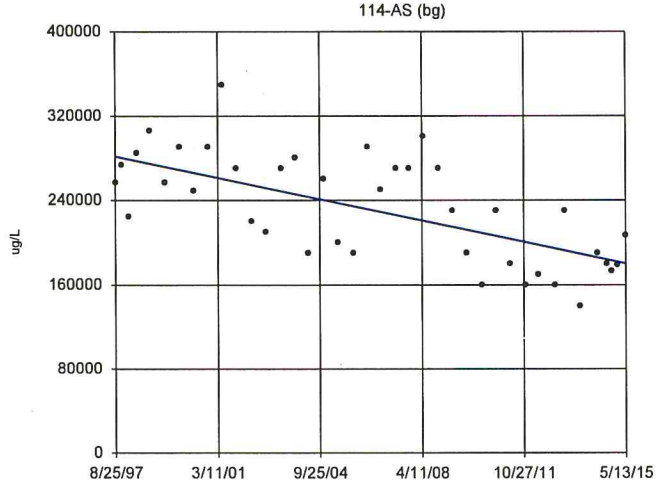
Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -5729 units per year.

Mann-Kendall statistic = -357
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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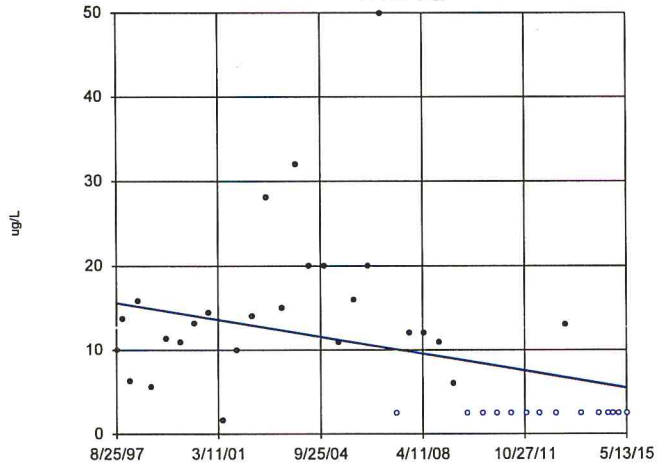
Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -0.5659 units per year.

Mann-Kendall statistic = -257
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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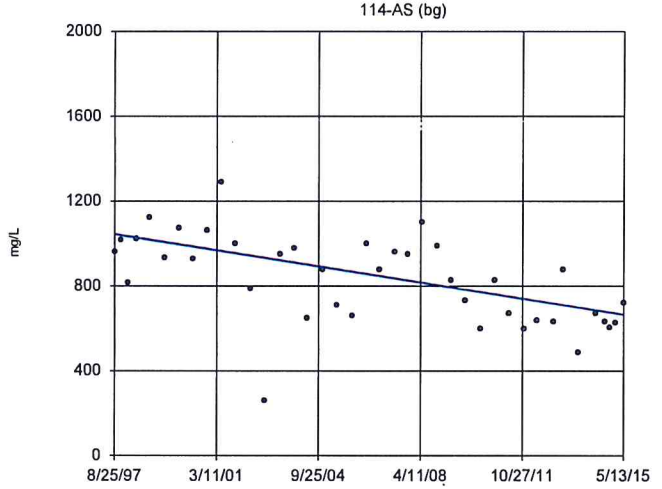
Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -21.28 units per year.

Mann-Kendall statistic = -349
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Hardness Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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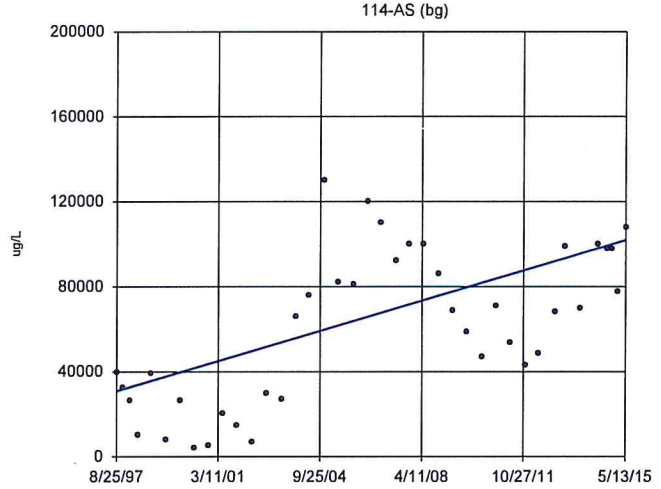
Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = 4003 units per year.

Mann-Kendall statistic = 315
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Iron Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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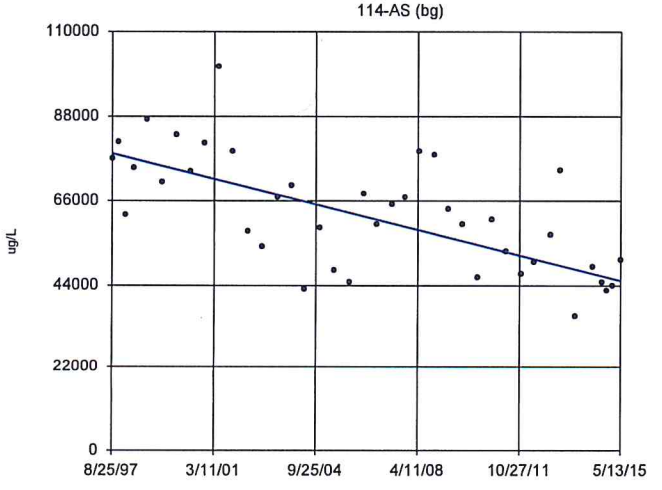
Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -1865 units per year.

Mann-Kendall statistic = -374
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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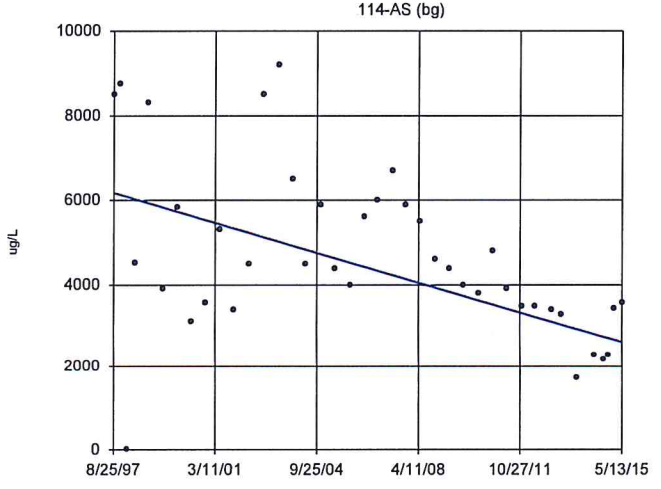
Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -200.1 units per year.

Mann-Kendall statistic = -316
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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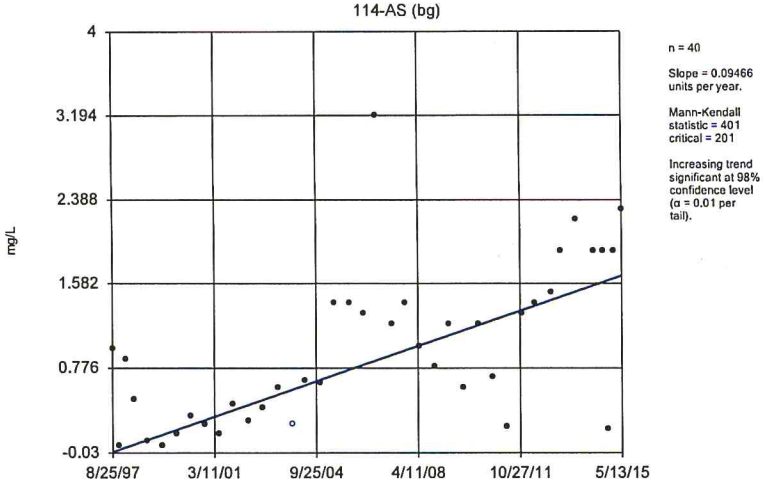
Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = 0.09466 units per year.

Mann-Kendall statistic = 401
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Phosphorus Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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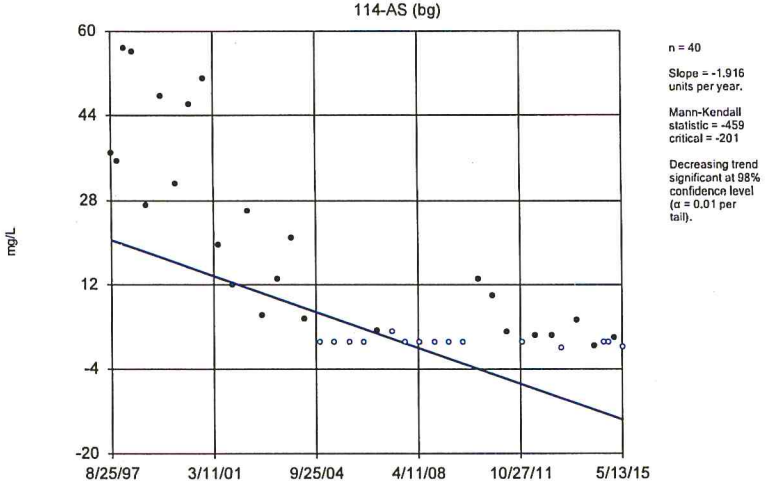
Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -1.916 units per year.

Mann-Kendall statistic = -459
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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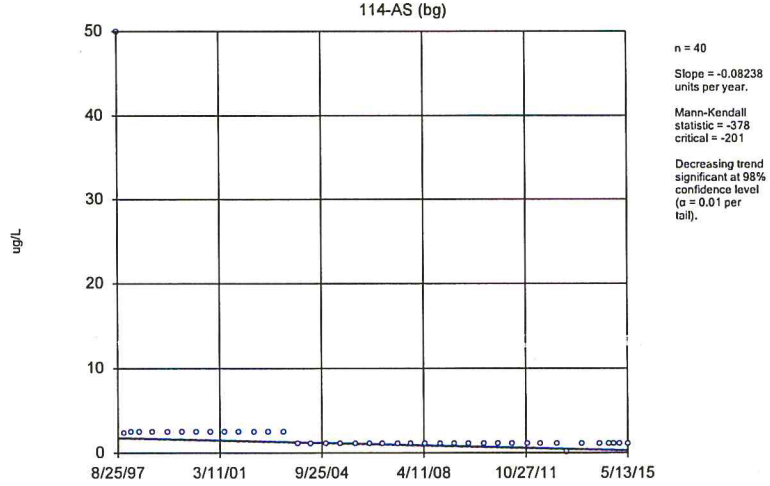
Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -0.08238 units per year.

Mann-Kendall statistic = -378
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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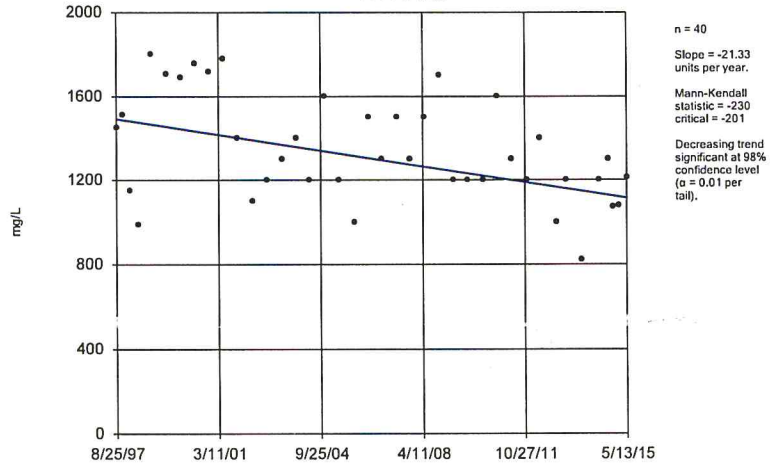
Sen's Slope Estimator

114-AS (bg)




n = 40

Slope = -21.33 units per year.

Mann-Kendall statistic = -230
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 1/7/2016 1:01 PM
Bridgeton LF Client: RSI Data: BRIDGETON

# INTRA-WELL PREDICTION LIMITS

Background data were evaluated for increasing statistical trends (or either increasing or decreasing trends for field pH). In those cases where the background data were determined to exhibit a statistical trend, typically the most recent background data were excluded until the data no longer exhibited a statistical trend. For each of the constituent-well pairs listed below, the specified modified background data period was utilized in the determination of the intra-well prediction limit.

**Alluvial Zone**

- Ammonia as N at PZ-114-AS (8/97 through 9/14)
- Arsenic (Total) at PZ-114-AS (8/97 through 11/07)
- Iron (Total) at PZ-114-AS (8/97 through 5/06)
- Phosphorus (Total) at PZ-114-AS (8/97 through 11/05)

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 11:41 AM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N (mg/L) | 114-AS | 31 | n/a | 9/6/2016 | 5.6 | No | 37 | 0.2618 | 1.512 | 2.703 | None | ln(x) | 0.0007744 | Param Intra 1 of 2 |
| Antimony Total (ug/L) | 114-AS | 50 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 114-AS | 190 | n/a | 9/6/2016 | 108 | No | 23 | 7.394 | 2.888 | 4.348 | None | sqrt(x) | 0.0007744 | Param Intra 1 of 2 |
| Barium Total (ug/L) | 114-AS | 1100 | n/a | 9/6/2016 | 922 | No | 40 | 6.583 | 0.2171 | 0 | None | ln(x) | 0.0007744 | Param Intra 1 of 2 |
| Beryllium Total (ug/L) | 114-AS | 1.0 | n/a | 9/6/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 114-AS | 660 | n/a | 9/6/2016 | 326 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Cadmium Total (ug/L) | 114-AS | 5.9 | n/a | 9/6/2016 | 0.1ND | No | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Calcium Total (ug/L) | 114-AS | 340000 | n/a | 9/6/2016 | 198000 | No | 40 | 232475 | 50510 | 0 | None | No | 0.0007744 | Param Intra 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 114-AS | 250 | n/a | 9/6/2016 | 37.9 | No | 40 | 3.906 | 1.151 | 7.5 | None | x^(1/3) | 0.0007744 | Param Intra 1 of 2 |
| Chloride (mg/L) | 114-AS | 600 | n/a | 9/6/2016 | 466 | No | 40 | 18.41 | 2.965 | 0 | None | sqrt(x) | 0.0007744 | Param Intra 1 of 2 |
| Chromium Total (ug/L) | 114-AS | 5.4 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 114-AS | 50 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 37.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Copper Total (ug/L) | 114-AS | 110 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 87.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Fluoride (mg/L) | 114-AS | 0.45 | n/a | 9/6/2016 | 0.28 | No | 25 | 0.2589 | 0.08723 | 8 | None | No | 0.0007744 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 114-AS | 1300 | n/a | 9/6/2016 | 697 | No | 40 | 828.3 | 205.5 | 0 | None | No | 0.0007744 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 114-AS | 170000 | n/a | 9/6/2016 | 66600 | No | 20 | 31.84 | 10.42 | 0 | None | x^(1/3) | 0.0007744 | Param Intra 1 of 2 |
| Lead Total (ug/L) | 114-AS | 25 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Magnesium Total (ug/L) | 114-AS | 98000 | n/a | 9/6/2016 | 49400 | No | 40 | 39.5 | 3.161 | 0 | None | x^(1/3) | 0.0007744 | Param Intra 1 of 2 |
| Manganese Total (ug/L) | 114-AS | 10000 | n/a | 9/6/2016 | 3850 | No | 39 | 8.401 | 0.3974 | 0 | None | ln(x) | 0.0007744 | Param Intra 1 of 2 |
| Mercury Total (ug/L) | 114-AS | 0.10 | n/a | 9/6/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 114-AS | 84 | n/a | 9/6/2016 | 5ND | No | 40 | n/a | n/a | 62.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 114-AS | 5.0 | n/a | 9/6/2016 | 0.05ND | No | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| pH [Field] (su) | 114-AS | 7 | 6.2 | 9/6/2016 | 6.72 | No | 37 | 1.888 | 0.02947 | 0 | None | ln(x) | 0.0003872 | Param Intra 1 of 2 |
| Phosphorus Total (mg/L) | 114-AS | 2 | n/a | 9/6/2016 | 1.6 | No | 19 | 0.7295 | 0.2274 | 5.263 | None | x^(1/3) | 0.0007744 | Param Intra 1 of 2 |
| Selenium Total (ug/L) | 114-AS | 50 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 114-AS | 5.0 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Sodium Total (ug/L) | 114-AS | 330000 | n/a | 9/6/2016 | 176000 | No | 40 | 12.09 | 0.2948 | 0 | None | ln(x) | 0.0007744 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 114-AS | 3400 | n/a | 9/6/2016 | 2060 | No | 39 | 2313 | 528.9 | 0 | None | No | 0.0007744 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 114-AS | 57 | n/a | 9/6/2016 | 0.125ND | No | 40 | n/a | n/a | 37.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Thallium Total (ug/L) | 114-AS | 50 | n/a | 9/6/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 114-AS | 2000 | n/a | 9/6/2016 | 1500 | No | 40 | 7.186 | 0.1882 | 0 | None | ln(x) | 0.0007744 | Param Intra 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 114-AS | 44 | n/a | 9/6/2016 | 10ND | No | 40 | 2.244 | 0.6242 | 10 | None | x^(1/3) | 0.0007744 | Param Intra 1 of 2 |
| Vanadium Total (ug/L) | 114-AS | 12 | n/a | 9/6/2016 | 5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 114-AS | 48 | n/a | 9/6/2016 | 10ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

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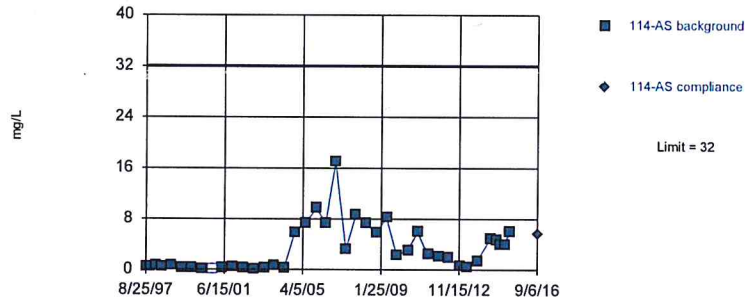
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=0.3567, Std. Dev.=1.493, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9353, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Ammonia as N Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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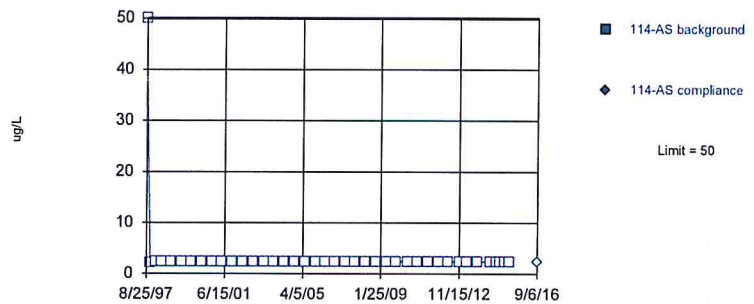
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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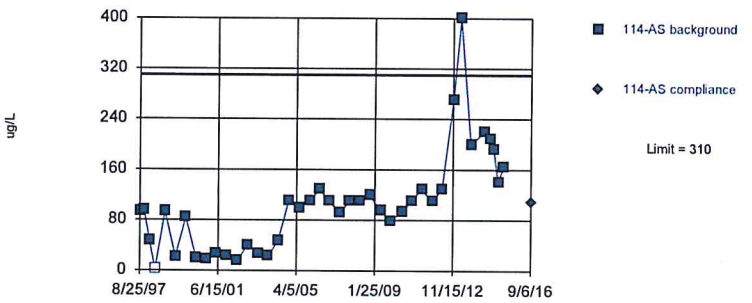
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=9.554, Std. Dev.=3.815, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9585, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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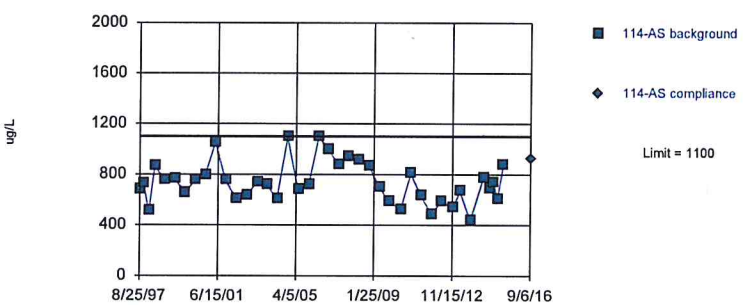
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.583, Std. Dev.=0.2171, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9819, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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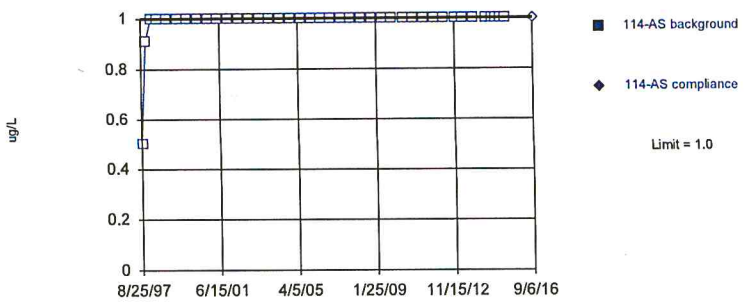
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Beryllium Total Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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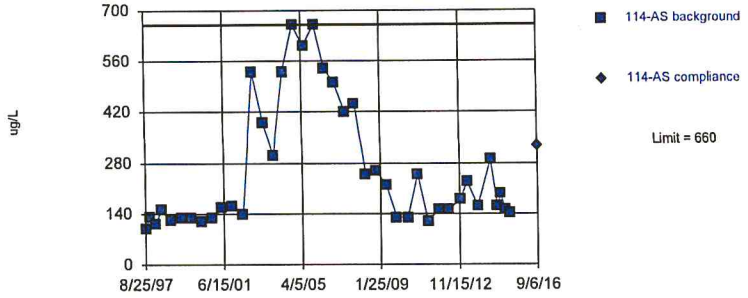
Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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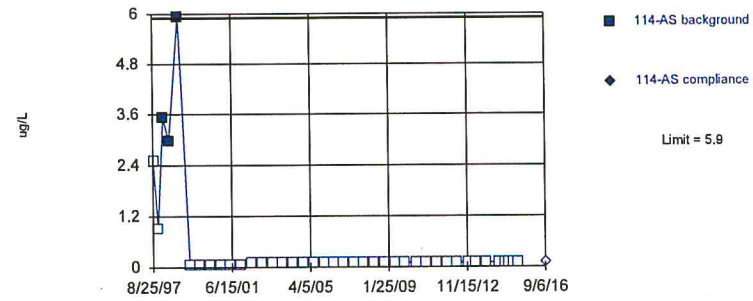
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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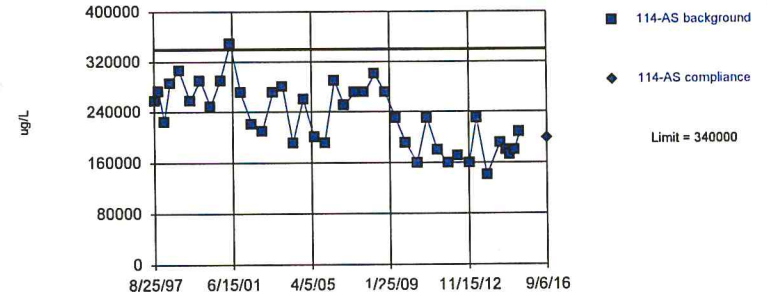
Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=232475, Std. Dev.=50510, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9565, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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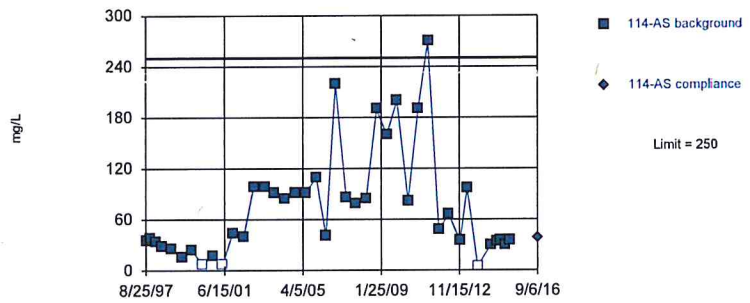
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=3.906, Std. Dev.=1.151, n=40, 7.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9581, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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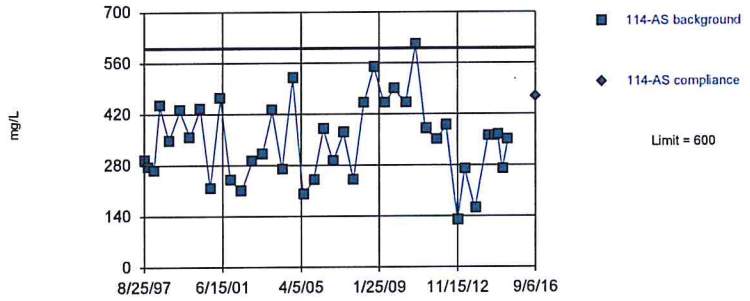
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=18.41, Std. Dev.=2.965, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9847, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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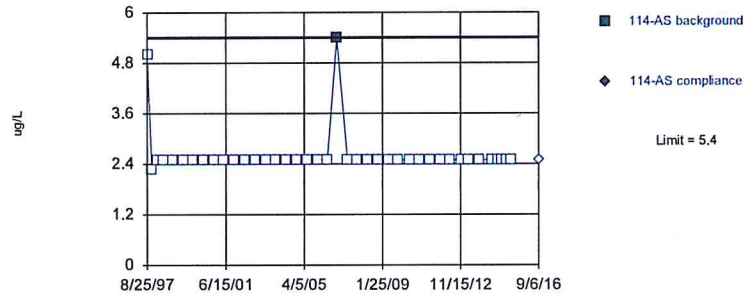
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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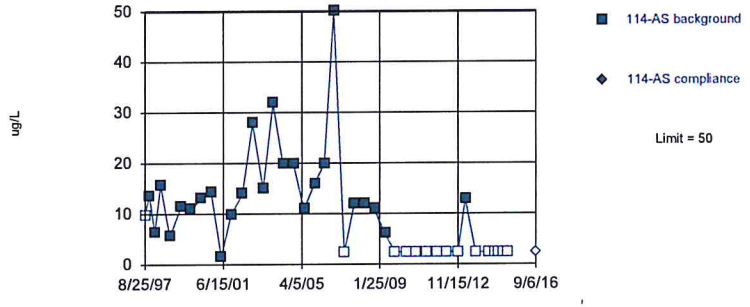
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 37.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cobalt Total Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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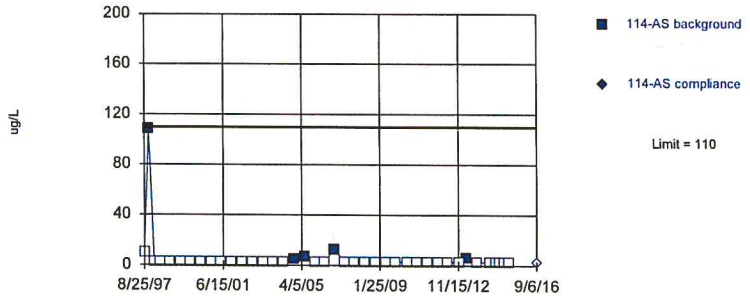
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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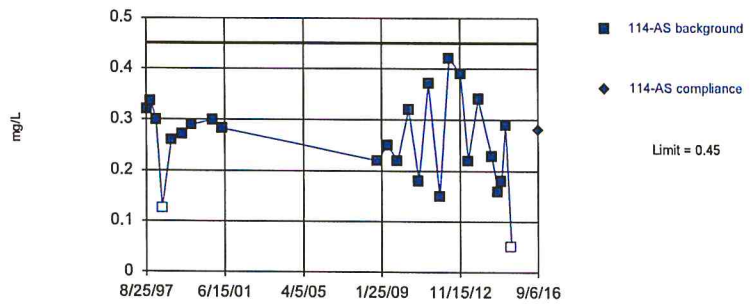
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=0.2589, Std. Dev.=0.08723, n=25, 8% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9851, critical = 0.888. Kappa = 2.19 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. Rosner's outlier test was performed on the background data. One background outlier was removed: 1.23 (5/23/2000).

Constituent: Fluoride Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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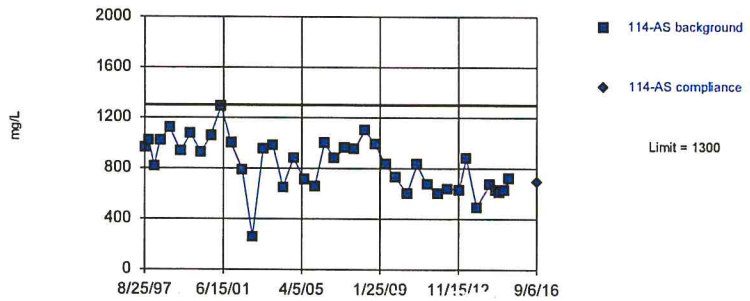
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=828.3, Std. Dev.=205.5, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9694, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Hardness Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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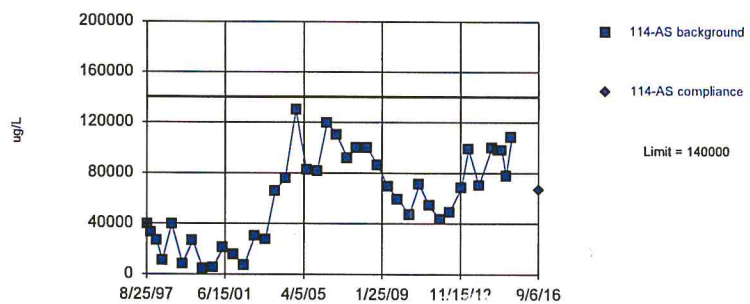
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=61149, Std. Dev.=35851, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9461, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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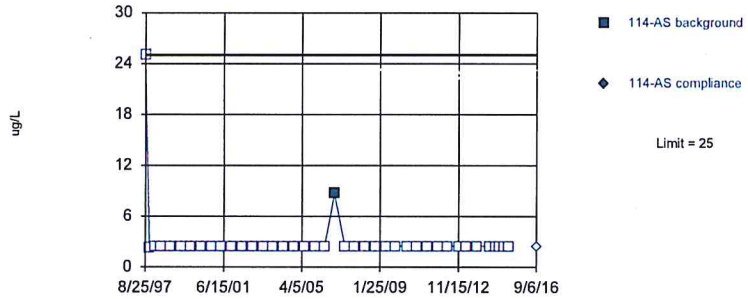
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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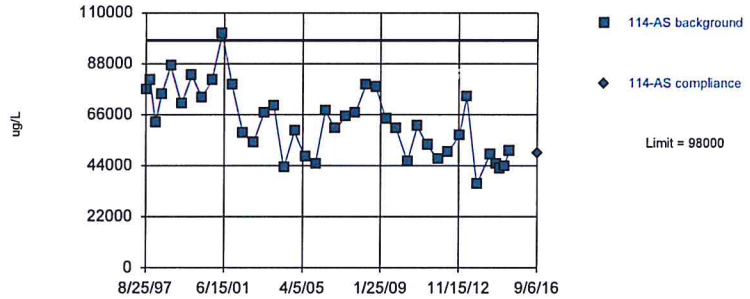
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=39.5, Std. Dev.=3.161, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.974, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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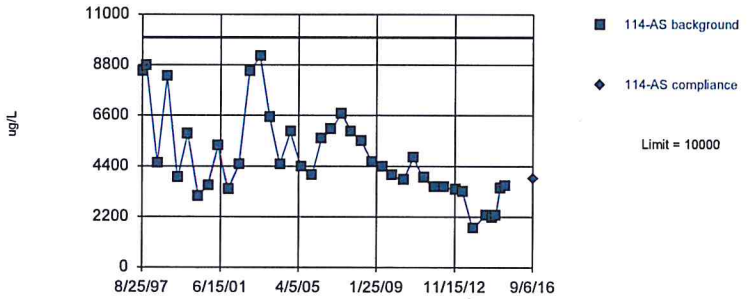
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=8.401, Std. Dev.=0.3974, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.966, critical = 0.917. Kappa = 2.081 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. Rosner's outlier test was performed on the background data. One background outlier was removed: 6.38 (2/16/1998).

Constituent: Manganese Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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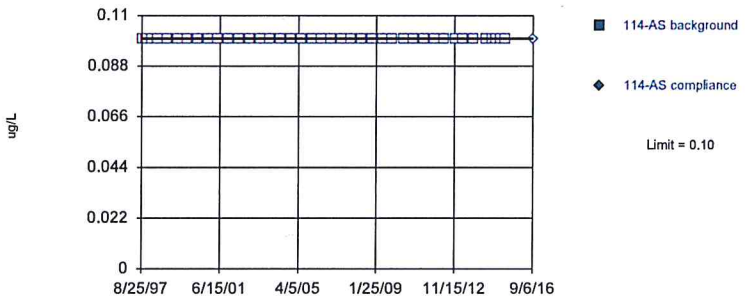
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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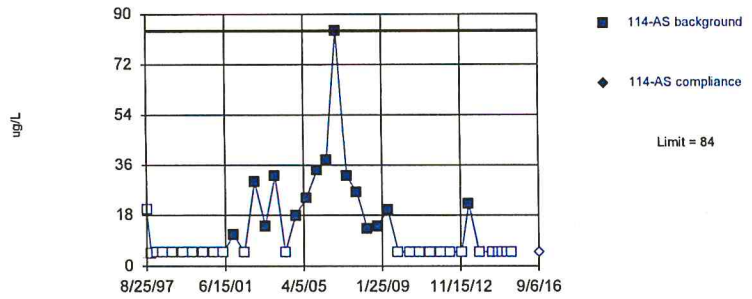
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

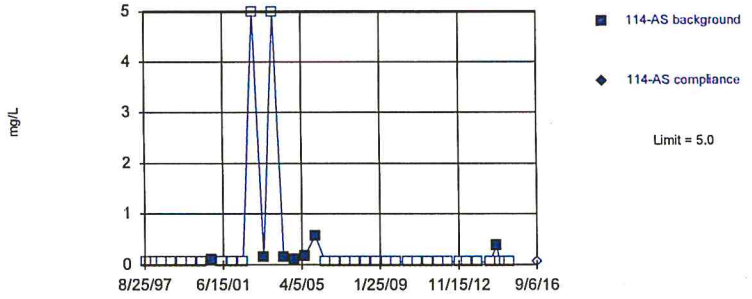
Constituent: Nickel Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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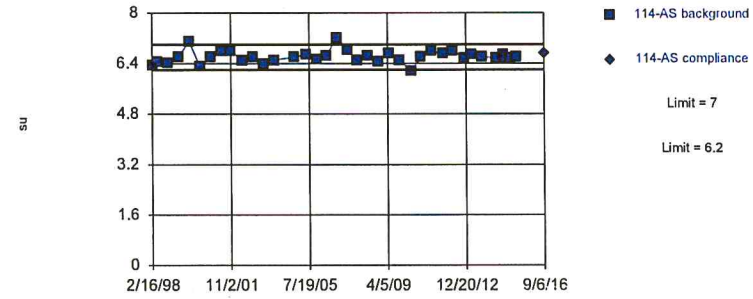
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.888, Std. Dev.=0.02947, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9517, critical = 0.914. Kappa = 2.092 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. Rosner's outlier test was performed on the background data. Three background outliers were removed: 5.8 (8/25/1997); 5.91 (11/10/1997); 7.5 (5/11/2004).

Constituent: pH [Field] Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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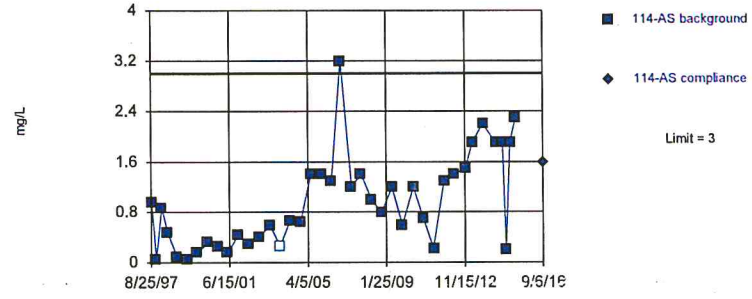
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=0.9028, Std. Dev.=0.3956, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

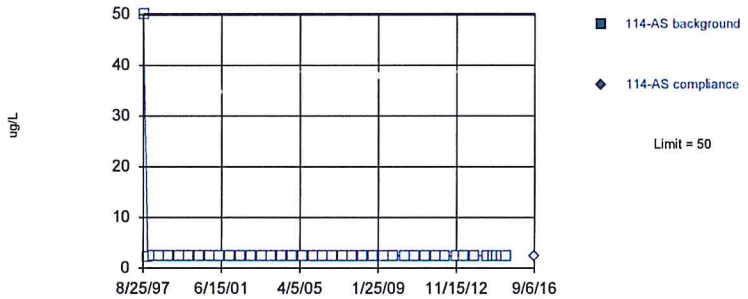
Constituent: Phosphorus Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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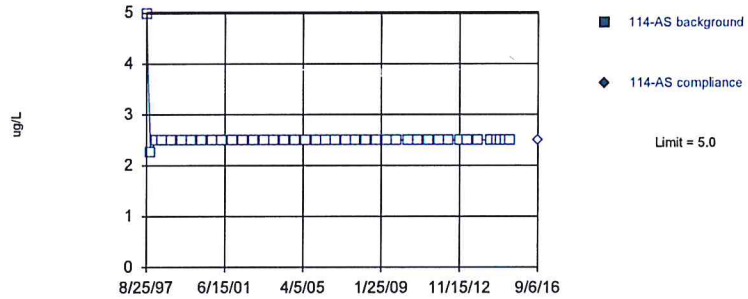
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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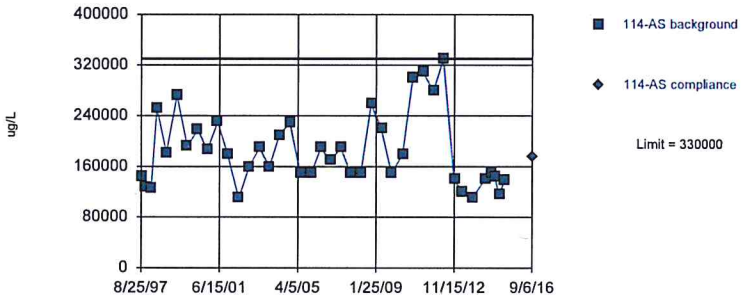
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=12.09, Std. Dev.=0.2948, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9539, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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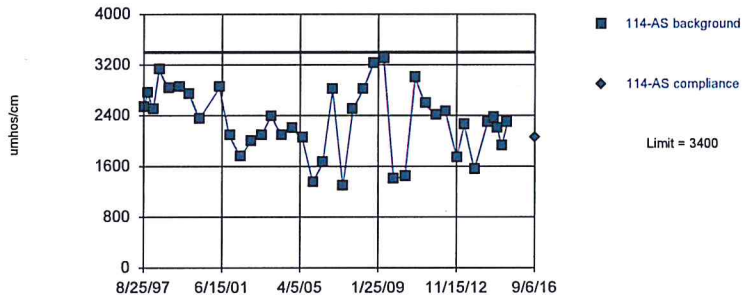
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=2313, Std. Dev.=528.9, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9683, critical = 0.917. Kappa = 2.081 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. Rosner's outlier test was performed on the background data. One background outlier was removed: 280 (11/13/2000).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 11:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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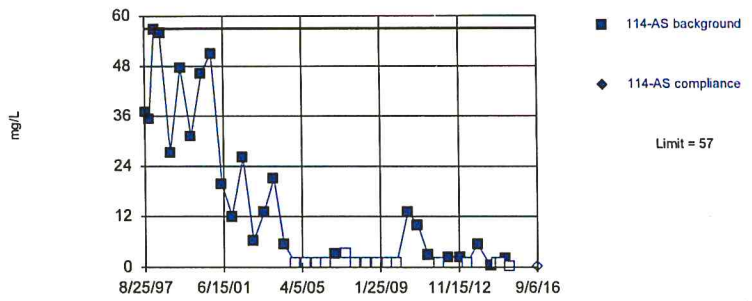
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 37.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sulfate Analysis Run 10/10/2016 11:33 AM

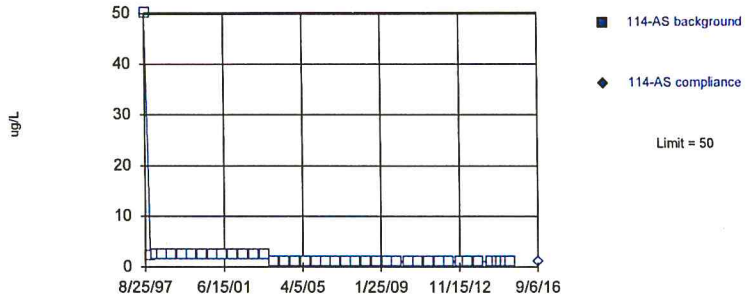
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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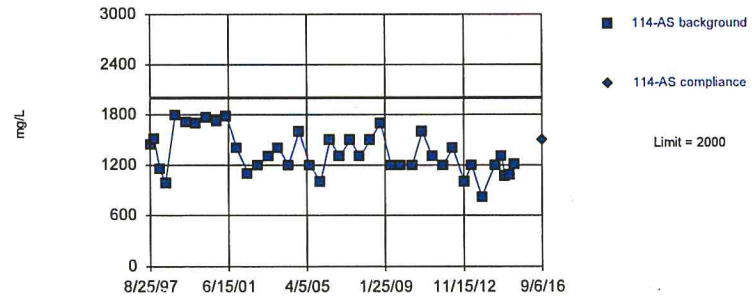
Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=7.186, Std. Dev.=0.1882, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9567, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 11:33 AM

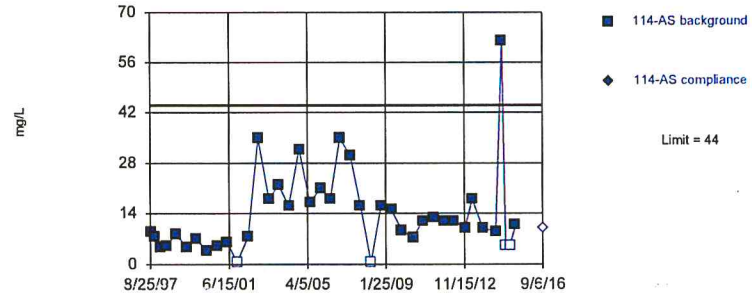
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=2.244, Std. Dev.=0.6242, n=40, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9684, critical = 0.919. Kappa = 2.076 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 11:33 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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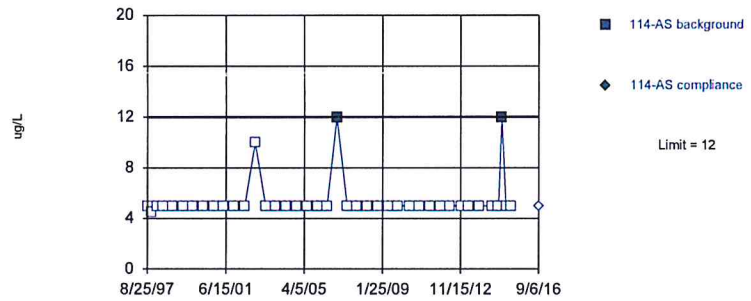
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 11:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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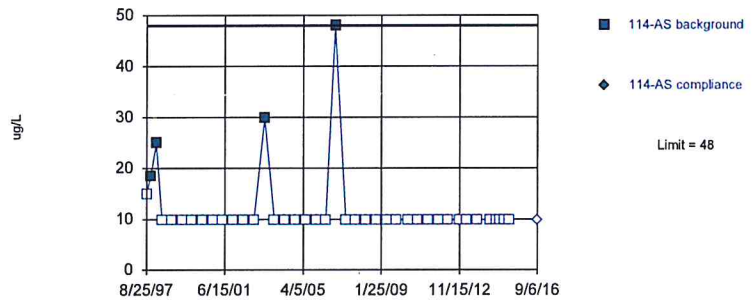
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 11:36 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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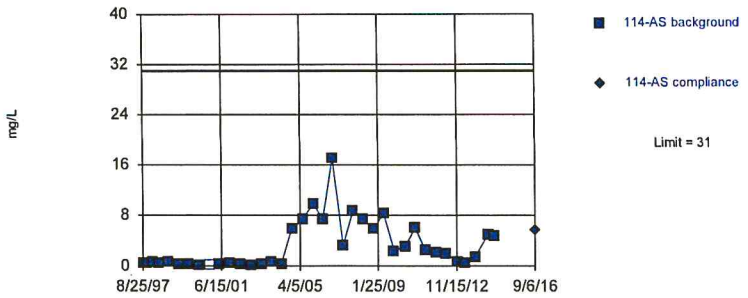
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=0.2618, Std. Dev.=1.512, n=37, 2.703% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9423, critical = 0.914. Kappa = 2.092 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Ammonia as N Analysis Run 10/10/2016 11:39 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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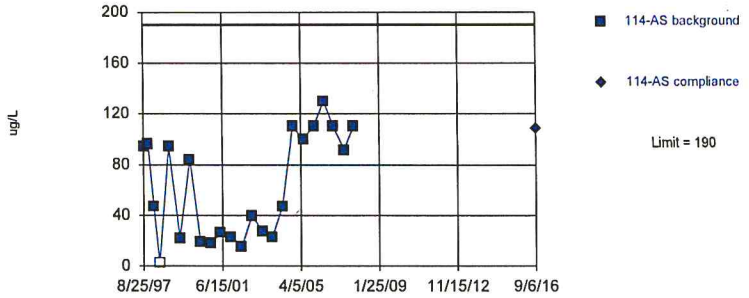
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=7.394, Std. Dev.=2.888, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8921, critical = 0.881. Kappa = 2.224 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 11:39 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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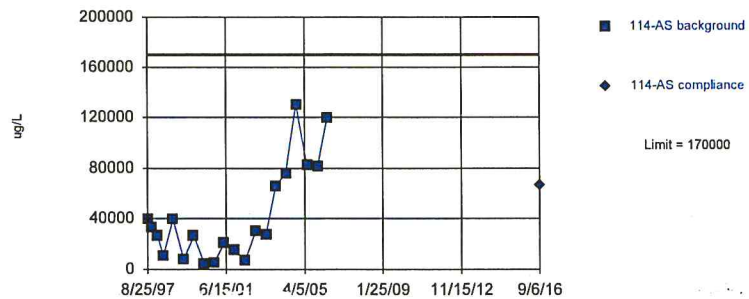
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=31.84, Std. Dev.=10.42, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.954, critical = 0.868. Kappa = 2.274 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 11:40 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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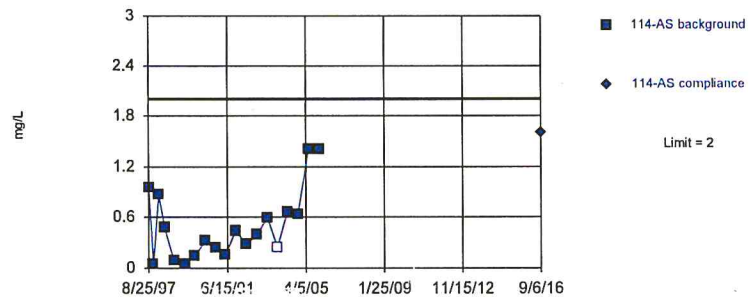
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=0.7295, Std. Dev.=0.2274, n=19, 5.263% NDs. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9712, critical = 0.901. Kappa = 2.302 (c=34, w=1, 1 of 2, event alpha = 0.026). Report alpha = 0.0007744. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Phosphorus Total Analysis Run 10/10/2016 11:40 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

# TIME SERIES GRAPHS

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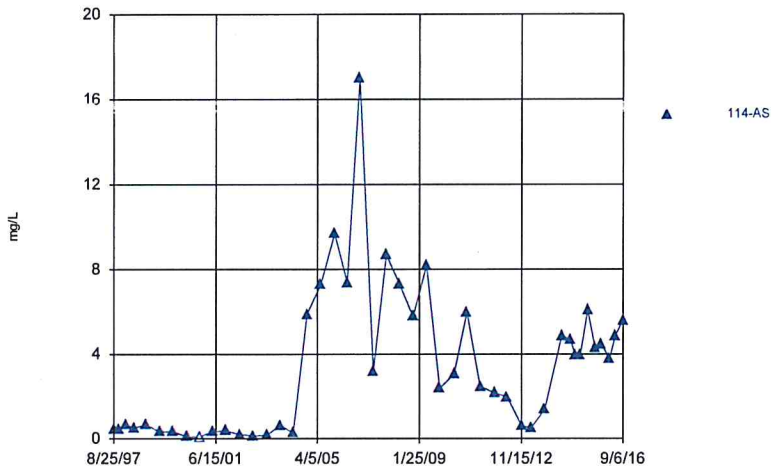
Hollow symbols indicate censored values.

Time Series




Constituent: Ammonia as N Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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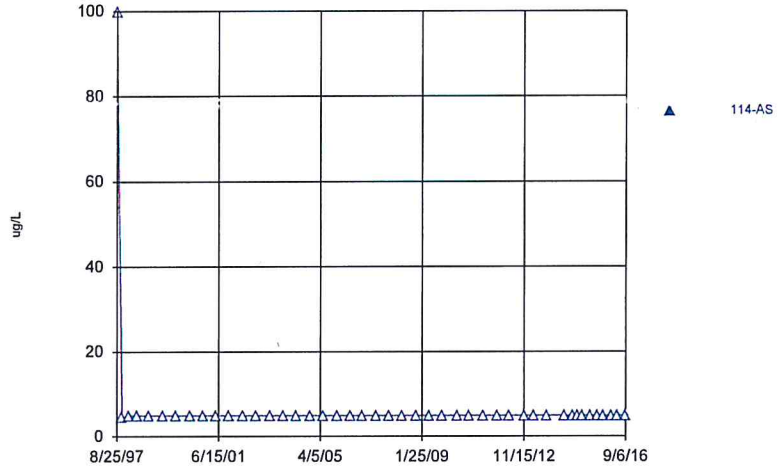
Hollow symbols indicate censored values.

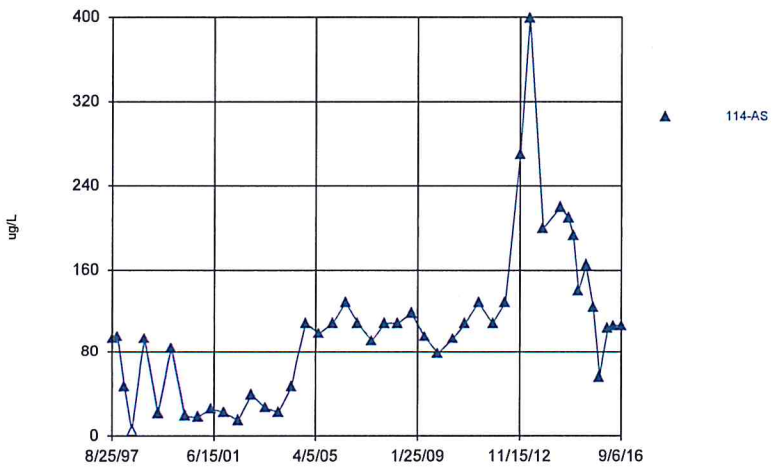
Time Series




Constituent: Antimony Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Time Series




Constituent: Arsenic Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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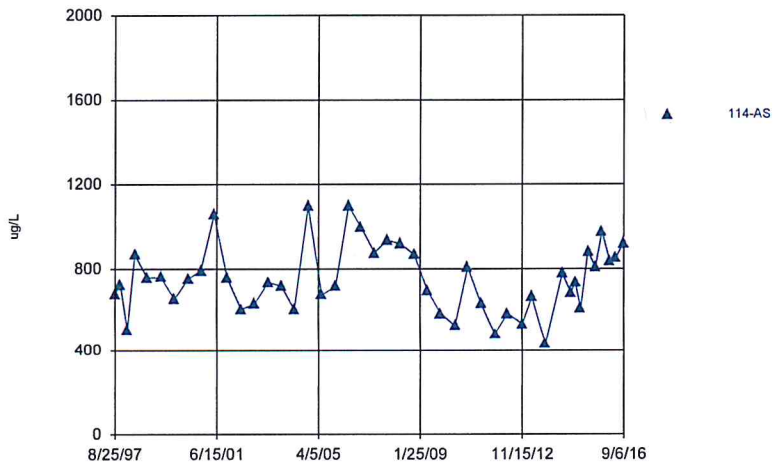
Time Series




Constituent: Barium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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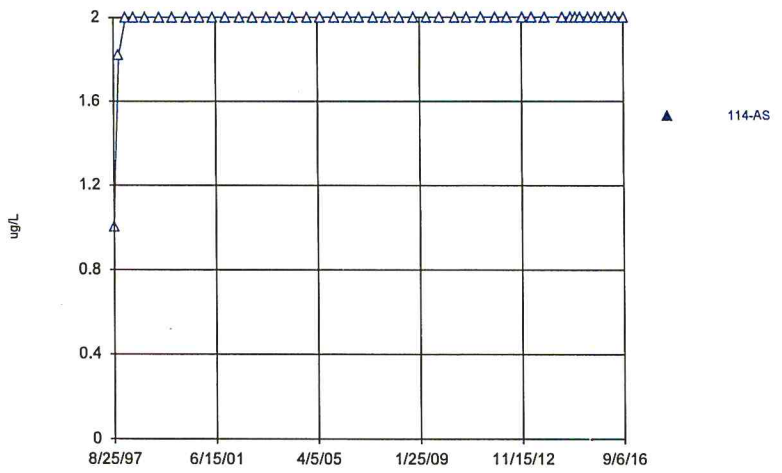
Hollow symbols indicate censored values.

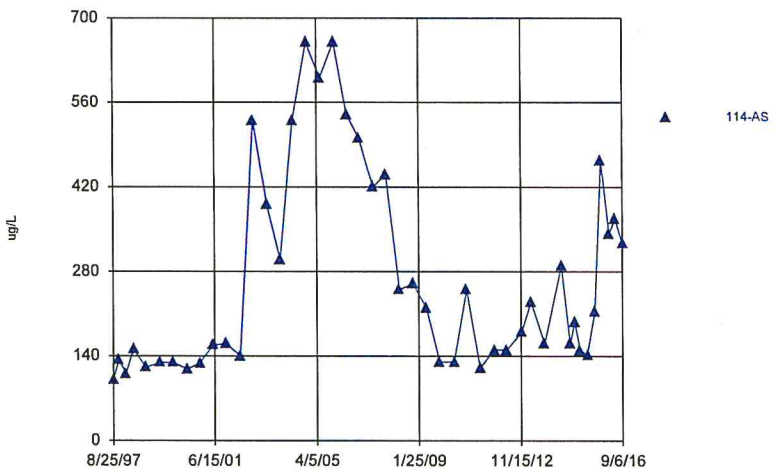
Time Series




Constituent: Beryllium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Time Series




Constituent: Boron Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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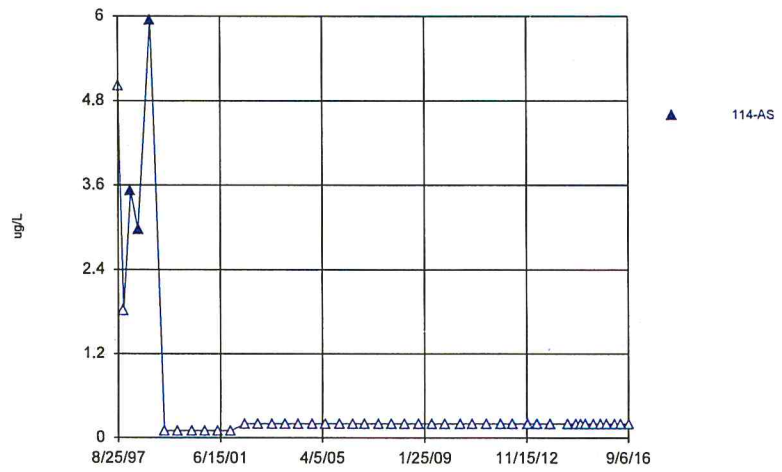
Hollow symbols indicate censored values.

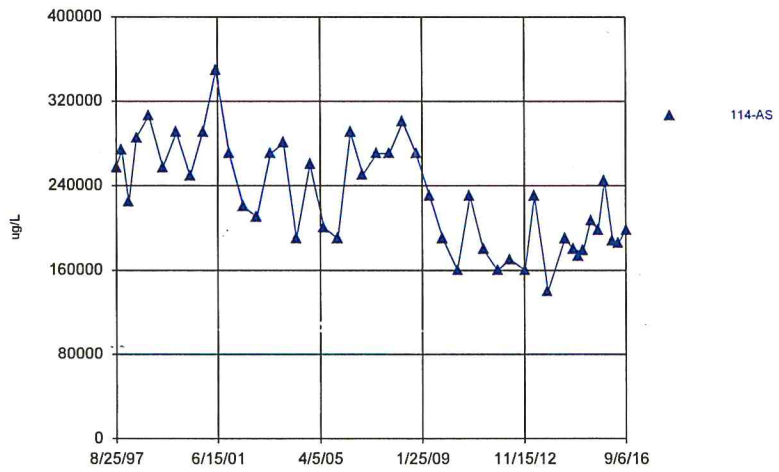
Time Series




Constituent: Cadmium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

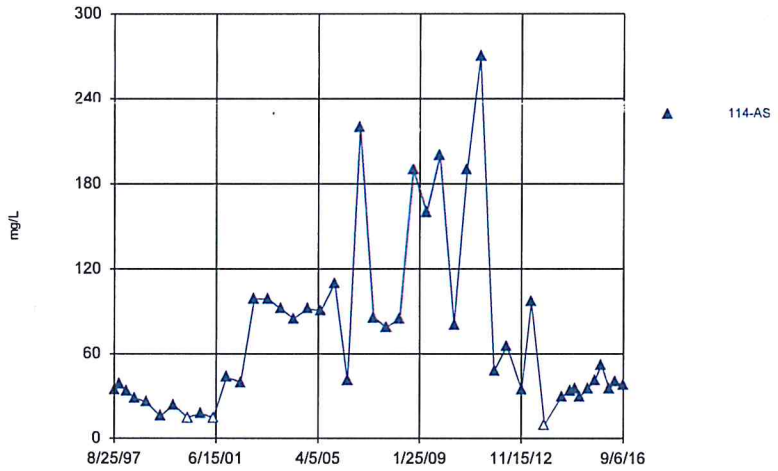
Time Series




Constituent: Calcium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

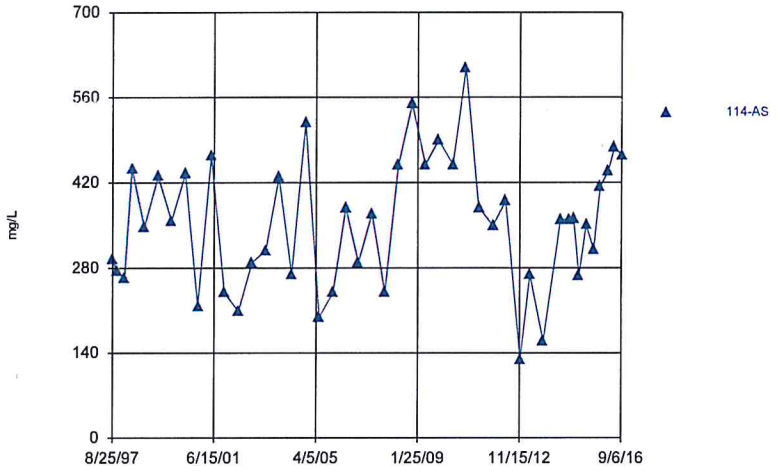
Time Series




Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Time Series




Constituent: Chloride Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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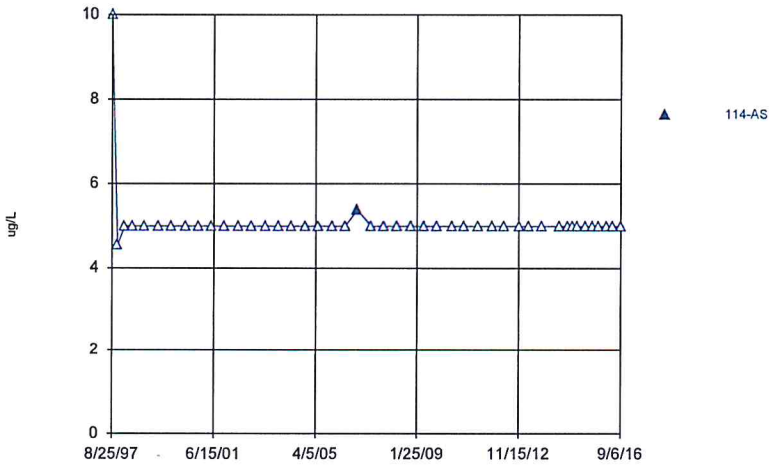
Hollow symbols indicate censored values.

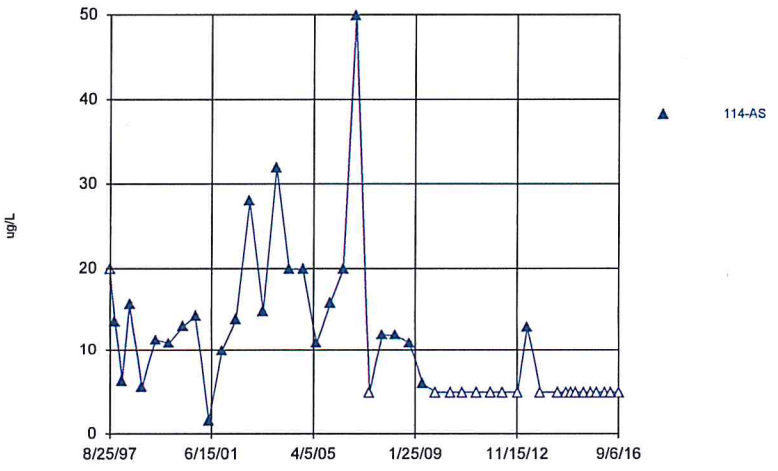
Time Series




Constituent: Chromium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series




Constituent: Cobalt Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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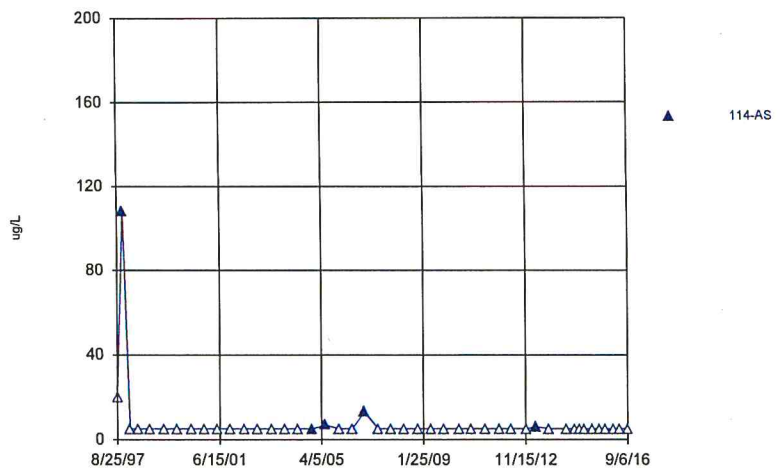
Hollow symbols indicate censored values.

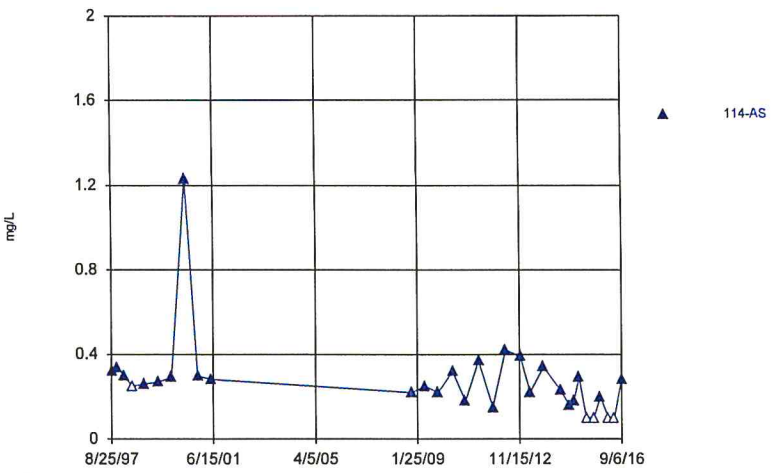
Time Series




Constituent: Copper Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series




Constituent: Fluoride Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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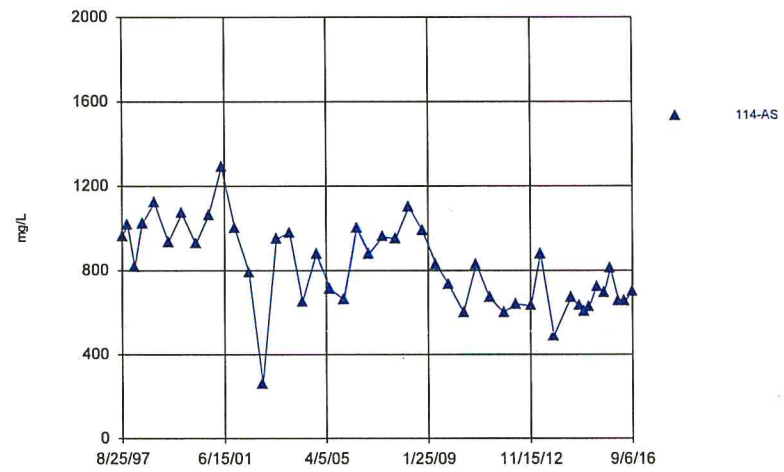
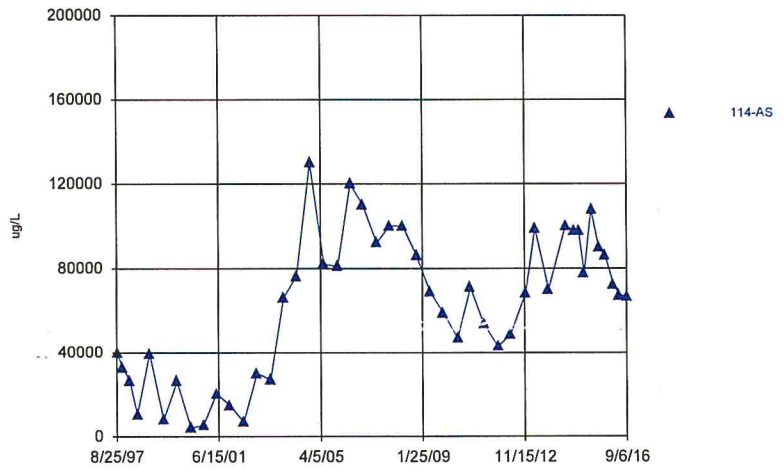
Time Series




Constituent: Hardness Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Time Series




Constituent: Iron Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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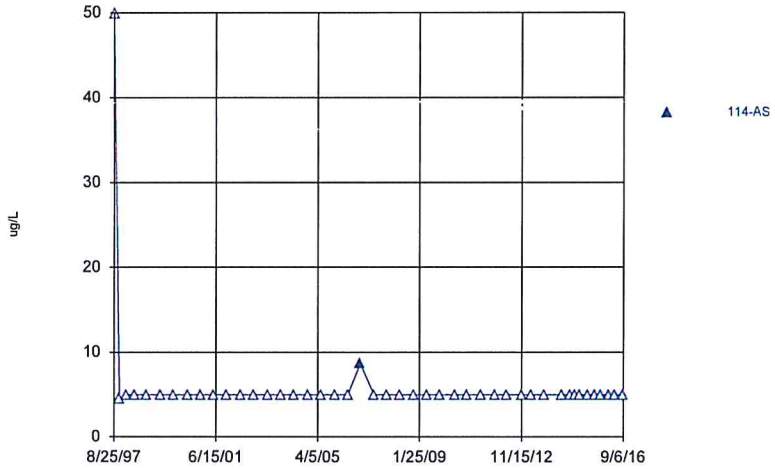
Hollow symbols indicate censored values.

Time Series




Constituent: Lead Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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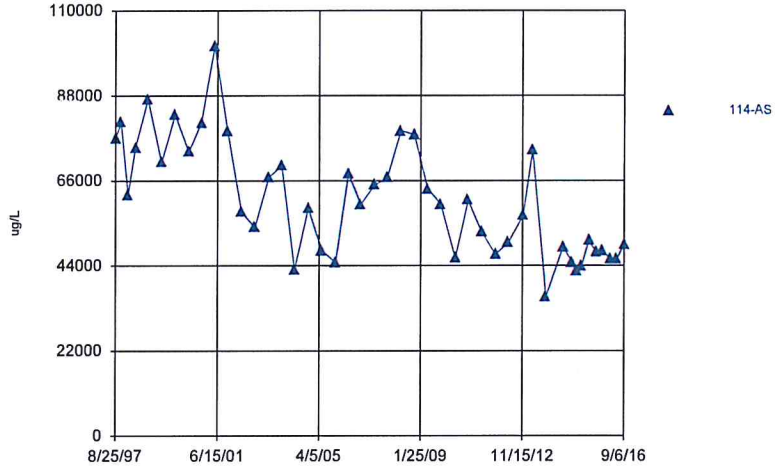
Time Series




Constituent: Magnesium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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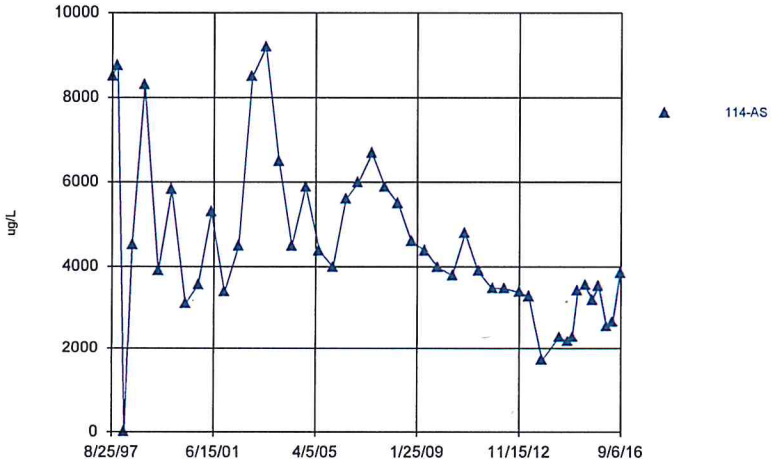
Time Series




Constituent: Manganese Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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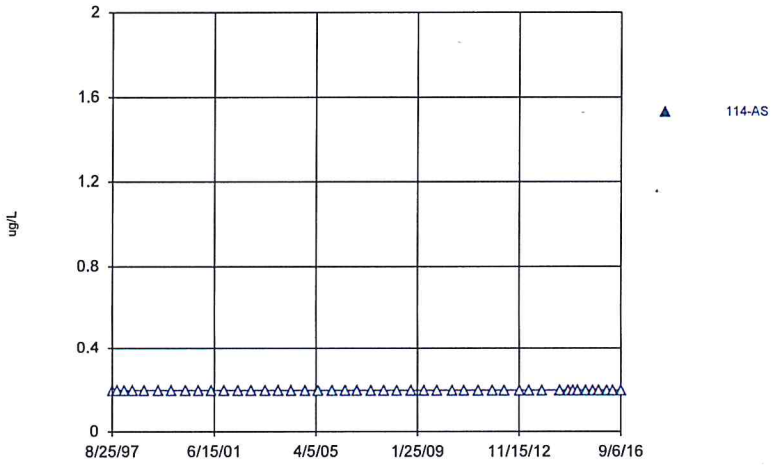
Hollow symbols indicate censored values.

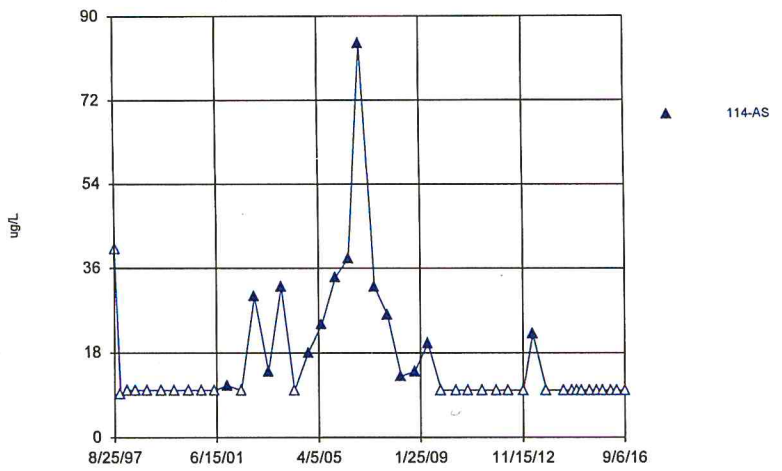
Time Series




Constituent: Mercury Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

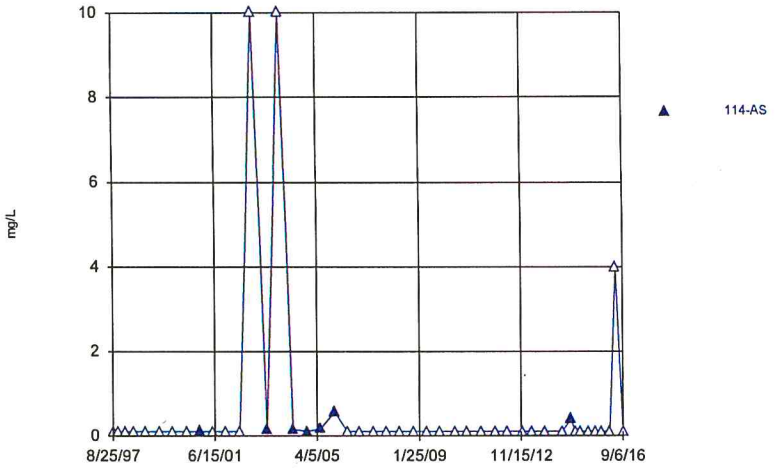
Time Series




Constituent: Nickel Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

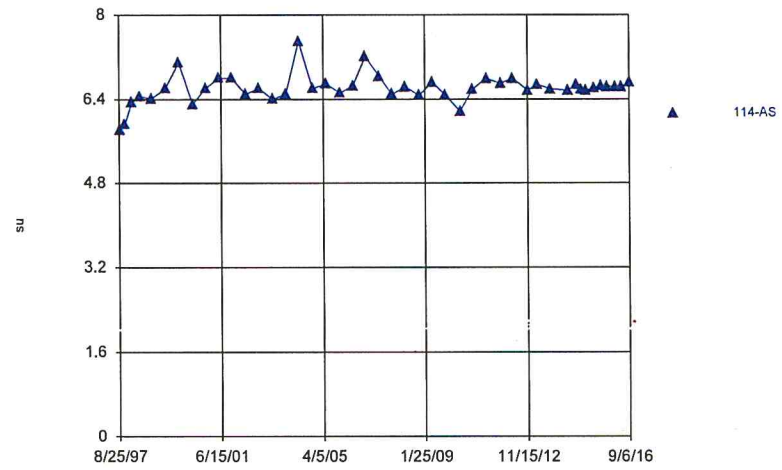
Time Series




Constituent: Nitrate/Nitrite Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

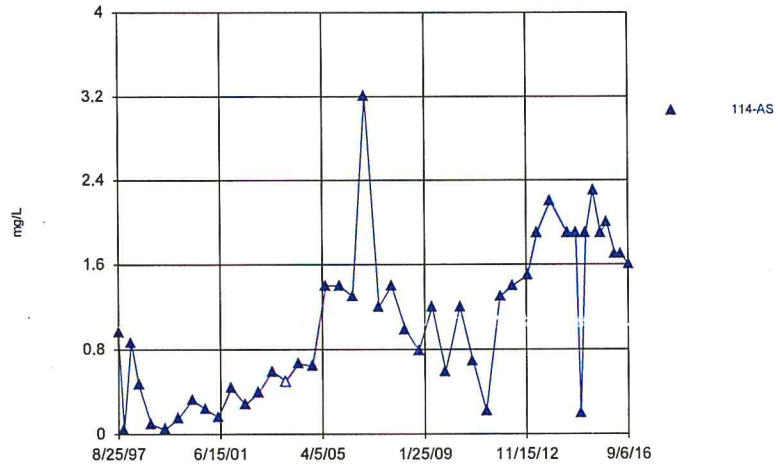
Time Series




Constituent: pH [Field] Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series




Constituent: Phosphorus Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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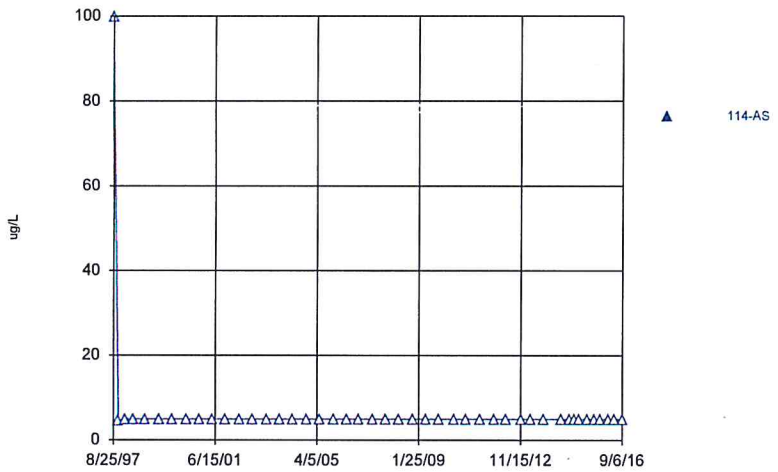
Hollow symbols indicate censored values.

Time Series




Constituent: Selenium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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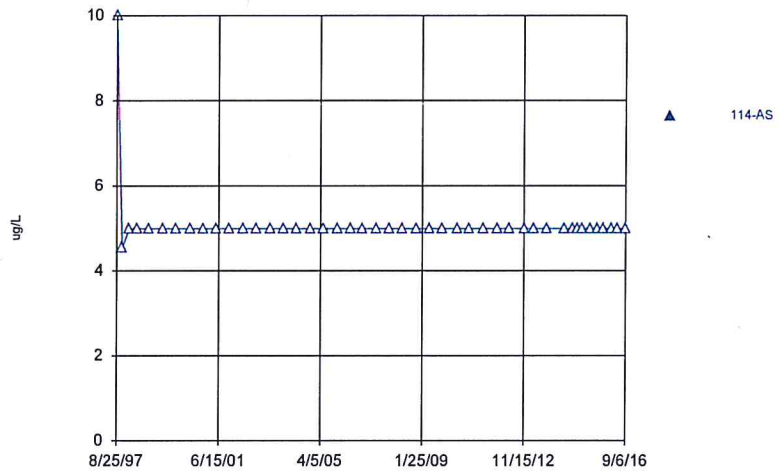
Hollow symbols indicate censored values.

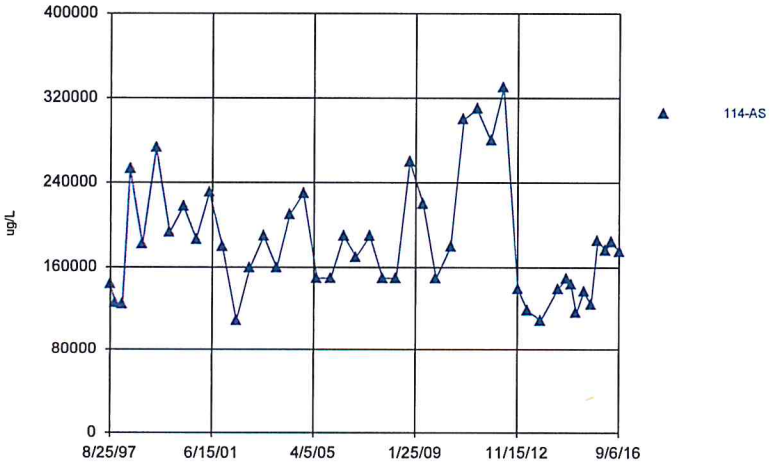
Time Series




Constituent: Silver Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

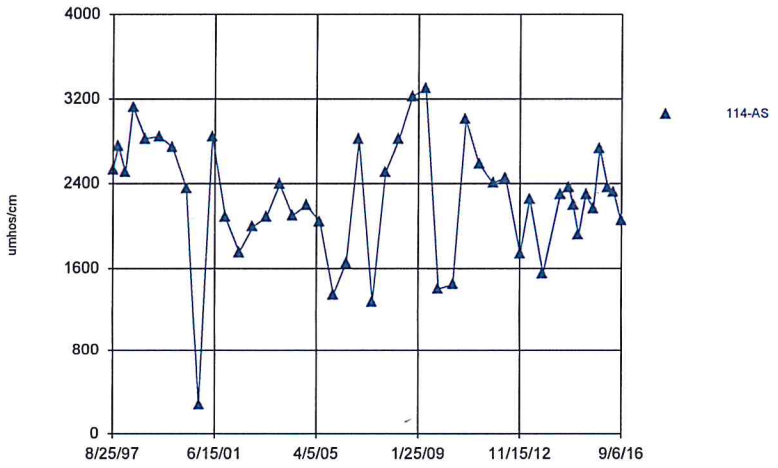
Time Series




Constituent: Sodium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Time Series




Constituent: Specific Conductance [Field] Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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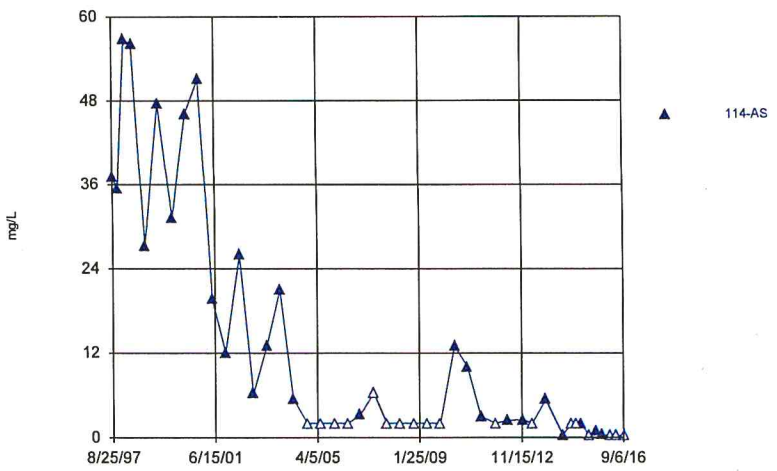
Hollow symbols indicate censored values.

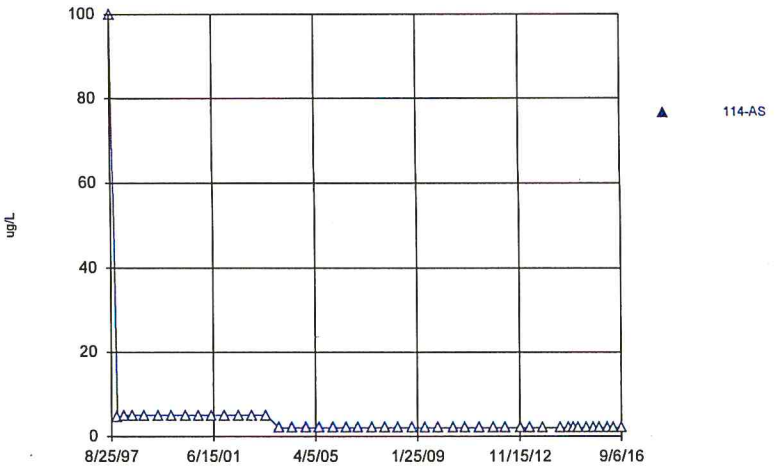
Time Series




Constituent: Sulfate Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

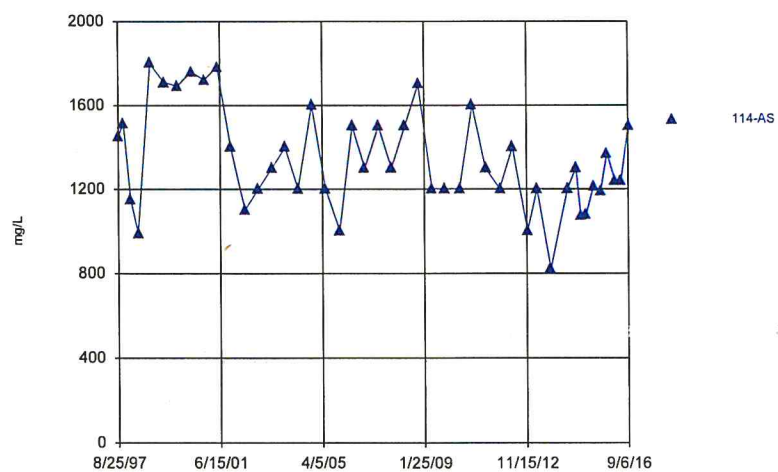
Time Series




Constituent: Thallium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

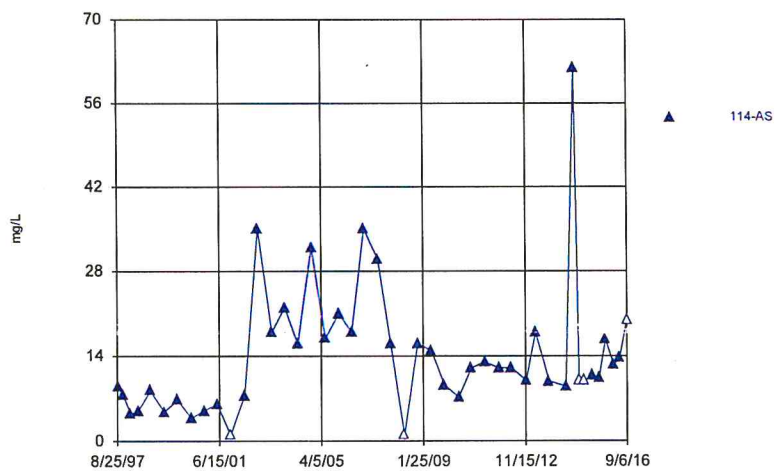
Time Series




Constituent: Total Dissolved Solids [TDS] Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

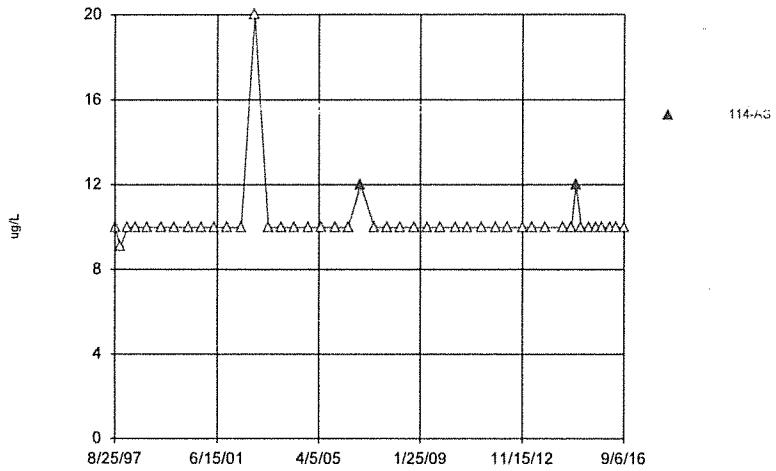
Time Series




Constituent: Total Organic Carbon [TOC] Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

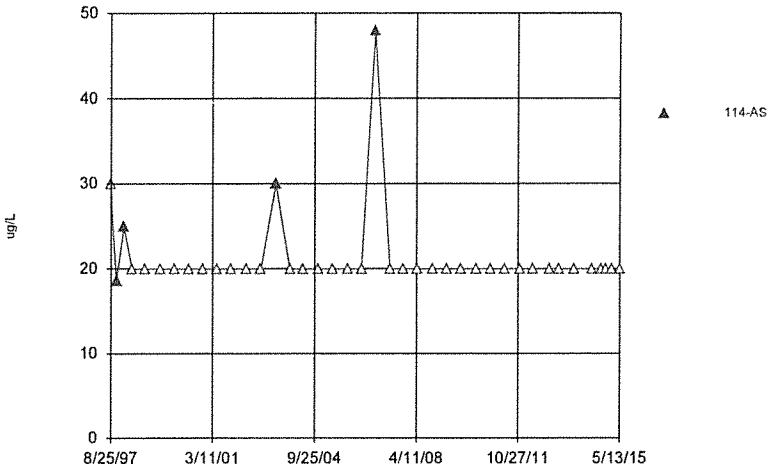
## Time Series




Constituent: Vanadium Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Time Series




Constituent: Zinc Total Analysis Run 10/11/2016 6:30 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

# APPENDIX D
# STATISTICAL EVALUATIONS
# ST. LOUIS FORMATION

# TREND EVALUATION OF BACKGROUND DATA

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:16 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N (mg/L) | 100-SS (bg) | 0 | -51 | -201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 104-SS (bg) | 0 | 110 | 201 | No | 40 | 80 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 105-SS (bg) | 0 | -138 | -201 | No | 40 | 85 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 106-SS (bg) | 0 | 51 | 201 | No | 40 | 67.5 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 109-SS (bg) | 0 | -62 | -201 | No | 40 | 87.5 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 110-SS (bg) | 0.004319 | 82 | 201 | No | 40 | 5 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 115-SS (bg) | 0 | 30 | 201 | No | 40 | 67.5 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 201A-SS (bg) | 0 | -47 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 205-SS (bg) | 0 | -95 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 100-SS (bg) | 0 | -22 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 104-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 105-SS (bg) | 0 | -65 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 106-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 109-SS (bg) | 0 | -100 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 110-SS (bg) | 0 | 46 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 115-SS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 201A-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 205-SS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 100-SS (bg) | 0 | 46 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 104-SS (bg) | 0 | 18 | 201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 105-SS (bg) | 0 | -65 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 106-SS (bg) | 0 | 89 | 201 | No | 40 | 55 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 109-SS (bg) | 0 | -171 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 110-SS (bg) | 0 | -96 | -201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| **Arsenic Total (ug/L)** | **115-SS (bg)** | **0.01852** | **211** | **201** | **Yes** | **40** | **55** | **n/a** | **n/a** | **0.02** | **NP** |
| Arsenic Total (ug/L) | 201A-SS (bg) | 0 | -85 | -201 | No | 40 | 87.5 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 205-SS (bg) | 0 | -26 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Barium Total (ug/L) | 100-SS (bg) | 0.1428 | 88 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Barium Total (ug/L)** | **104-SS (bg)** | **0.8454** | **261** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Barium Total (ug/L)** | **105-SS (bg)** | **4.903** | **327** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Barium Total (ug/L) | 106-SS (bg) | 0 | 59 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Barium Total (ug/L) | 109-SS (bg) | 0 | -35 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Barium Total (ug/L)** | **110-SS (bg)** | **7.415** | **420** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Barium Total (ug/L)** | **115-SS (bg)** | **14.74** | **308** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Barium Total (ug/L) | 201A-SS (bg) | 0.64 | 112 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Barium Total (ug/L)** | **205-SS (bg)** | **0.4866** | **202** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Beryllium Total (ug/L) | 100-SS (bg) | 0 | 116 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 104-SS (bg) | 0 | 81 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 105-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 106-SS (bg) | 0 | 81 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 109-SS (bg) | 0 | 48 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 110-SS (bg) | 0 | 116 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 115-SS (bg) | 0 | 48 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 201A-SS (bg) | 0 | 81 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 205-SS (bg) | 0 | 48 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| **Boron Total (ug/L)** | **100-SS (bg)** | **1.059** | **234** | **201** | **Yes** | **40** | **10** | **n/a** | **n/a** | **0.02** | **NP** |
| **Boron Total (ug/L)** | **104-SS (bg)** | **3.228** | **377** | **201** | **Yes** | **40** | **20** | **n/a** | **n/a** | **0.02** | **NP** |
| Boron Total (ug/L) | 105-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Boron Total (ug/L) | 106-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Boron Total (ug/L) | 109-SS (bg) | -0.3624 | -57 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:16 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Boron Total (ug/L) | 110-SS (bg) | -0.6411 | -87 | -201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| **Boron Total (ug/L)** | **115-SS (bg)** | **12.11** | **266** | **201** | **Yes** | **40** | **27.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Boron Total (ug/L) | 201A-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Boron Total (ug/L) | 205-SS (bg) | 0 | -63 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 100-SS (bg) | 0 | -61 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 104-SS (bg) | 0 | -35 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 105-SS (bg) | 0 | -92 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 106-SS (bg) | 0 | -63 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 109-SS (bg) | 0 | -87 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 110-SS (bg) | 0 | -34 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 115-SS (bg) | 0 | -89 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 201A-SS (bg) | 0 | -66 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 205-SS (bg) | 0 | -165 | -201 | No | 40 | 87.5 | n/a | n/a | 0.02 | NP |
| Calcium Total (ug/L) | 100-SS (bg) | -114.8 | -79 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Calcium Total (ug/L) | 104-SS (bg) | 243.6 | 118 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Calcium Total (ug/L)** | **105-SS (bg)** | **1908** | **403** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Calcium Total (ug/L)** | **106-SS (bg)** | **584.2** | **291** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Calcium Total (ug/L) | 109-SS (bg) | 273.8 | 151 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Calcium Total (ug/L)** | **110-SS (bg)** | **3124** | **313** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Calcium Total (ug/L)** | **115-SS (bg)** | **4611** | **259** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Calcium Total (ug/L)** | **201A-SS (bg)** | **941.3** | **409** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Calcium Total (ug/L)** | **205-SS (bg)** | **391** | **295** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chemical Oxygen Demand [COD] (m...** | **100-SS (bg)** | **0** | **-301** | **-201** | **Yes** | **40** | **97.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Chemical Oxygen Demand [COD] (m... | 104-SS (bg) | 0 | 73 | 201 | No | 40 | 75 | n/a | n/a | 0.02 | NP |
| Chemical Oxygen Demand [COD] (m... | 105-SS (bg) | 0 | -161 | -201 | No | 40 | 75 | n/a | n/a | 0.02 | NP |
| **Chemical Oxygen Demand [COD] (m...** | **106-SS (bg)** | **0** | **-339** | **-201** | **Yes** | **40** | **90** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chemical Oxygen Demand [COD] (m...** | **109-SS (bg)** | **0** | **-268** | **-201** | **Yes** | **40** | **95** | **n/a** | **n/a** | **0.02** | **NP** |
| Chemical Oxygen Demand [COD] (m... | 110-SS (bg) | 0.5451 | 88 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Chemical Oxygen Demand [COD] (m... | 115-SS (bg) | 1.334 | 147 | 201 | No | 40 | 30 | n/a | n/a | 0.02 | NP |
| **Chemical Oxygen Demand [COD] (m...** | **201A-SS (bg)** | **0** | **-366** | **-201** | **Yes** | **40** | **95** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chemical Oxygen Demand [COD] (m...** | **205-SS (bg)** | **0** | **-229** | **-201** | **Yes** | **40** | **90** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **100-SS (bg)** | **-0.1805** | **-260** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **104-SS (bg)** | **0.1496** | **335** | **201** | **Yes** | **40** | **40** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **105-SS (bg)** | **4.592** | **437** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **106-SS (bg)** | **0.9369** | **452** | **201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **109-SS (bg)** | **-0.09448** | **-319** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **110-SS (bg)** | **2.339** | **204** | **201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **115-SS (bg)** | **11.58** | **248** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **201A-SS (bg)** | **0.1287** | **491** | **201** | **Yes** | **40** | **30** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **205-SS (bg)** | **0.7123** | **329** | **201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Chromium Total (ug/L) | 100-SS (bg) | 0 | -157 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 104-SS (bg) | 0 | -180 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 105-SS (bg) | 0 | -82 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 106-SS (bg) | 0 | -83 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 109-SS (bg) | 0 | -192 | -201 | No | 40 | 82.5 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 110-SS (bg) | 0 | -190 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 115-SS (bg) | 0 | -46 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 201A-SS (bg) | 0 | -126 | -201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 205-SS (bg) | 0 | -132 | -201 | No | 40 | 85 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 100-SS (bg) | 0 | -100 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:16 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cobalt Total (ug/L) | 104-SS (bg) | 0 | -135 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 105-SS (bg) | 0 | -65 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 106-SS (bg) | 0 | -135 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 109-SS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 110-SS (bg) | 0 | -170 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 115-SS (bg) | 0.262 | 172 | 201 | No | 40 | 42.5 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 201A-SS (bg) | 0 | -135 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 205-SS (bg) | 0 | -102 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 100-SS (bg) | 0 | -164 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 104-SS (bg) | 0 | -136 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 105-SS (bg) | 0 | -80 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 106-SS (bg) | 0 | -102 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 109-SS (bg) | 0 | -100 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 110-SS (bg) | 0 | -110 | -201 | No | 40 | 70 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 115-SS (bg) | 0 | -72 | -201 | No | 40 | 82.5 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 201A-SS (bg) | 0 | -138 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 205-SS (bg) | 0 | -25 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| **Fluoride (mg/L)** | **100-SS (bg)** | **-0.00...** | **-214** | **-186** | **Yes** | **38** | **2.632** | **n/a** | **n/a** | **0.02** | **NP** |
| Fluoride (mg/L) | 104-SS (bg) | 0 | -1 | -186 | No | 38 | 2.632 | n/a | n/a | 0.02 | NP |
| **Fluoride (mg/L)** | **105-SS (bg)** | **-0.01749** | **-384** | **-186** | **Yes** | **38** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Fluoride (mg/L) | 106-SS (bg) | -0.00... | -94 | -186 | No | 38 | 0 | n/a | n/a | 0.02 | NP |
| **Fluoride (mg/L)** | **109-SS (bg)** | **0.0198** | **264** | **186** | **Yes** | **38** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Fluoride (mg/L)** | **110-SS (bg)** | **-0.01819** | **-375** | **-186** | **Yes** | **38** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Fluoride (mg/L)** | **115-SS (bg)** | **-0.05116** | **-340** | **-186** | **Yes** | **38** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Fluoride (mg/L)** | **201A-SS (bg)** | **-0.00...** | **-341** | **-186** | **Yes** | **38** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Fluoride (mg/L)** | **205-SS (bg)** | **-0.00...** | **-188** | **-186** | **Yes** | **38** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Hardness Total (mg/L) | 100-SS (bg) | 0 | 7 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Hardness Total (mg/L) | 104-SS (bg) | 1.426 | 170 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Hardness Total (mg/L)** | **105-SS (bg)** | **9.008** | **387** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Hardness Total (mg/L)** | **106-SS (bg)** | **2.804** | **278** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Hardness Total (mg/L) | 109-SS (bg) | 1.292 | 165 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Hardness Total (mg/L)** | **110-SS (bg)** | **10.01** | **287** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Hardness Total (mg/L)** | **115-SS (bg)** | **18.87** | **276** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Hardness Total (mg/L)** | **201A-SS (bg)** | **4.532** | **349** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Hardness Total (mg/L)** | **205-SS (bg)** | **3.993** | **352** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Iron Total (ug/L) | 100-SS (bg) | 0 | -28 | -201 | No | 40 | 25 | n/a | n/a | 0.02 | NP |
| **Iron Total (ug/L)** | **104-SS (bg)** | **-116.2** | **-276** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Iron Total (ug/L) | 105-SS (bg) | -44.5 | -178 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Iron Total (ug/L)** | **106-SS (bg)** | **51.01** | **414** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Iron Total (ug/L)** | **109-SS (bg)** | **-18.82** | **-357** | **-201** | **Yes** | **40** | **5** | **n/a** | **n/a** | **0.02** | **NP** |
| Iron Total (ug/L) | 110-SS (bg) | 107.5 | 166 | 201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| **Iron Total (ug/L)** | **115-SS (bg)** | **100.5** | **332** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Iron Total (ug/L) | 201A-SS (bg) | -24.18 | -189 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Iron Total (ug/L) | 205-SS (bg) | -33.55 | -182 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 100-SS (bg) | 0 | -93 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 104-SS (bg) | 0 | -62 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 105-SS (bg) | 0 | -65 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 106-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 109-SS (bg) | 0 | -100 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 110-SS (bg) | 0 | 46 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:16 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead Total (ug/L) | 115-SS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 201A-SS (bg) | 0 | -132 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 205-SS (bg) | 0 | -16 | -201 | No | 40 | 87.5 | n/a | n/a | 0.02 | NP |
| Magnesium Total (ug/L) | 100-SS (bg) | 175.4 | 165 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Magnesium Total (ug/L)** | **104-SS (bg)** | **266.6** | **263** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Magnesium Total (ug/L)** | **105-SS (bg)** | **937** | **399** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Magnesium Total (ug/L)** | **106-SS (bg)** | **346.9** | **326** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Magnesium Total (ug/L) | 109-SS (bg) | 96.8 | 100 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Magnesium Total (ug/L)** | **110-SS (bg)** | **851.4** | **291** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Magnesium Total (ug/L)** | **115-SS (bg)** | **1502** | **244** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Magnesium Total (ug/L)** | **201A-SS (bg)** | **642.5** | **444** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Magnesium Total (ug/L)** | **205-SS (bg)** | **484.6** | **412** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Manganese Total (ug/L)** | **100-SS (bg)** | **0** | **-215** | **-201** | **Yes** | **40** | **57.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Manganese Total (ug/L) | 104-SS (bg) | -0.9428 | -141 | -201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| Manganese Total (ug/L) | 105-SS (bg) | -0.6502 | -127 | -201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| Manganese Total (ug/L) | 106-SS (bg) | 0.355 | 77 | 201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| **Manganese Total (ug/L)** | **109-SS (bg)** | **-0.8628** | **-304** | **-201** | **Yes** | **40** | **42.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Manganese Total (ug/L)** | **110-SS (bg)** | **2.934** | **236** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Manganese Total (ug/L)** | **115-SS (bg)** | **3.607** | **301** | **201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Manganese Total (ug/L)** | **201A-SS (bg)** | **-11.65** | **-318** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Manganese Total (ug/L)** | **205-SS (bg)** | **-0.5884** | **-264** | **-201** | **Yes** | **40** | **30** | **n/a** | **n/a** | **0.02** | **NP** |
| Mercury Total (ug/L) | 100-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 104-SS (bg) | 0 | -61 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 105-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 106-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 109-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 110-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 115-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 201A-SS (bg) | 0 | -53 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 205-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| **Nickel Total (ug/L)** | **100-SS (bg)** | **-0.5913** | **-261** | **-201** | **Yes** | **40** | **10** | **n/a** | **n/a** | **0.02** | **NP** |
| Nickel Total (ug/L) | 104-SS (bg) | 0 | -130 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 105-SS (bg) | 0 | -54 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 106-SS (bg) | 0 | -170 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 109-SS (bg) | 0 | -132 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 110-SS (bg) | 0 | -40 | -201 | No | 40 | 25 | n/a | n/a | 0.02 | NP |
| **Nickel Total (ug/L)** | **115-SS (bg)** | **1.87** | **232** | **201** | **Yes** | **40** | **30** | **n/a** | **n/a** | **0.02** | **NP** |
| Nickel Total (ug/L) | 201A-SS (bg) | 0 | -126 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 205-SS (bg) | 0 | -100 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 100-SS (bg) | 0 | -74 | -201 | No | 40 | 75 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 104-SS (bg) | 0 | 58 | 201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 105-SS (bg) | 0 | -46 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 106-SS (bg) | 0 | -64 | -201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 109-SS (bg) | 0 | 76 | 201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 110-SS (bg) | 0 | -19 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 115-SS (bg) | 0 | -40 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| **Nitrate/Nitrite (mg/L)** | **201A-SS (bg)** | **0.01** | **364** | **201** | **Yes** | **40** | **50** | **n/a** | **n/a** | **0.02** | **NP** |
| Nitrate/Nitrite (mg/L) | 205-SS (bg) | 0 | -18 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| pH [Field] (su) | 100-SS (bg) | -0.01736 | -196 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **pH [Field] (su)** | **104-SS (bg)** | **-0.0405** | **-277** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:16 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH [Field] (su)** | **105-SS (bg)** | **-0.02251** | **-283** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **pH [Field] (su)** | **106-SS (bg)** | **-0.02559** | **-255** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| pH [Field] (su) | 109-SS (bg) | -0.01685 | -162 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **pH [Field] (su)** | **110-SS (bg)** | **-0.01625** | **-207** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| pH [Field] (su) | 115-SS (bg) | -0.02196 | -199 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **pH [Field] (su)** | **201A-SS (bg)** | **-0.0296** | **-300** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **pH [Field] (su)** | **205-SS (bg)** | **-0.01733** | **-228** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Phosphorus Total (mg/L) | 100-SS (bg) | 0 | -178 | -201 | No | 40 | 70 | n/a | n/a | 0.02 | NP |
| Phosphorus Total (mg/L) | 104-SS (bg) | 0 | -95 | -201 | No | 40 | 60 | n/a | n/a | 0.02 | NP |
| **Phosphorus Total (mg/L)** | **105-SS (bg)** | **-0.00...** | **-509** | **-201** | **Yes** | **40** | **50** | **n/a** | **n/a** | **0.02** | **NP** |
| Phosphorus Total (mg/L) | 106-SS (bg) | 0 | -90 | -201 | No | 40 | 72.5 | n/a | n/a | 0.02 | NP |
| Phosphorus Total (mg/L) | 109-SS (bg) | 0 | -77 | -201 | No | 40 | 72.5 | n/a | n/a | 0.02 | NP |
| Phosphorus Total (mg/L) | 110-SS (bg) | -0.00... | -147 | -201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| **Phosphorus Total (mg/L)** | **115-SS (bg)** | **0.009173** | **344** | **201** | **Yes** | **40** | **10** | **n/a** | **n/a** | **0.02** | **NP** |
| **Phosphorus Total (mg/L)** | **201A-SS (bg)** | **0** | **-217** | **-201** | **Yes** | **40** | **70** | **n/a** | **n/a** | **0.02** | **NP** |
| Phosphorus Total (mg/L) | 205-SS (bg) | 0 | -16 | -201 | No | 40 | 70 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 100-SS (bg) | 0 | 46 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 104-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 105-SS (bg) | 0 | -65 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 106-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 109-SS (bg) | 0 | 41 | 201 | No | 40 | 80 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 110-SS (bg) | 0 | 45 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 115-SS (bg) | 0 | -62 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 201A-SS (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 205-SS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 100-SS (bg) | 0 | -100 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 104-SS (bg) | 0 | -98 | -194 | No | 39 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 105-SS (bg) | 0 | -65 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 106-SS (bg) | 0 | -61 | -186 | No | 38 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 109-SS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 110-SS (bg) | 0 | -100 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 115-SS (bg) | 0 | -58 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 201A-SS (bg) | 0 | -135 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 205-SS (bg) | 0 | -28 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| **Sodium Total (ug/L)** | **100-SS (bg)** | **-831.9** | **-488** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **104-SS (bg)** | **-502.2** | **-400** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **105-SS (bg)** | **571** | **215** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **106-SS (bg)** | **269.6** | **394** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **109-SS (bg)** | **-794.1** | **-400** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Sodium Total (ug/L) | 110-SS (bg) | 154.7 | 33 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Sodium Total (ug/L)** | **115-SS (bg)** | **3767** | **297** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **201A-SS (bg)** | **-1529** | **-493** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **205-SS (bg)** | **-392.5** | **-234** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Specific Conductance [Field] (u... | 100-SS (bg) | -3.436 | -194 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Specific Conductance [Field] (u... | 104-SS (bg) | 3.086 | 107 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Specific Conductance [Field] (u...** | **105-SS (bg)** | **17.15** | **333** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Specific Conductance [Field] (u... | 106-SS (bg) | 3.452 | 173 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Specific Conductance [Field] (u... | 109-SS (bg) | -1.534 | -92 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Specific Conductance [Field] (u...** | **110-SS (bg)** | **16.95** | **292** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Specific Conductance [Field] (u...** | **115-SS (bg)** | **55.65** | **298** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:16 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance [Field] (u... | 201A-SS (bg) | 0.6058 | 38 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Specific Conductance [Field] (u... | 205-SS (bg) | 1.604 | 104 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Sulfate as SO4 (mg/L)** | **100-SS (bg)** | **-1.575** | **-512** | **-201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sulfate as SO4 (mg/L)** | **104-SS (bg)** | **-1.275** | **-505** | **-201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sulfate as SO4 (mg/L)** | **105-SS (bg)** | **3.61** | **428** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Sulfate as SO4 (mg/L) | 106-SS (bg) | 0.1357 | 84 | 201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| **Sulfate as SO4 (mg/L)** | **109-SS (bg)** | **-1.556** | **-397** | **-201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sulfate as SO4 (mg/L)** | **110-SS (bg)** | **-1.606** | **-300** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sulfate as SO4 (mg/L)** | **115-SS (bg)** | **-1.746** | **-505** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sulfate as SO4 (mg/L)** | **201A-SS (bg)** | **0.7361** | **205** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Sulfate as SO4 (mg/L) | 205-SS (bg) | 0.3668 | 130 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Thallium Total (ug/L)** | **100-SS (bg)** | **0** | **-324** | **-201** | **Yes** | **40** | **97.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **104-SS (bg)** | **0** | **-314** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **105-SS (bg)** | **-0.08868** | **-390** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **106-SS (bg)** | **0** | **-314** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **109-SS (bg)** | **-0.08239** | **-378** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **110-SS (bg)** | **0** | **-304** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **115-SS (bg)** | **-0.08238** | **-378** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **201A-SS (bg)** | **0** | **-314** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **205-SS (bg)** | **-0.08234** | **-378** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Total Dissolved Solids [TDS] (m...** | **100-SS (bg)** | **-4.547** | **-362** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Dissolved Solids [TDS] (m... | 104-SS (bg) | -1.495 | -138 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Total Dissolved Solids [TDS] (m...** | **105-SS (bg)** | **10.47** | **377** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Dissolved Solids [TDS] (m... | 106-SS (bg) | 1.895 | 188 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Total Dissolved Solids [TDS] (m... | 109-SS (bg) | -2.746 | -201 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Total Dissolved Solids [TDS] (m... | 110-SS (bg) | 0 | 45 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Total Dissolved Solids [TDS] (m...** | **115-SS (bg)** | **20.92** | **246** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Dissolved Solids [TDS] (m... | 201A-SS (bg) | 0 | 40 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Total Dissolved Solids [TDS] (m... | 205-SS (bg) | 0 | -29 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Total Organic Carbon [TOC] (mg/L) | 100-SS (bg) | 0 | 51 | 201 | No | 40 | 72.5 | n/a | n/a | 0.02 | NP |
| Total Organic Carbon [TOC] (mg/L) | 104-SS (bg) | 0.01062 | 166 | 201 | No | 40 | 47.5 | n/a | n/a | 0.02 | NP |
| Total Organic Carbon [TOC] (mg/L) | 105-SS (bg) | -0.03496 | -95 | -201 | No | 40 | 17.5 | n/a | n/a | 0.02 | NP |
| **Total Organic Carbon [TOC] (mg/L)** | **106-SS (bg)** | **0.02137** | **213** | **201** | **Yes** | **40** | **52.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Organic Carbon [TOC] (mg/L) | 109-SS (bg) | 0 | 167 | 201 | No | 40 | 52.5 | n/a | n/a | 0.02 | NP |
| Total Organic Carbon [TOC] (mg/L) | 110-SS (bg) | 0.3407 | 163 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Total Organic Carbon [TOC] (mg/L) | 115-SS (bg) | 0.5685 | 195 | 201 | No | 40 | 22.5 | n/a | n/a | 0.02 | NP |
| Total Organic Carbon [TOC] (mg/L) | 201A-SS (bg) | 0 | 146 | 201 | No | 40 | 50 | n/a | n/a | 0.02 | NP |
| **Total Organic Carbon [TOC] (mg/L)** | **205-SS (bg)** | **0.04989** | **246** | **201** | **Yes** | **40** | **45** | **n/a** | **n/a** | **0.02** | **NP** |
| Vanadium Total (ug/L) | 100-SS (bg) | 0 | 5 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 104-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 105-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 106-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 109-SS (bg) | 0 | 9 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 110-SS (bg) | 0 | 38 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 115-SS (bg) | 0 | 42 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 201A-SS (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 205-SS (bg) | 0 | 44 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 100-SS (bg) | 0 | -167 | -201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 104-SS (bg) | 0 | -180 | -201 | No | 40 | 85 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 105-SS (bg) | 0 | -184 | -201 | No | 40 | 85 | n/a | n/a | 0.02 | NP |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:16 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Zinc Total (ug/L) | 106-SS (bg) | 0 | -165 | -201 | No | 40 | 92.5 | n/a | n/a | 0.02 | NP |
| **Zinc Total (ug/L)** | **109-SS (bg)** | **-3.762** | **-661** | **-201** | **Yes** | **40** | **32.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Zinc Total (ug/L) | 110-SS (bg) | 0 | -176 | -201 | No | 40 | 77.5 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 115-SS (bg) | 0 | -144 | -201 | No | 40 | 87.5 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 201A-SS (bg) | 0 | -100 | -201 | No | 40 | 85 | n/a | n/a | 0.02 | NP |
| **Zinc Total (ug/L)** | **205-SS (bg)** | **0** | **-254** | **-201** | **Yes** | **40** | **82.5** | **n/a** | **n/a** | **0.02** | **NP** |

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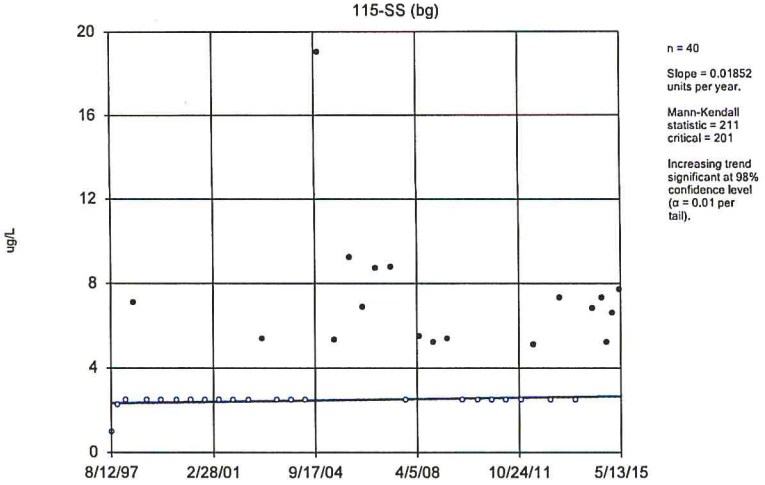
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 0.01852 units per year.

Mann-Kendall statistic = 211 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Arsenic Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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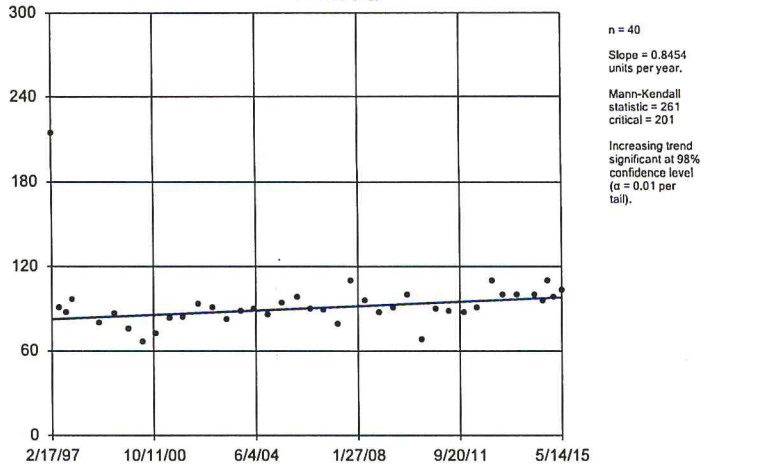
Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = 0.8454 units per year.

Mann-Kendall statistic = 261 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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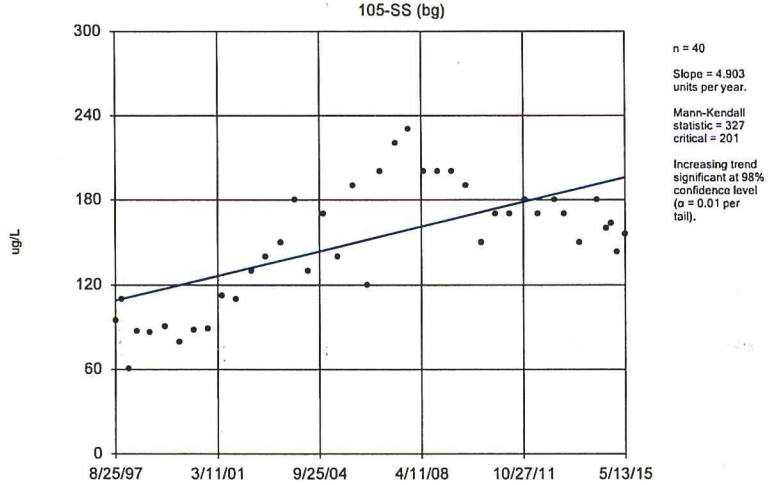
Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 4.903 units per year.

Mann-Kendall statistic = 327 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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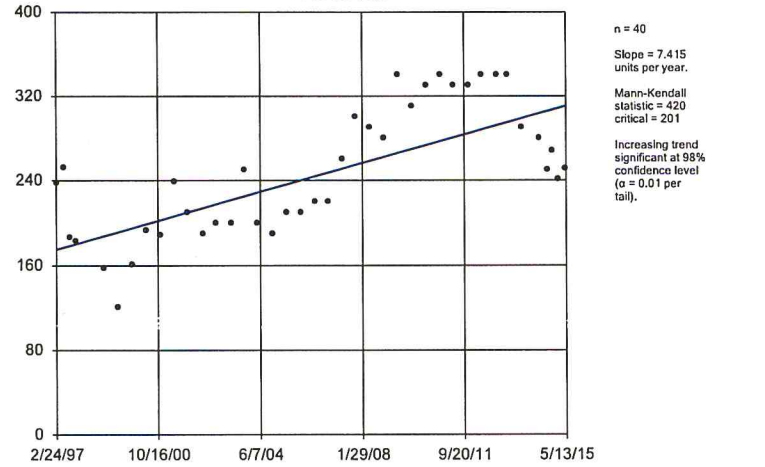
Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = 7.415 units per year.

Mann-Kendall statistic = 420 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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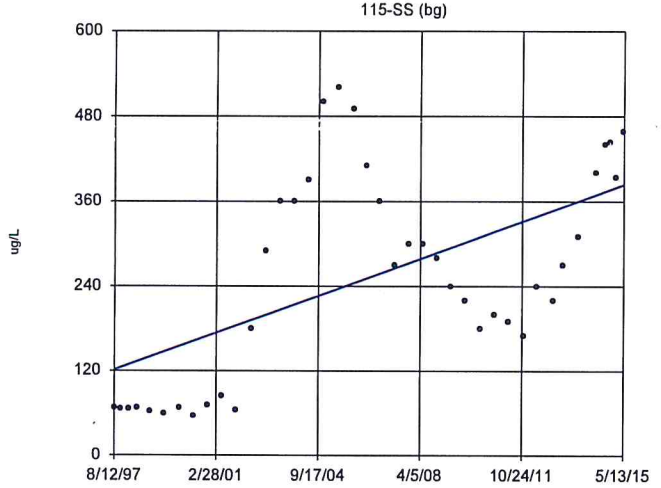
Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 14.74 units per year.

Mann-Kendall statistic = 366 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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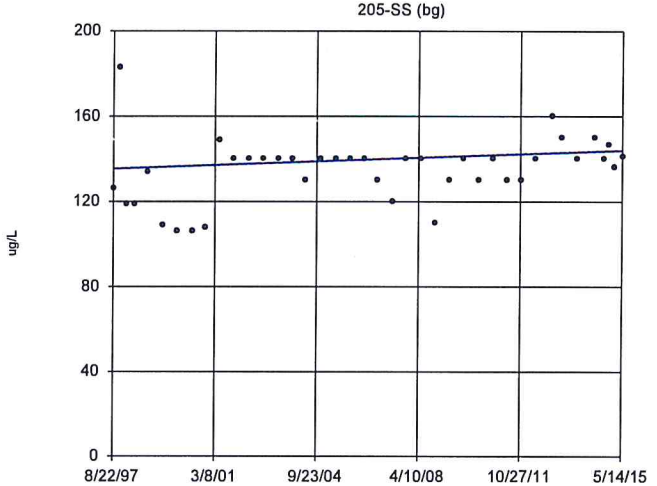
Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = 0.4866 units per year.

Mann-Kendall statistic = 202 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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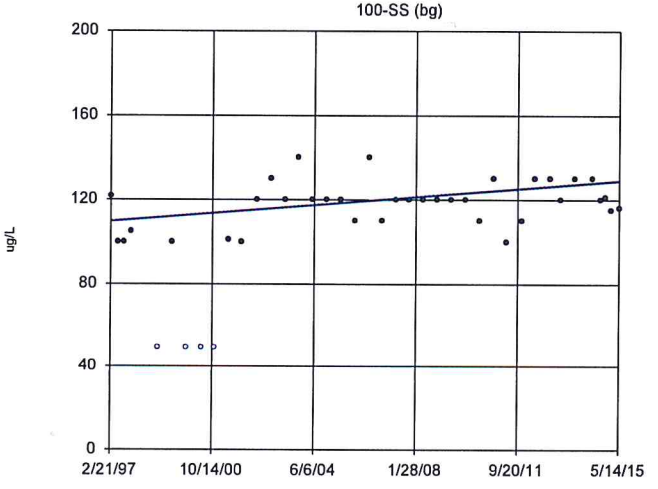
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = 1.059 units per year.

Mann-Kendall statistic = 234 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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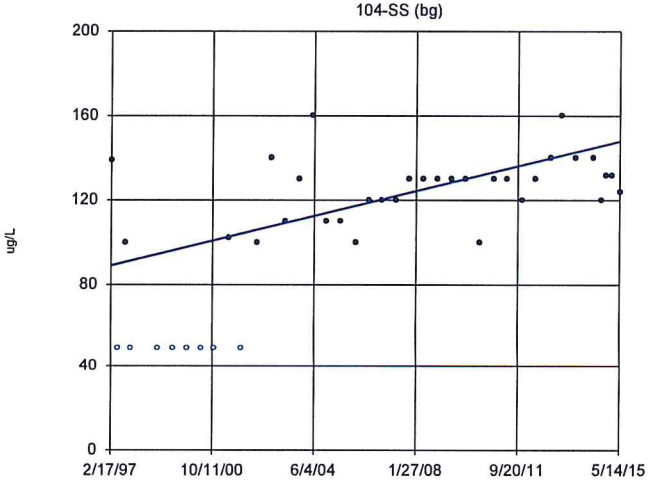
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = 3.228 units per year.

Mann-Kendall statistic = 377 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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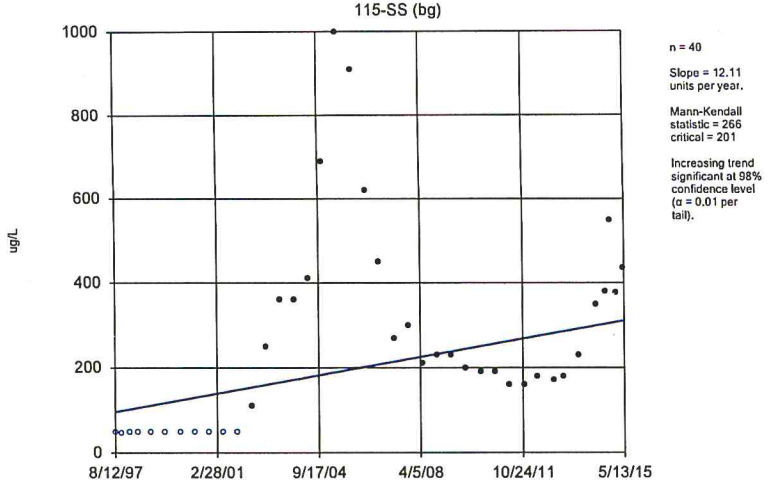
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 12.11 units per year.

Mann-Kendall statistic = 266
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Total Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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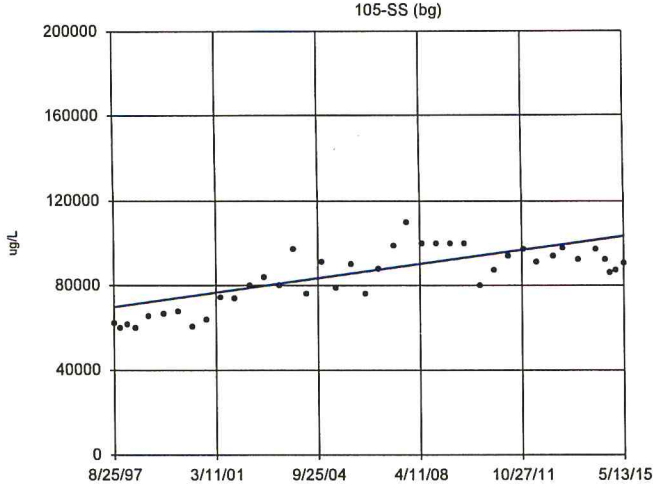
Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 1908 units per year.

Mann-Kendall statistic = 403
critical = 201

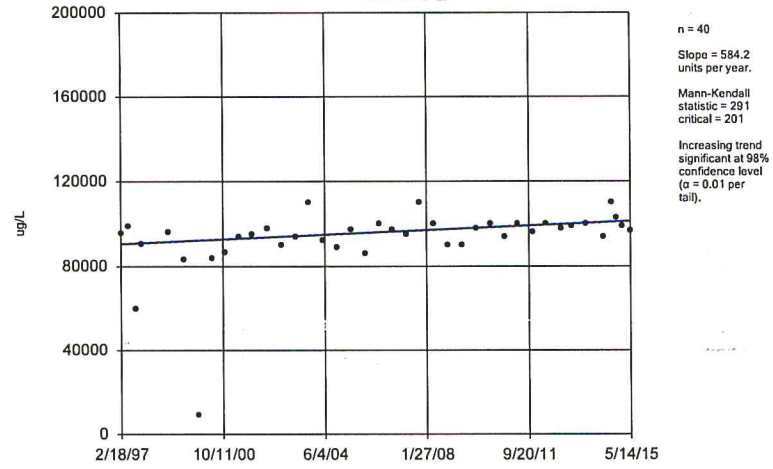
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Total Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = 584.2 units per year.

Mann-Kendall statistic = 291
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Total Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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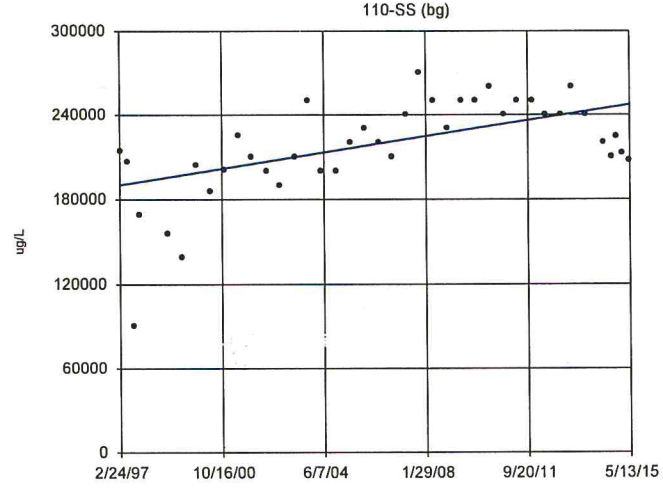
Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = 3124 units per year.

Mann-Kendall statistic = 313
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Total Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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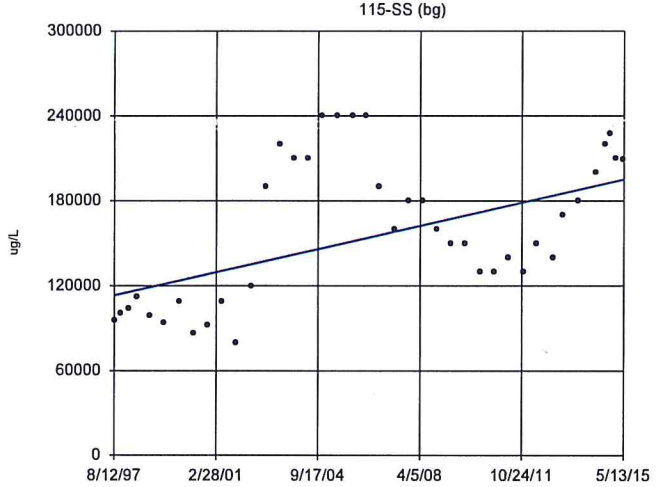
## Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 4611 units per year.

Mann-Kendall statistic = 259 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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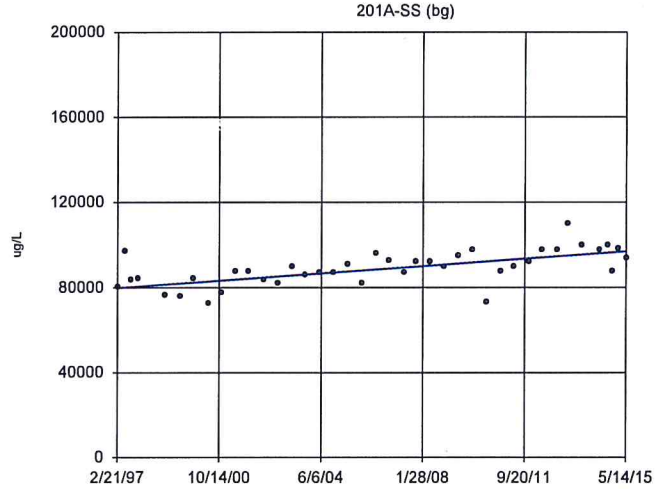
## Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = 941.3 units per year.

Mann-Kendall statistic = 409 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

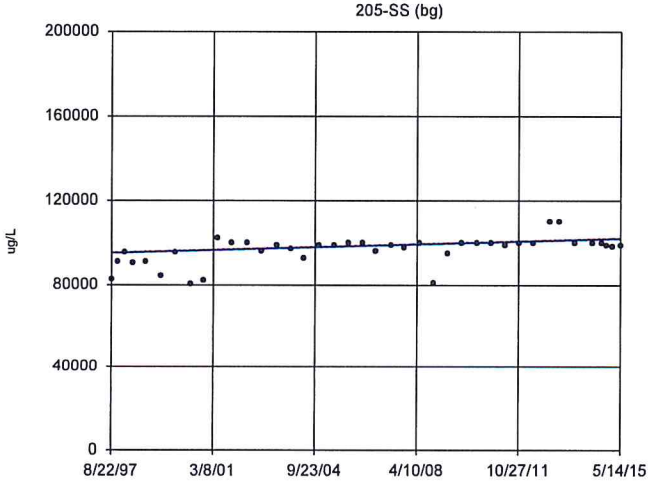
Constituent: Calcium Total Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

## Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = 391 units per year.

Mann-Kendall statistic = 295 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Total Analysis Run 1/7/2016 1:04 PM

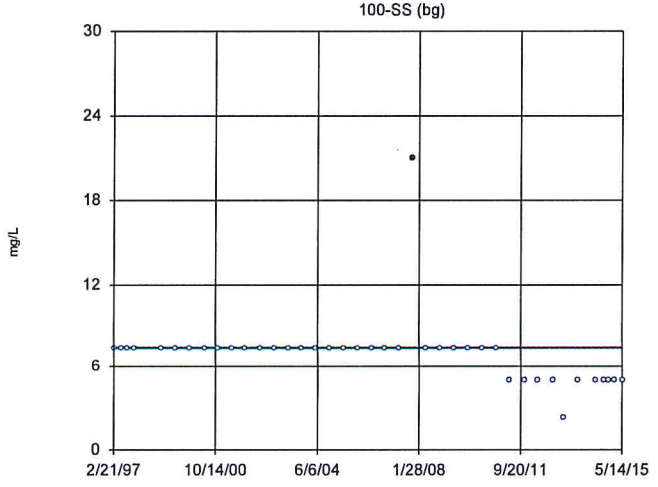
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

## Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -301 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

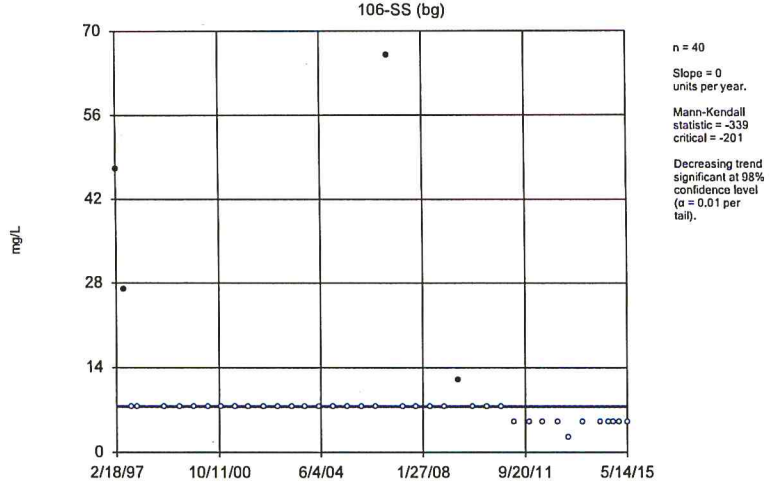
Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)

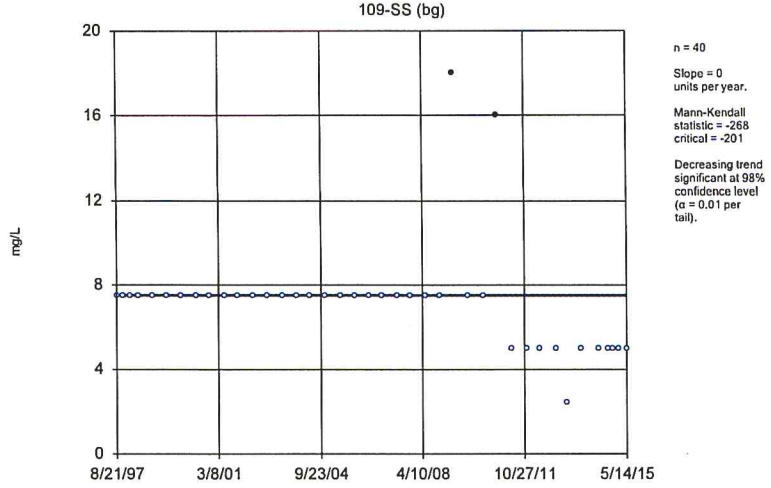



Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)

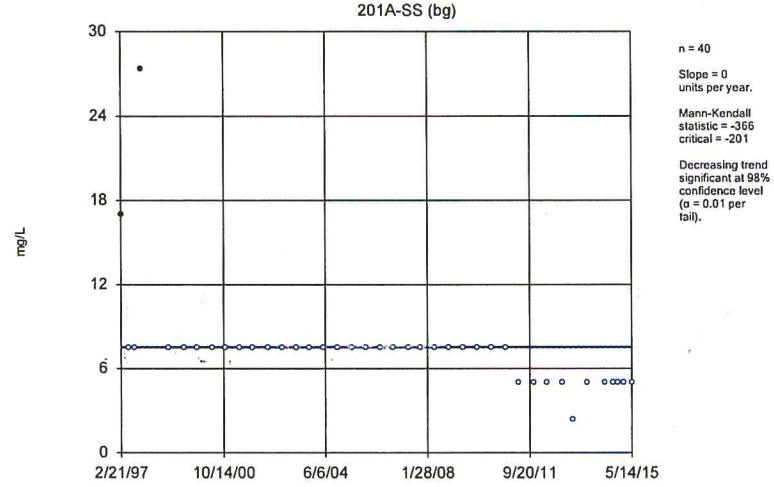



Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)

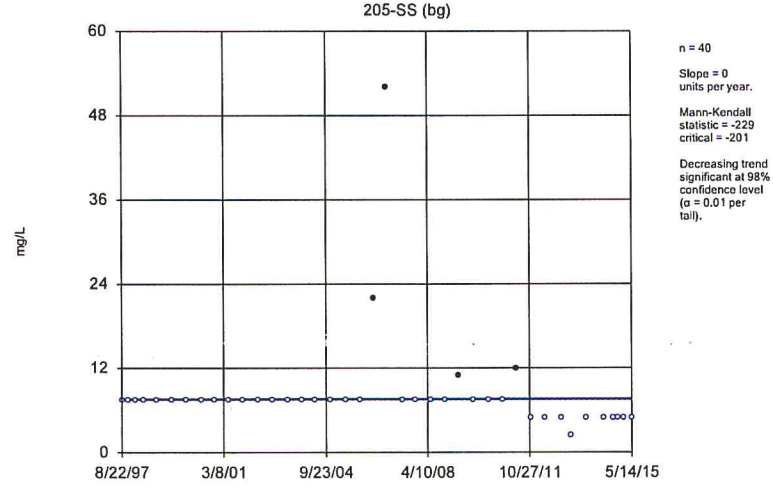



Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

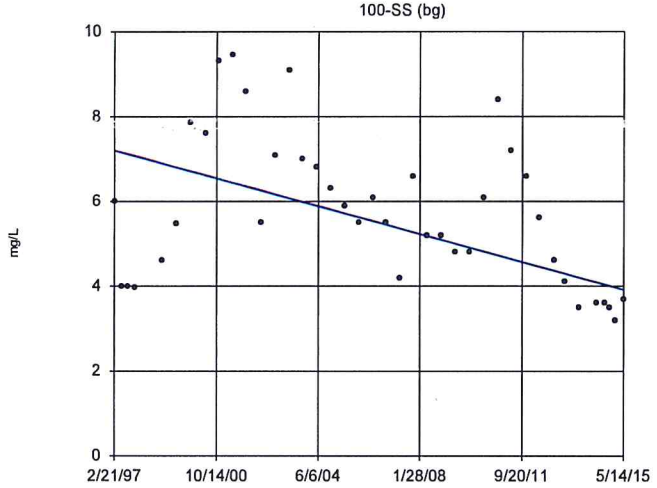



Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = -0.1805 units per year.

Mann-Kendall statistic = -260 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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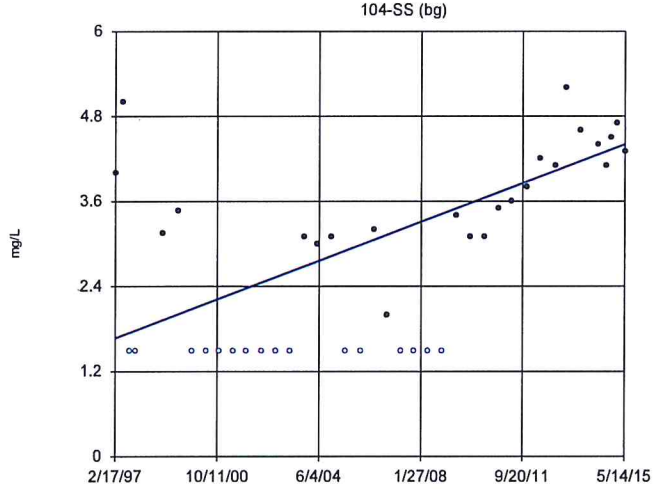
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = 0.1496 units per year.

Mann-Kendall statistic = 335 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

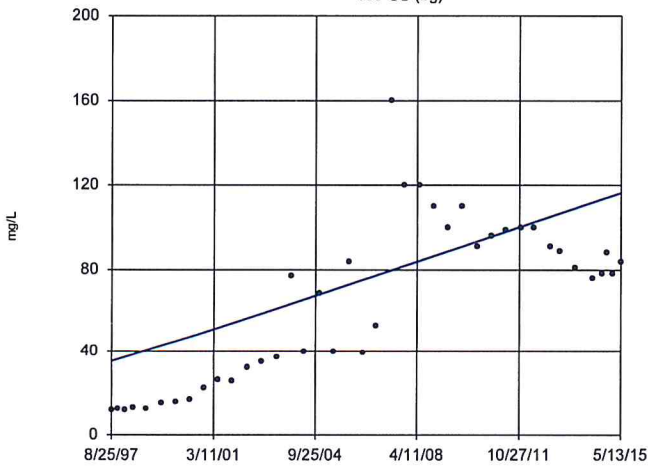
Constituent: Chloride Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 4.592 units per year.

Mann-Kendall statistic = 437 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:04 PM

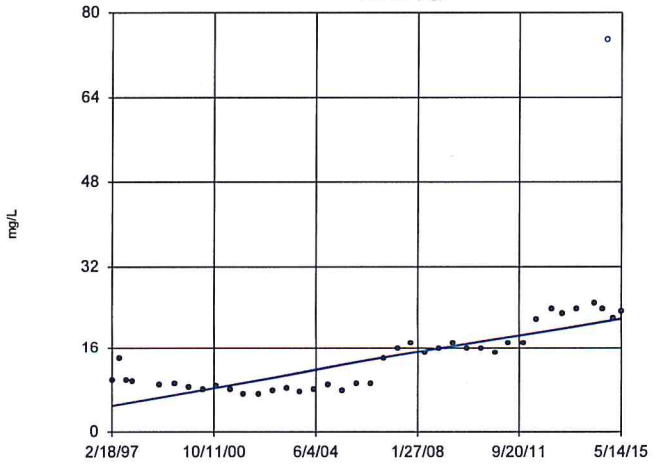
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = 0.9369 units per year.

Mann-Kendall statistic = 452 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

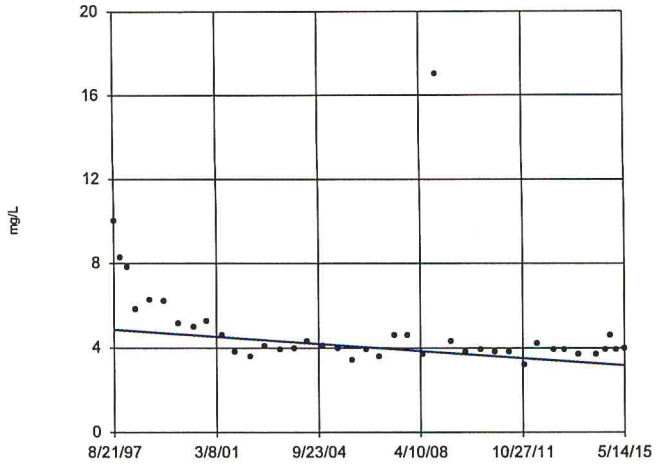
Constituent: Chloride Analysis Run 1/7/2016 1:04 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

## Sen's Slope Estimator

109-SS (bg)




n = 40

Slope = -0.09448 units per year.

Mann-Kendall statistic = -319
critical = -201

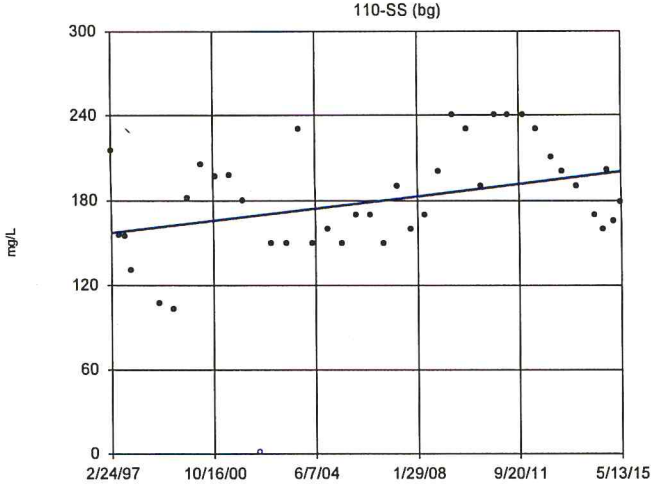
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = 2.339 units per year.

Mann-Kendall statistic = 204
critical = 201

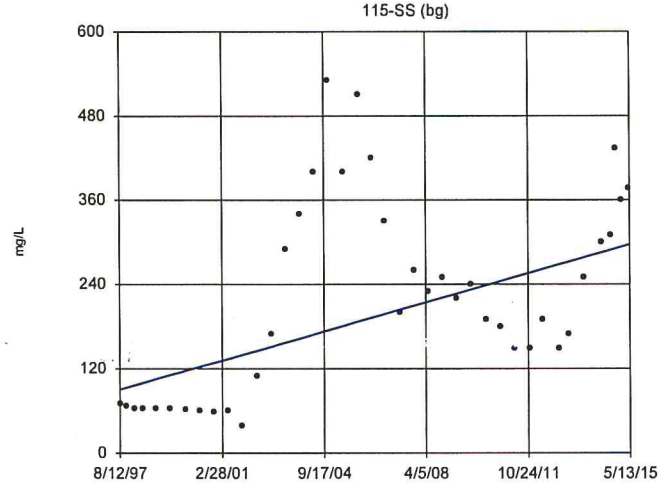
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

## Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 11.58 units per year.

Mann-Kendall statistic = 248
critical = 201

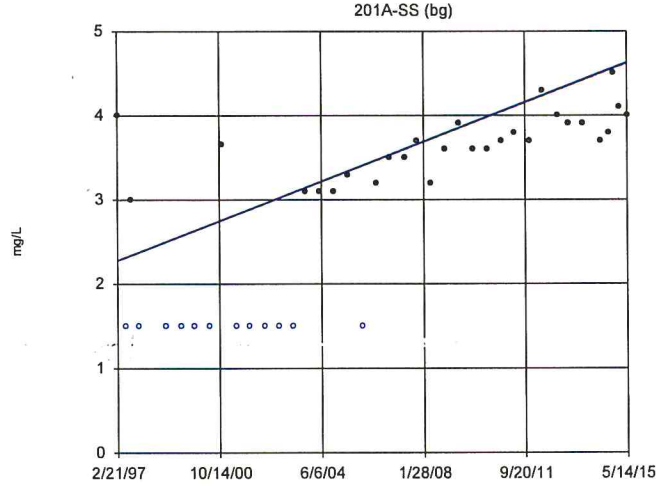
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = 0.1287 units per year.

Mann-Kendall statistic = 491
critical = 201

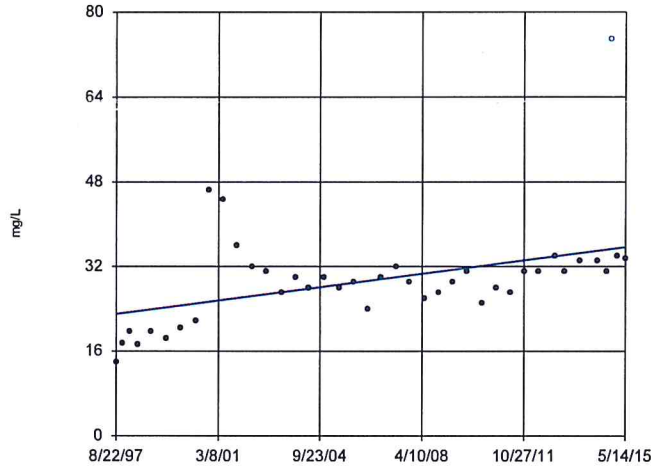
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = 0.7123 units per year.

Mann-Kendall statistic = 329
critical = 201

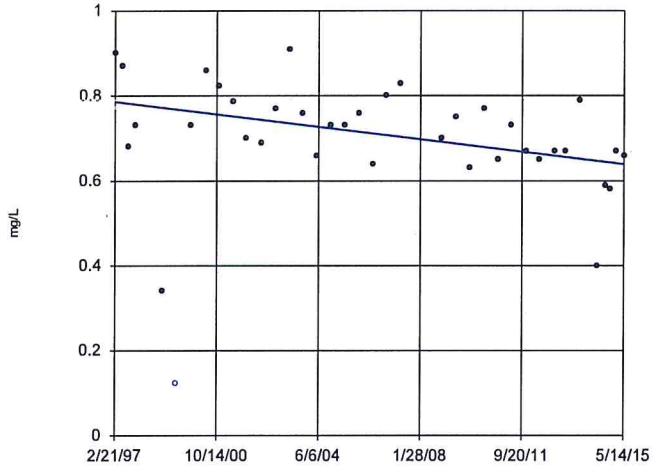
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:04 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

100-SS (bg)




n = 38

Slope = -0.008097 units per year.

Mann-Kendall statistic = -214
critical = -186

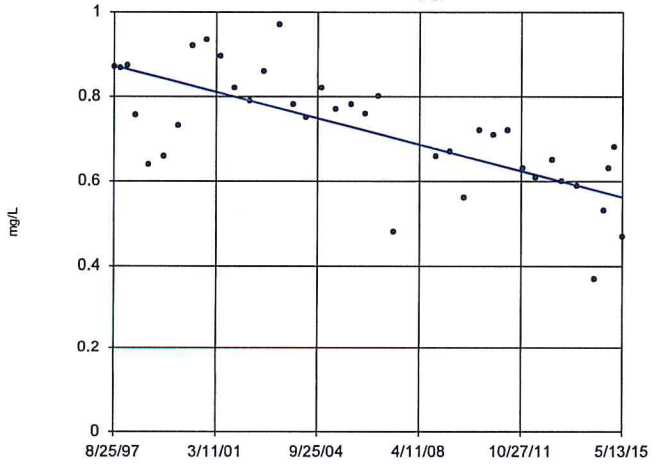
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

## Sen's Slope Estimator

105-SS (bg)




n = 38

Slope = -0.01749 units per year.

Mann-Kendall statistic = -384
critical = -186

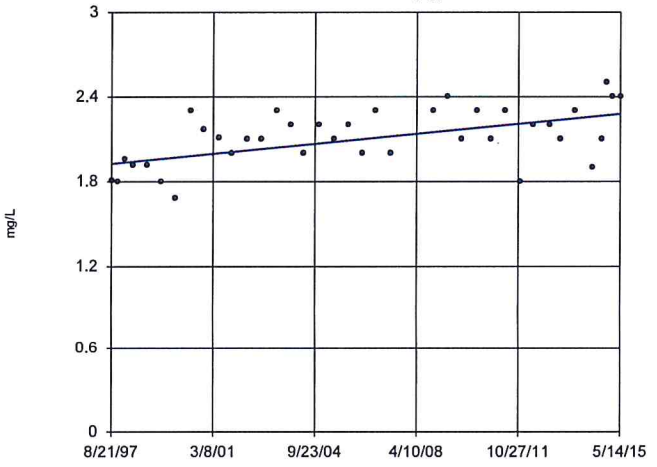
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

## Sen's Slope Estimator

109-SS (bg)




n = 38

Slope = 0.0198 units per year.

Mann-Kendall statistic = 264
critical = 186

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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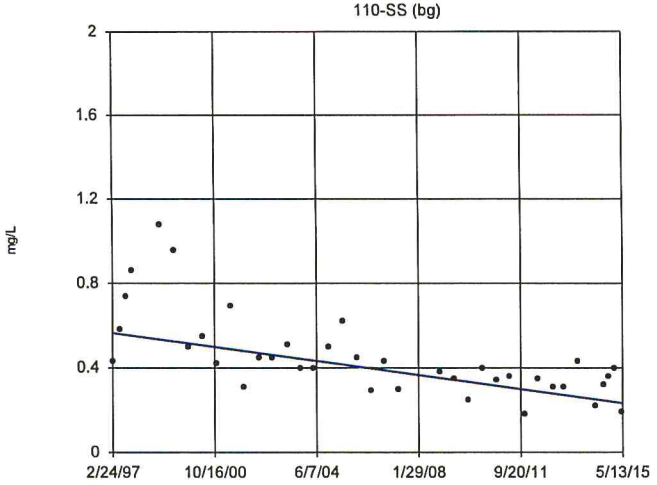
## Sen's Slope Estimator

110-SS (bg)




n = 38

Slope = -0.01819 units per year.

Mann-Kendall statistic = -375
critical = -186

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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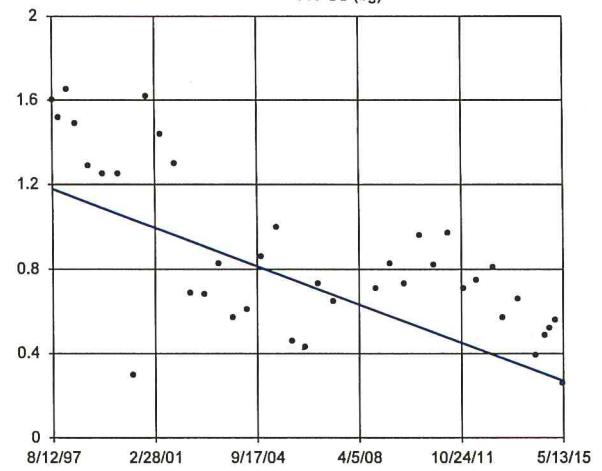
## Sen's Slope Estimator

115-SS (bg)




n = 38

Slope = -0.05116 units per year.

Mann-Kendall statistic = -340
critical = -186

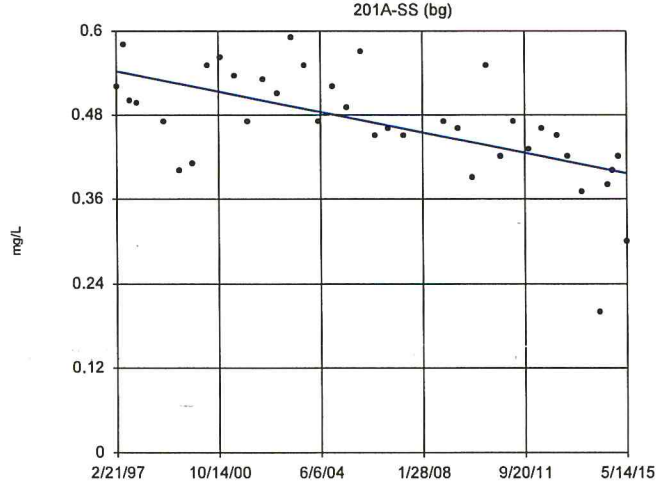
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

## Sen's Slope Estimator

201A-SS (bg)




n = 38

Slope = -0.008016 units per year.

Mann-Kendall statistic = -341
critical = -186

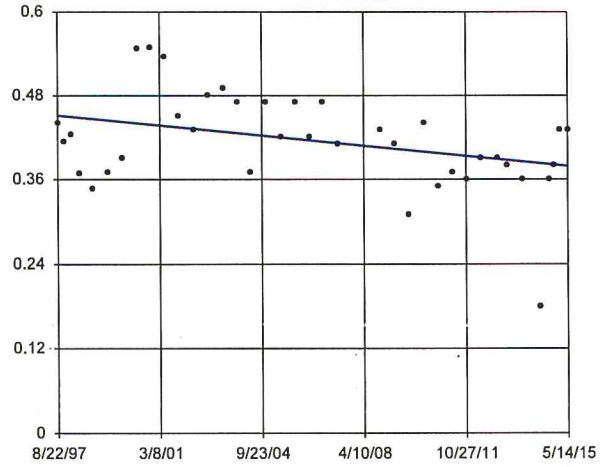
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

## Sen's Slope Estimator

205-SS (bg)




n = 38

Slope = -0.004092 units per year.

Mann-Kendall statistic = -188
critical = -186

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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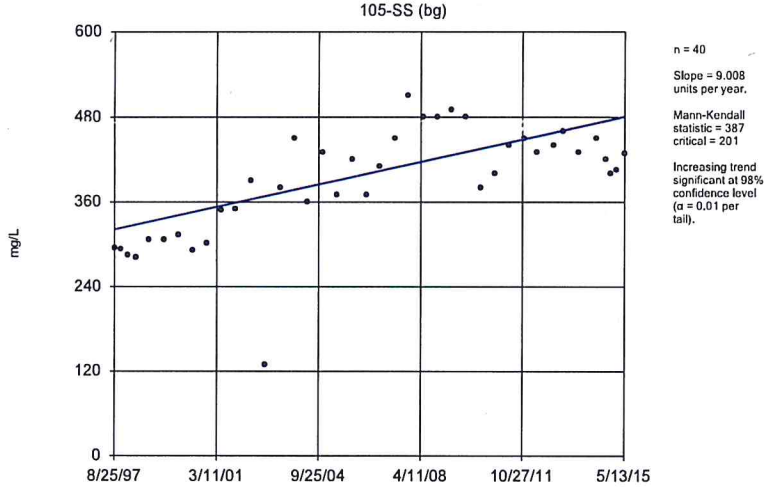
Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 9.008 units per year.

Mann-Kendall statistic = 387 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Hardness Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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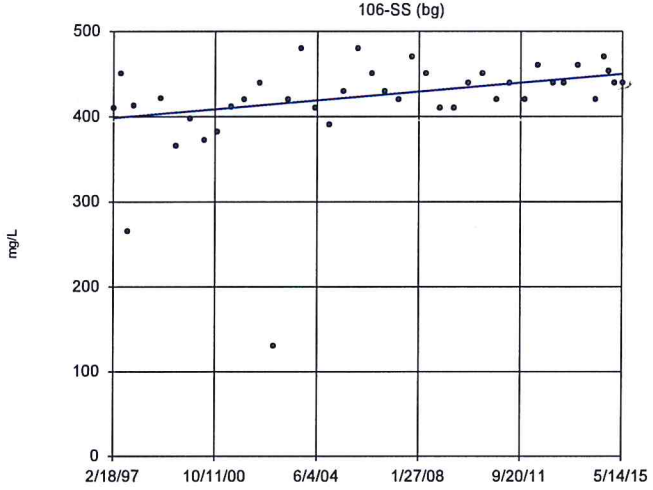
Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = 2.804 units per year.

Mann-Kendall statistic = 278 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Hardness Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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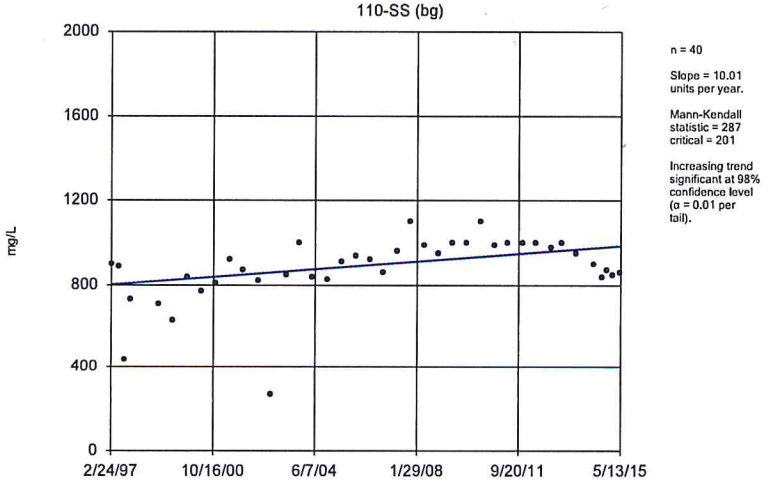
Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = 10.01 units per year.

Mann-Kendall statistic = 287 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Hardness Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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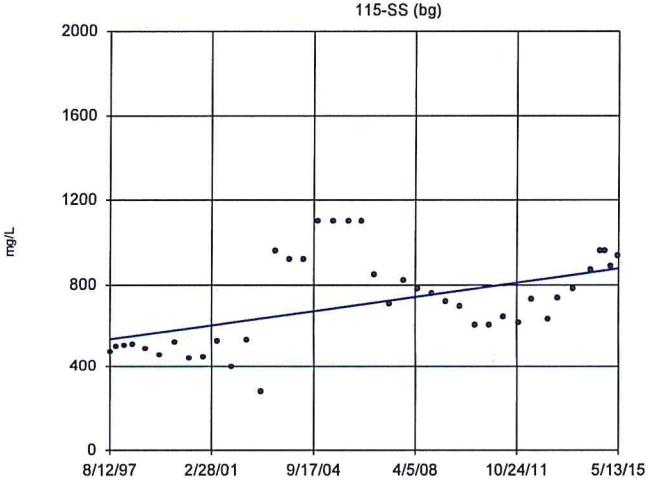
Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 18.87 units per year.

Mann-Kendall statistic = 276 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Hardness Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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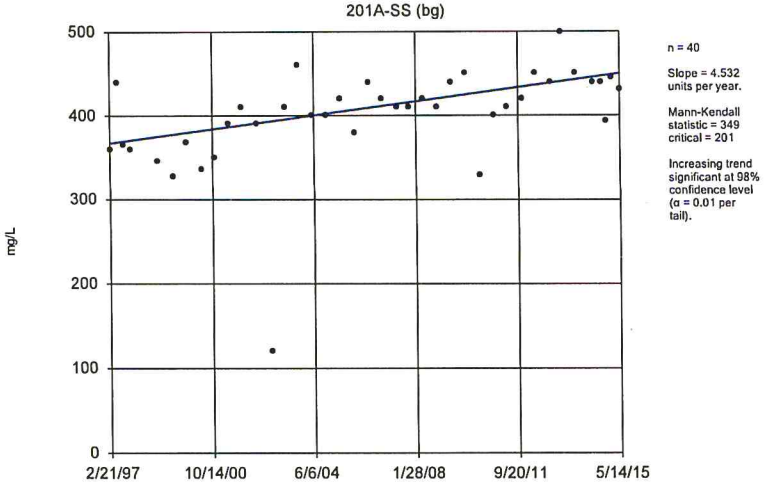
## Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = 4.532 units per year.

Mann-Kendall statistic = 349
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Hardness Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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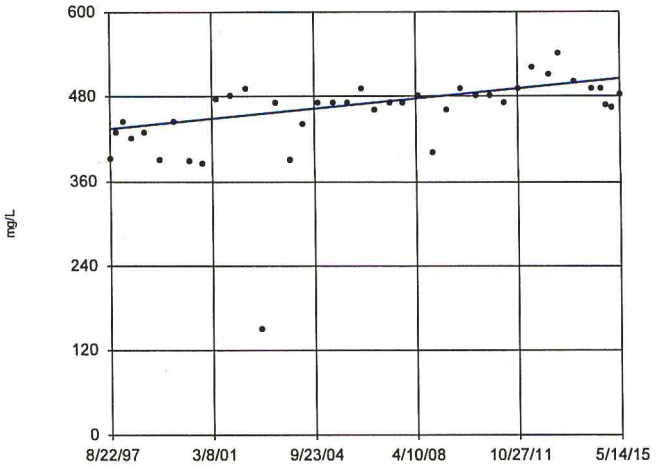
## Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = 3.993 units per year.

Mann-Kendall statistic = 352
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Hardness Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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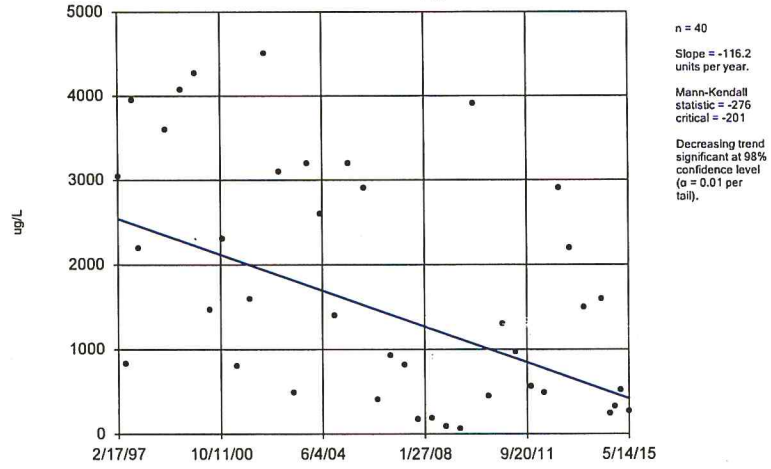
## Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = -116.2 units per year.

Mann-Kendall statistic = -276
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Iron Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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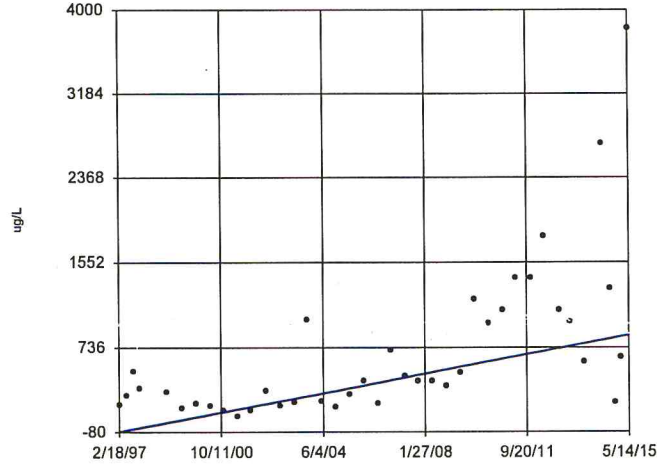
## Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = 51.01 units per year.

Mann-Kendall statistic = 414
critical = 201

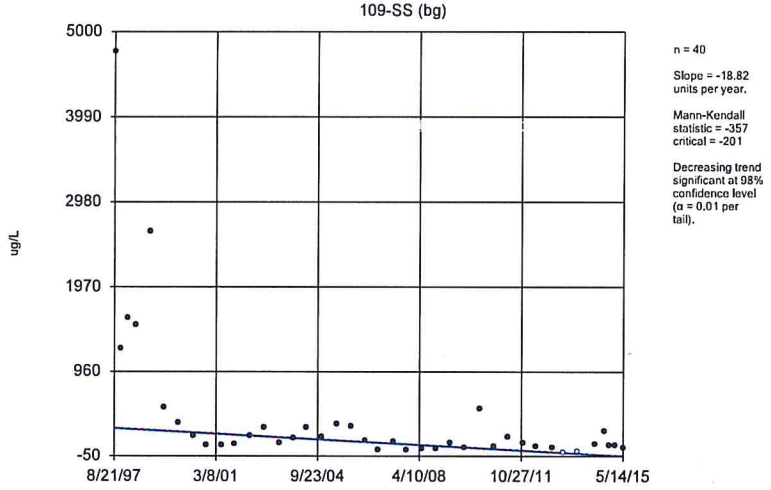
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Iron Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

109-SS (bg)




n = 40

Slope = -18.82 units per year.

Mann-Kendall statistic = -357
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Iron Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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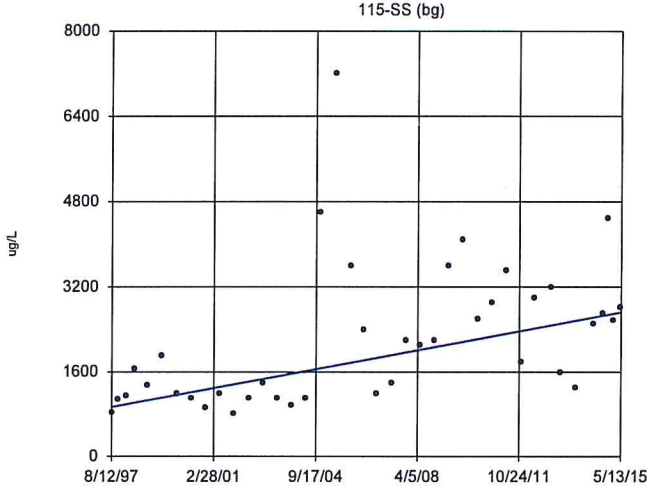
## Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 100.5 units per year.

Mann-Kendall statistic = 332
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Iron Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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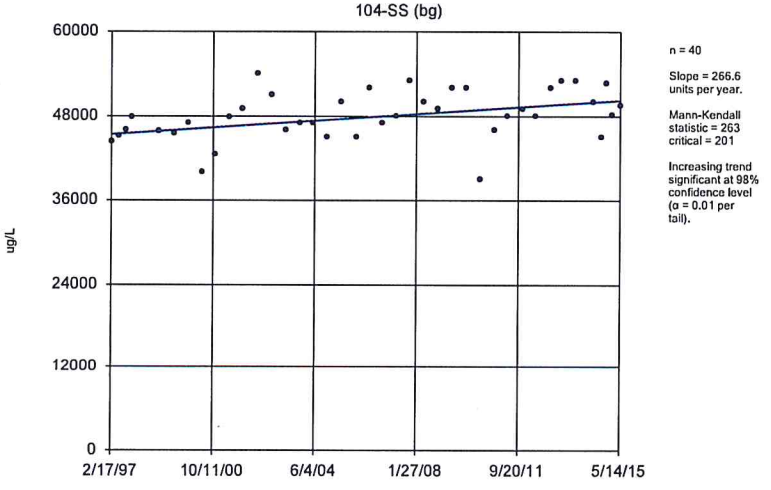
## Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = 266.6 units per year.

Mann-Kendall statistic = 263
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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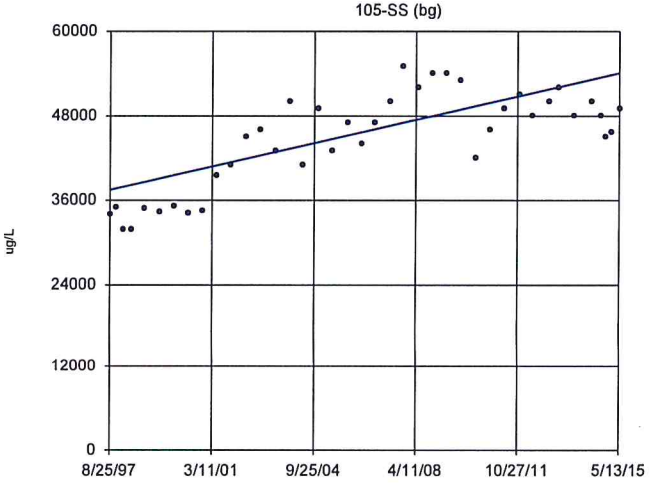
## Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 937 units per year.

Mann-Kendall statistic = 399
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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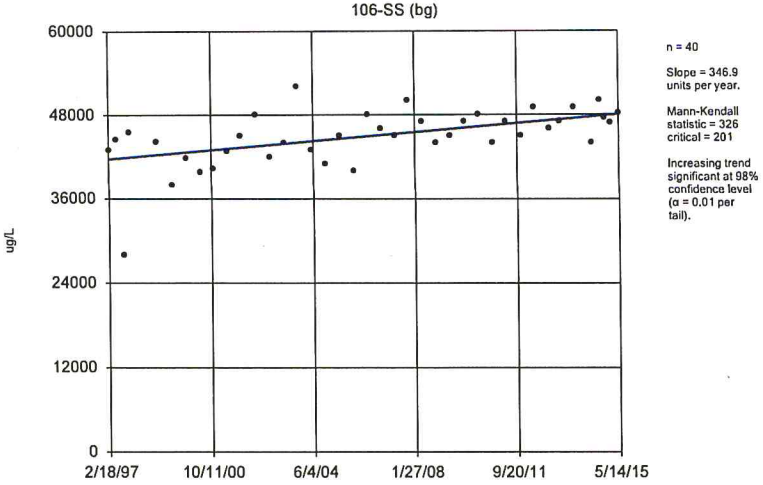
## Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = 346.9 units per year.

Mann-Kendall statistic = 326 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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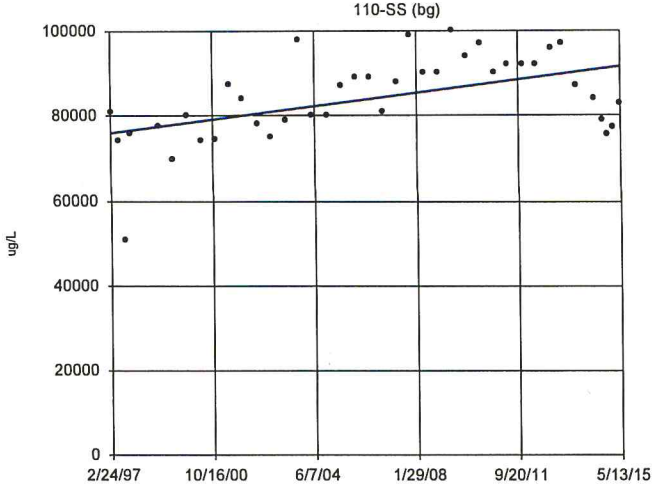
## Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = 851.4 units per year.

Mann-Kendall statistic = 291 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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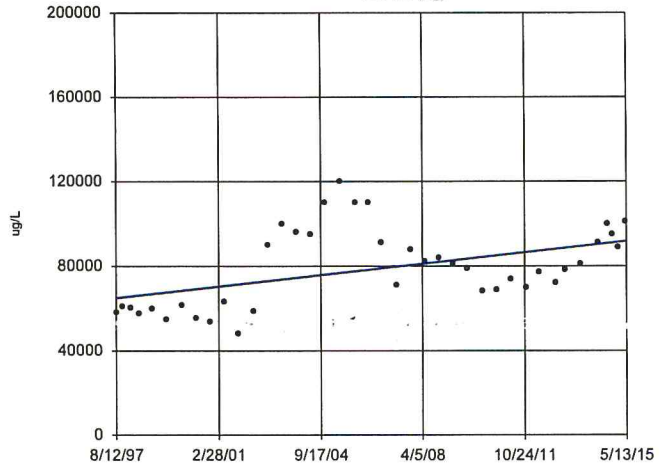
## Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 1502 units per year.

Mann-Kendall statistic = 244 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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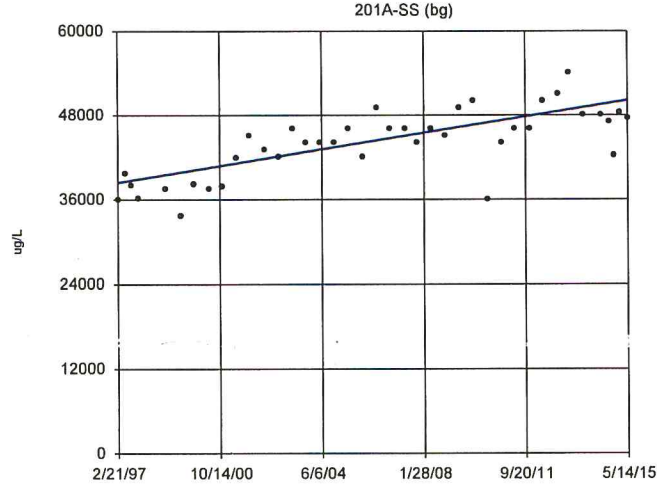
## Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = 642.5 units per year.

Mann-Kendall statistic = 444 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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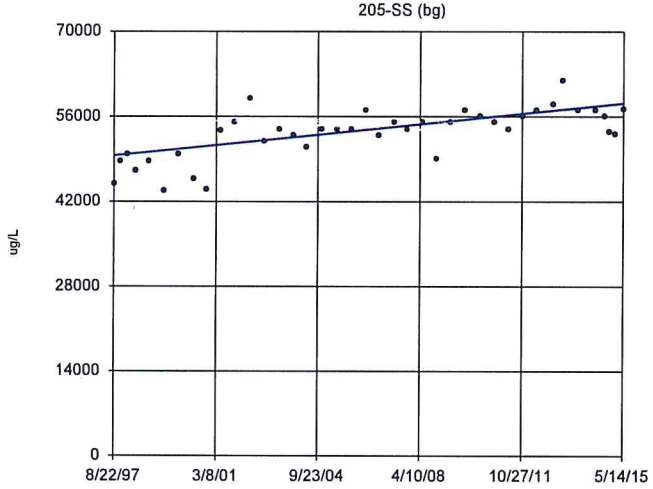
## Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = 484.6 units per year.

Mann-Kendall statistic = 412 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 1/7/2016 1:05 PM

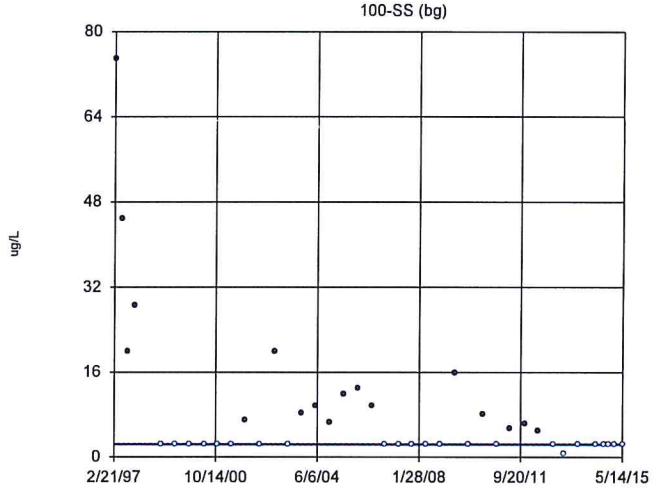
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

## Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -215 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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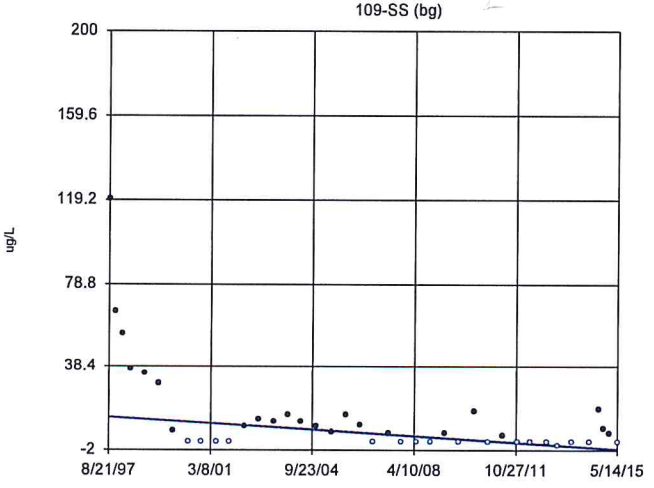
Hollow symbols indicate censored values.

## Sen's Slope Estimator

109-SS (bg)




n = 40

Slope = -0.8628 units per year.

Mann-Kendall statistic = -304 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

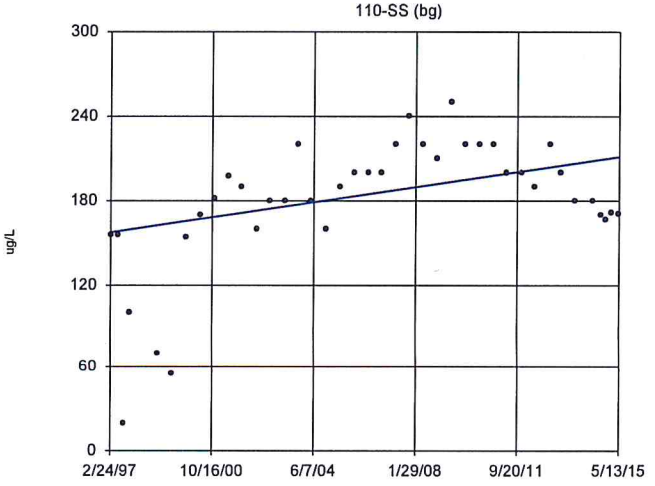
Constituent: Manganese Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

## Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = 2.934 units per year.

Mann-Kendall statistic = 236 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

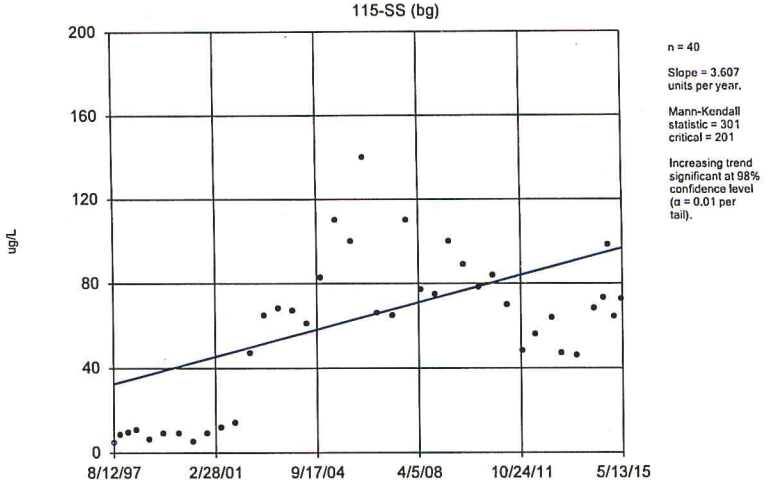
Constituent: Manganese Total Analysis Run 1/7/2016 1:05 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 3.607 units per year.

Mann-Kendall statistic = 301
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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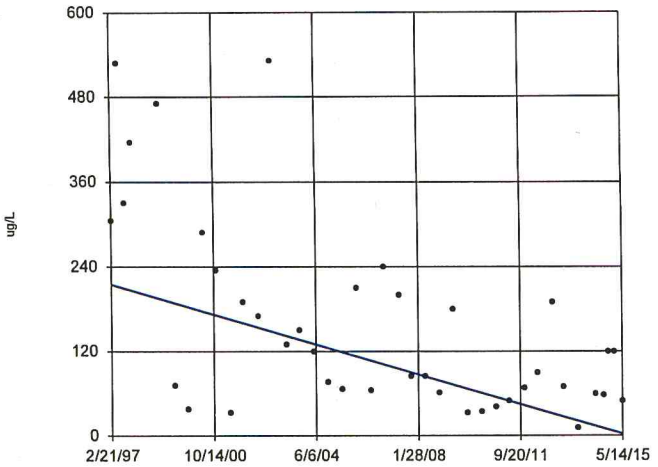
Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = -11.65 units per year.

Mann-Kendall statistic = -318
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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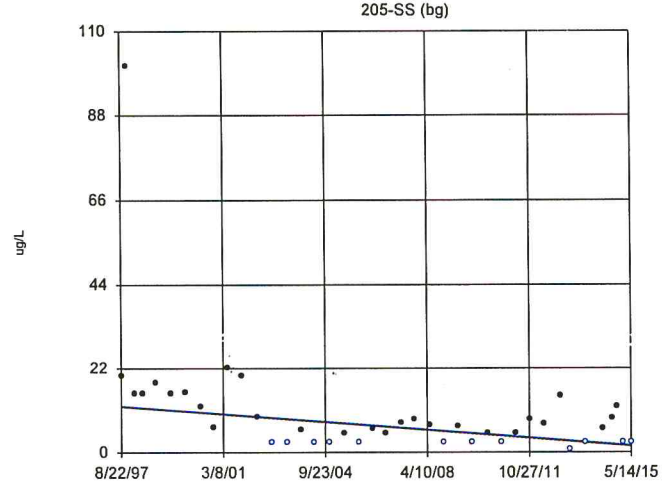
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = -0.5884 units per year.

Mann-Kendall statistic = -264
critical = -201

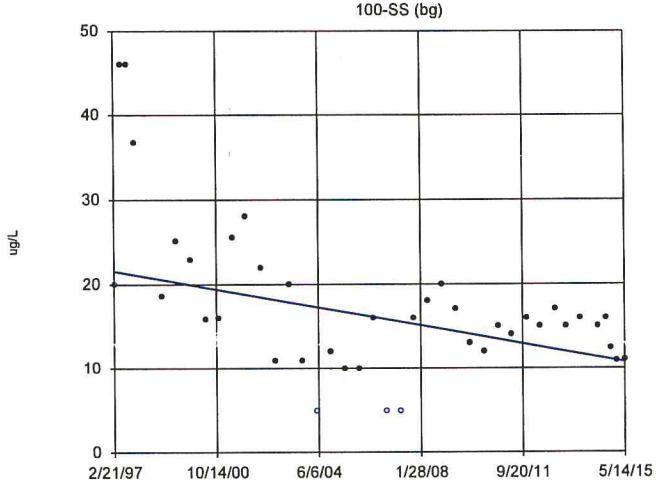
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = -0.5913 units per year.

Mann-Kendall statistic = -261
critical = -201

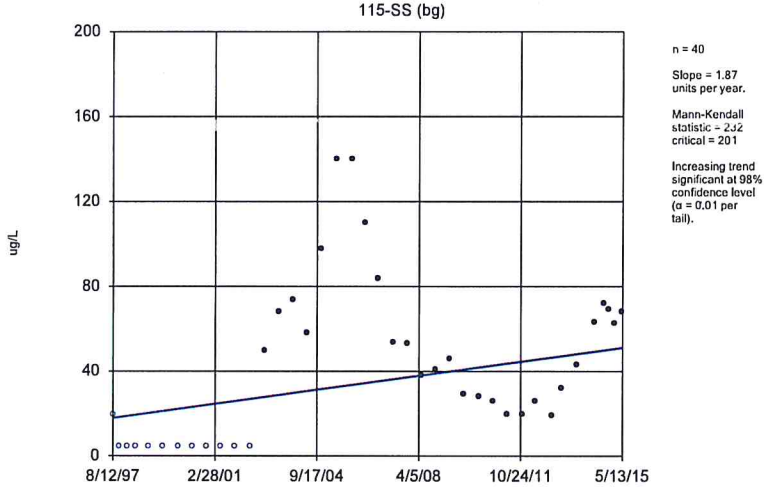
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 1.87 units per year.

Mann-Kendall statistic = 252
critical = 201

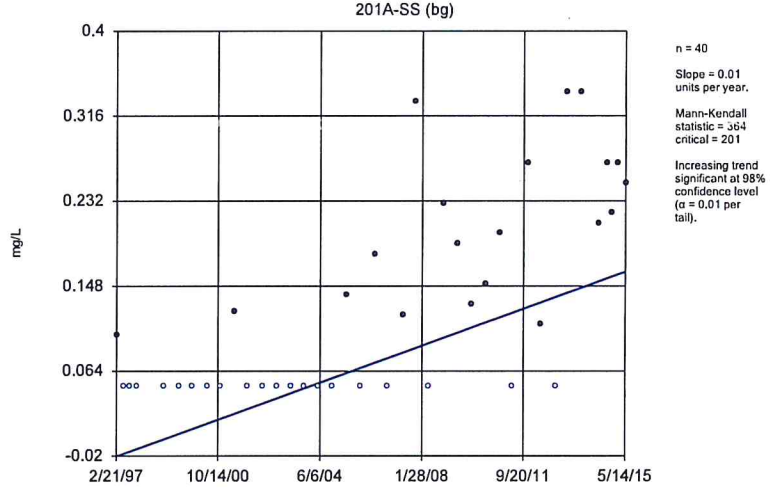
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = 0.01 units per year.

Mann-Kendall statistic = 364
critical = 201

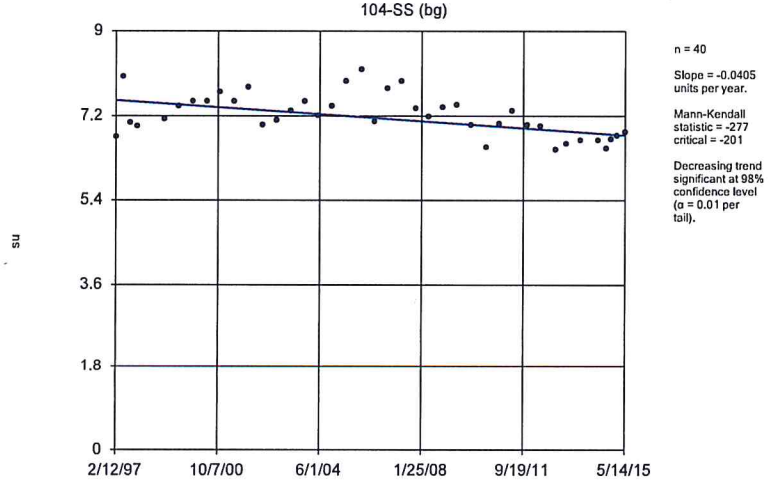
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nitrate/Nitrite Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

## Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = -0.0405 units per year.

Mann-Kendall statistic = -277
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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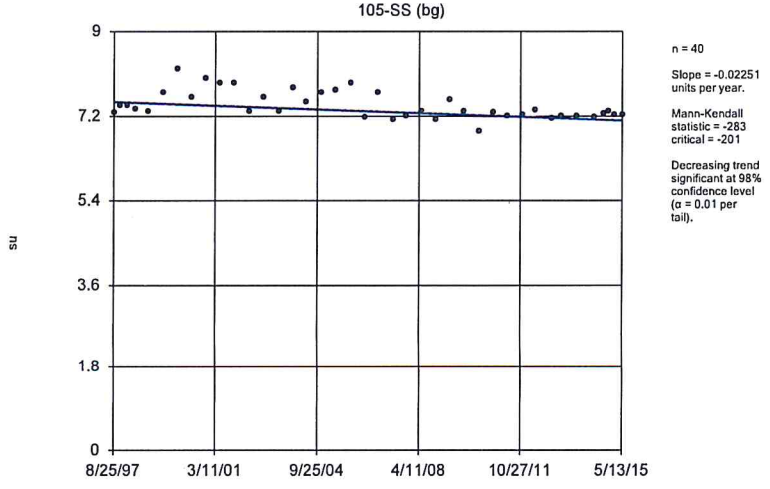
## Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = -0.02251 units per year.

Mann-Kendall statistic = -283
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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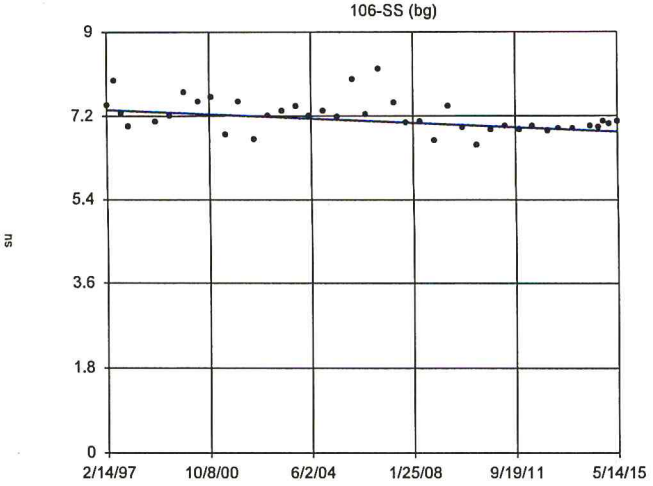
## Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = -0.02559 units per year.

Mann-Kendall statistic = -255
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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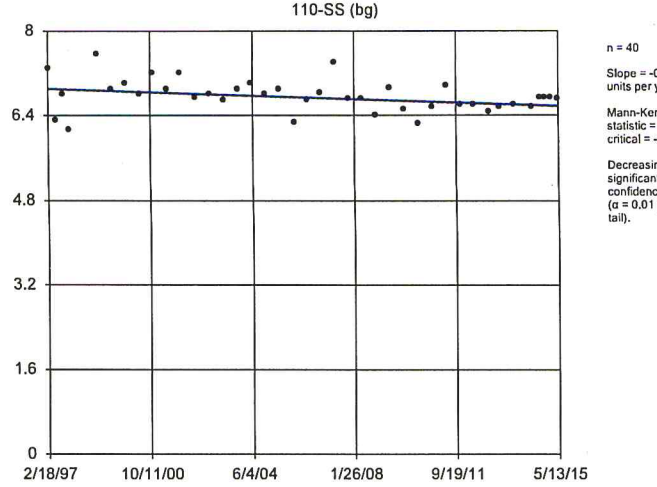
## Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = -0.01825 units per year.

Mann-Kendall statistic = -207
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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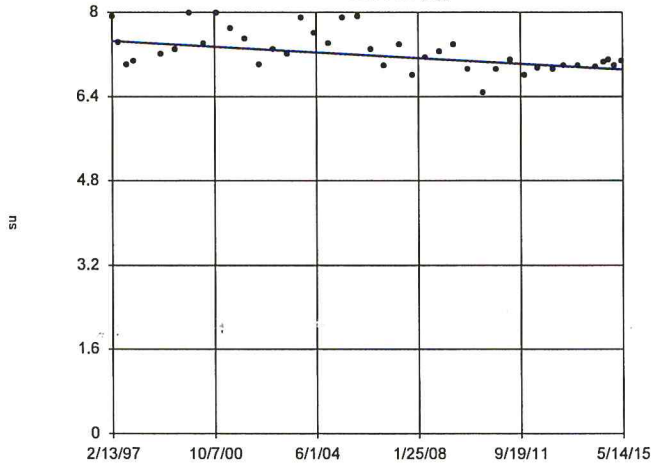
## Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = -0.0296 units per year.

Mann-Kendall statistic = -300
critical = -201

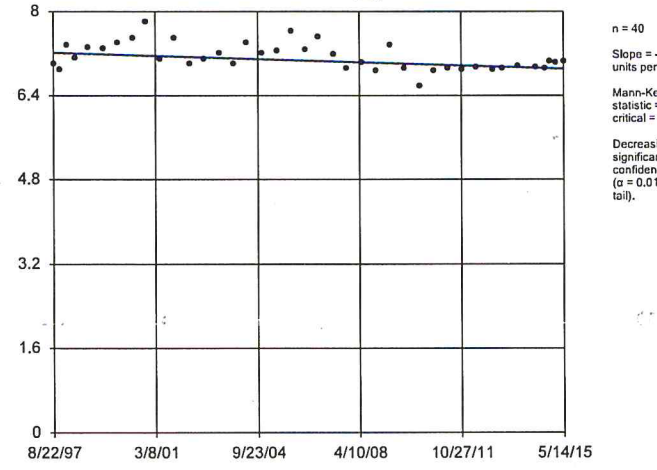
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

## Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = -0.01733 units per year.

Mann-Kendall statistic = -228
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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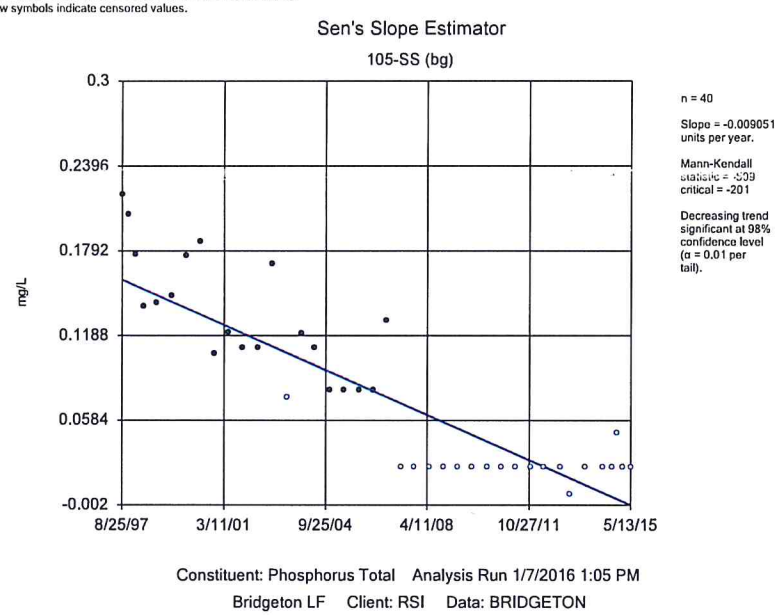
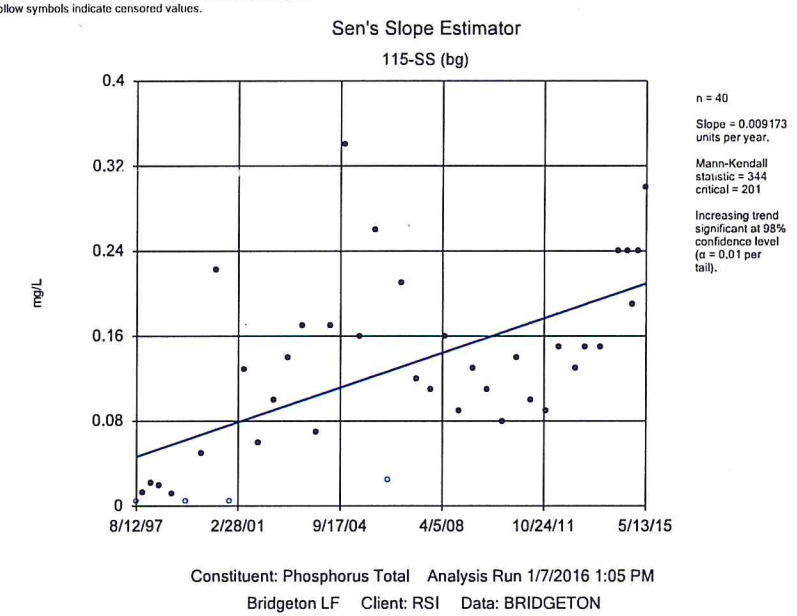
Hollow symbols indicate censored values.



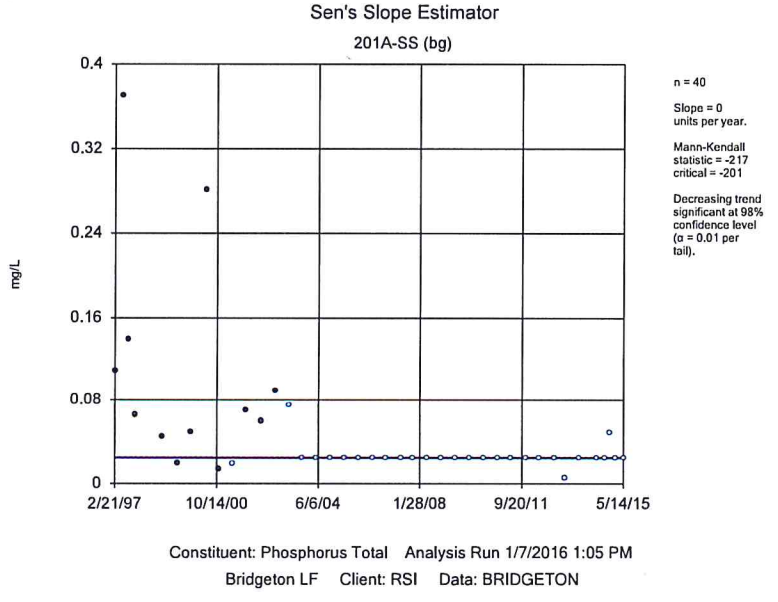

Constituent: Phosphorus Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.



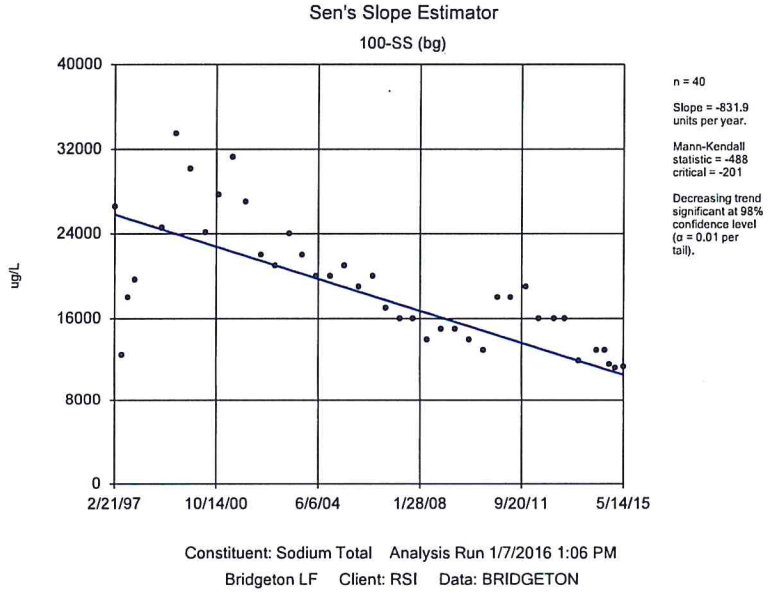

Constituent: Phosphorus Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.




Constituent: Phosphorus Total Analysis Run 1/7/2016 1:05 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

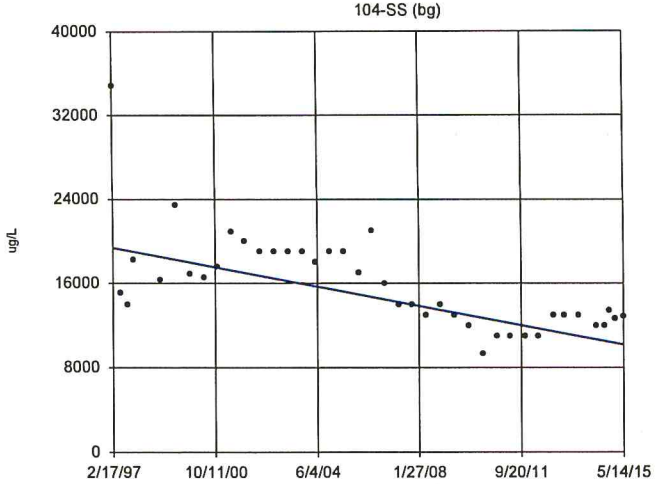



Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = -502.2 units per year.

Mann-Kendall statistic = -400 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

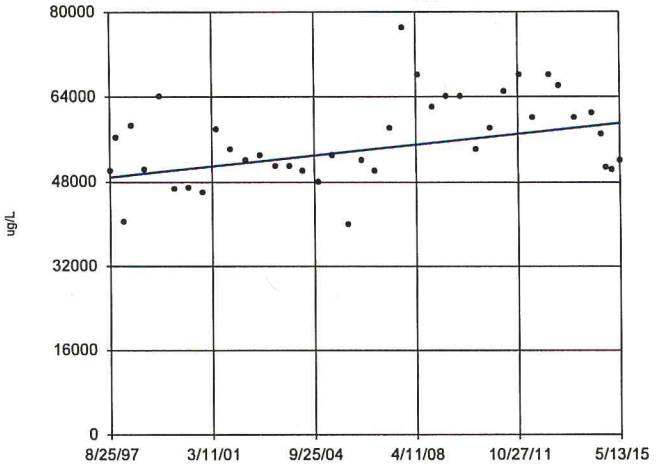
Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 571 units per year.

Mann-Kendall statistic = 215 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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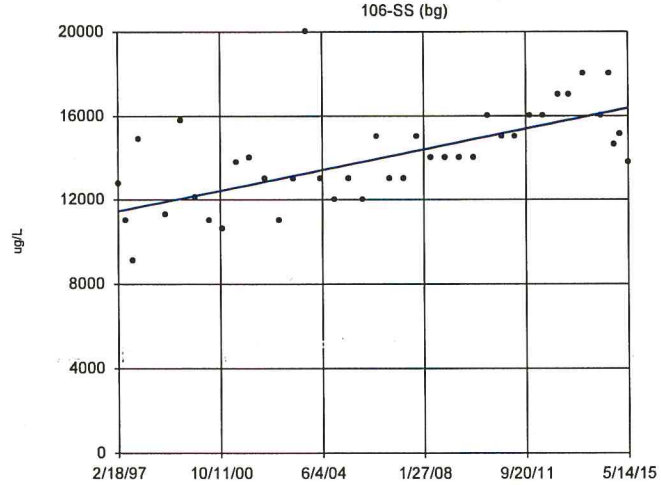
Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = 269.6 units per year.

Mann-Kendall statistic = 394 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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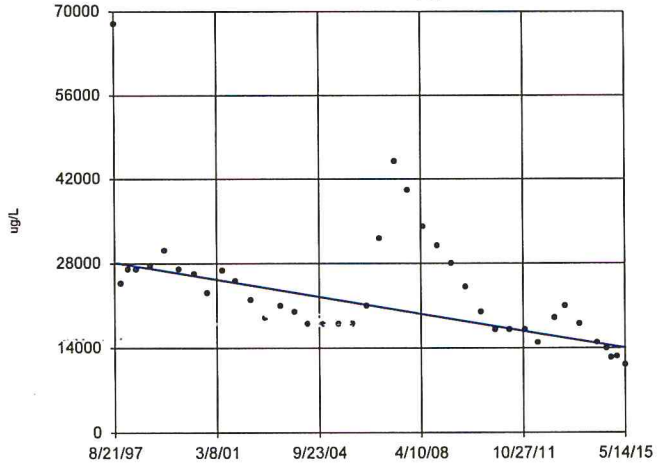
Sen's Slope Estimator

109-SS (bg)




n = 40

Slope = -794.1 units per year.

Mann-Kendall statistic = -400 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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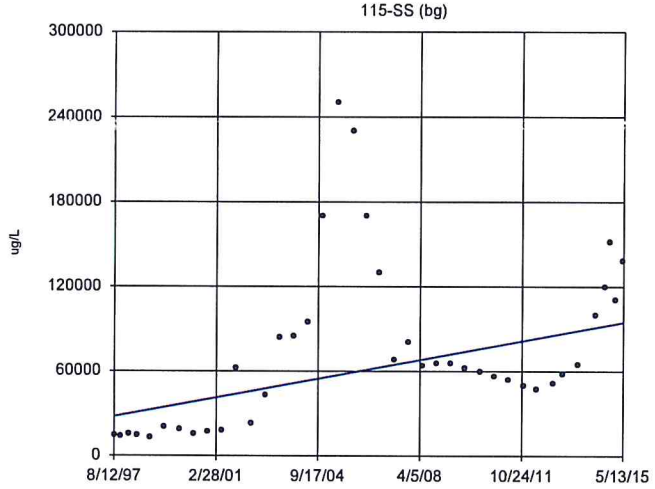
Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 3767 units per year.

Mann-Kendall statistic = 297 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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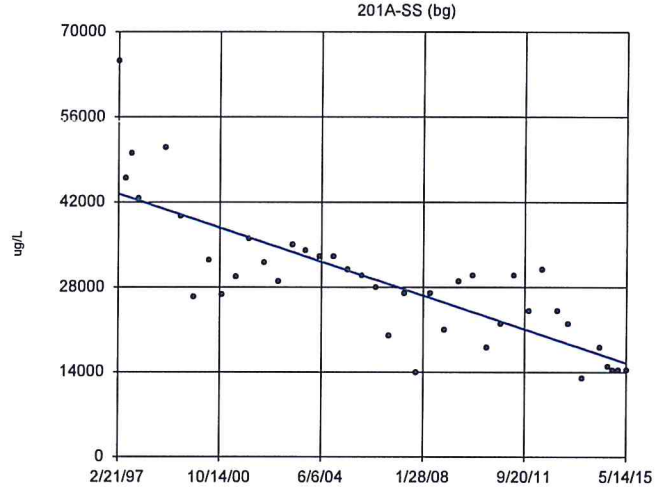
Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = -1529 units per year.

Mann-Kendall statistic = -493 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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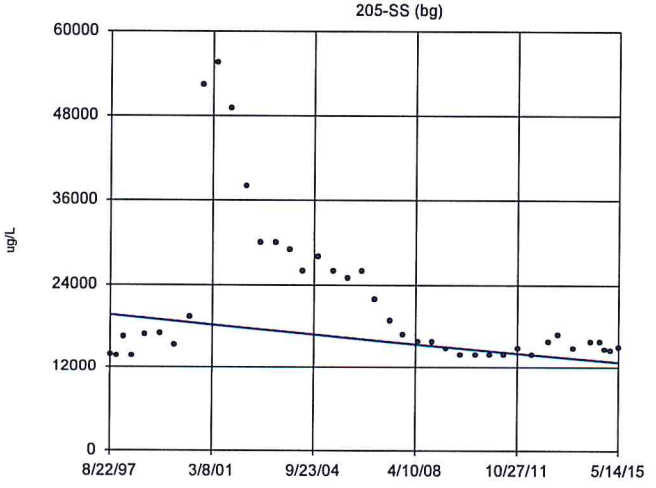
Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = -392.5 units per year.

Mann-Kendall statistic = -234 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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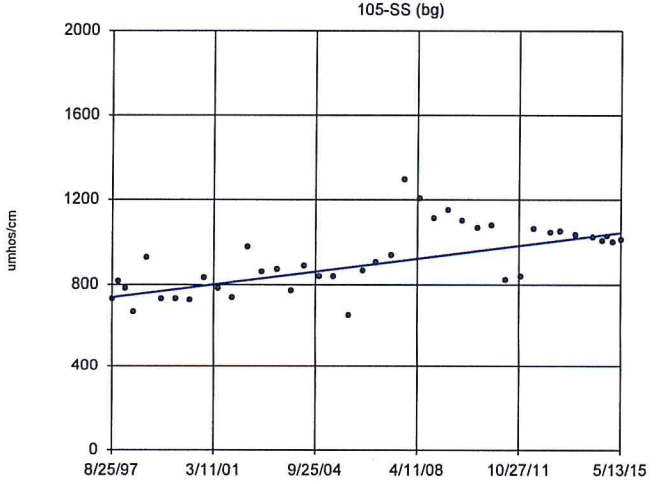
Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 17.15 units per year.

Mann-Kendall statistic = 333 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Specific Conductance [Field] Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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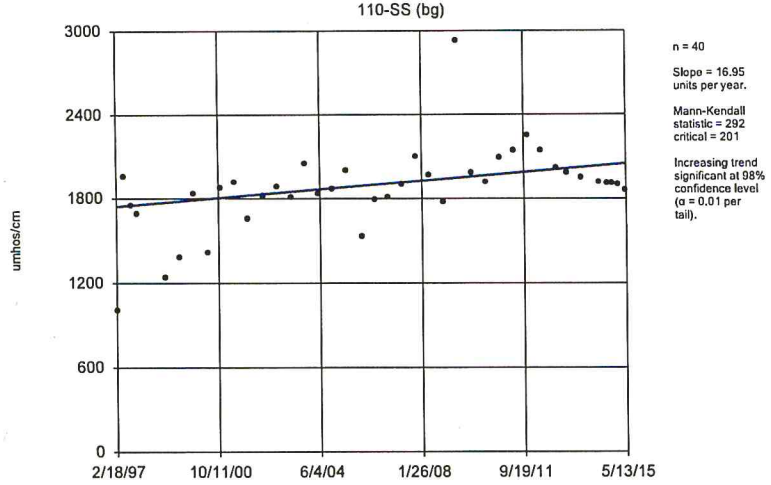
## Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = 16.95 units per year.

Mann-Kendall statistic = 292
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Specific Conductance [Field] Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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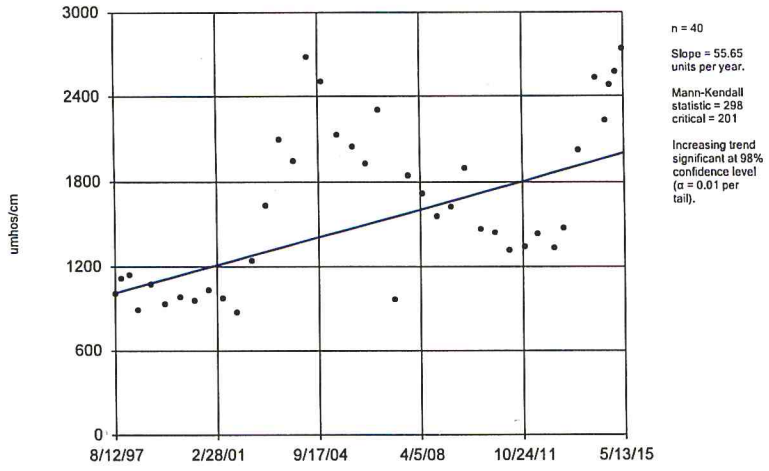
## Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 55.65 units per year.

Mann-Kendall statistic = 298
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Specific Conductance [Field] Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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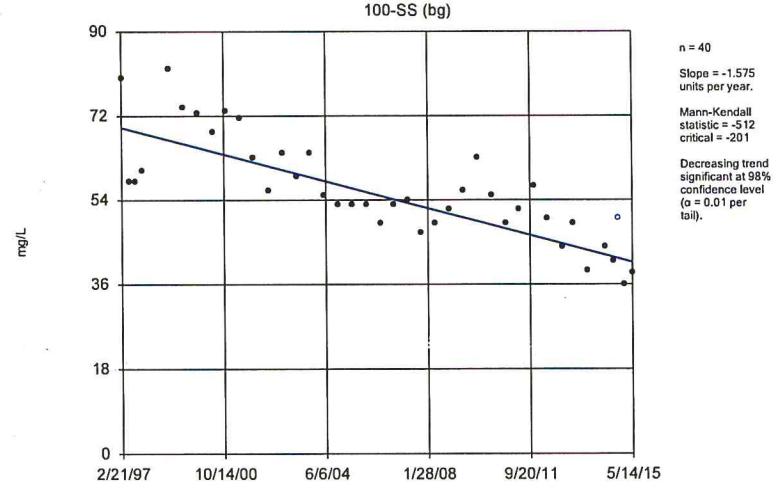
Hollow symbols indicate censored values.

## Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = -1.575 units per year.

Mann-Kendall statistic = -512
critical = -201

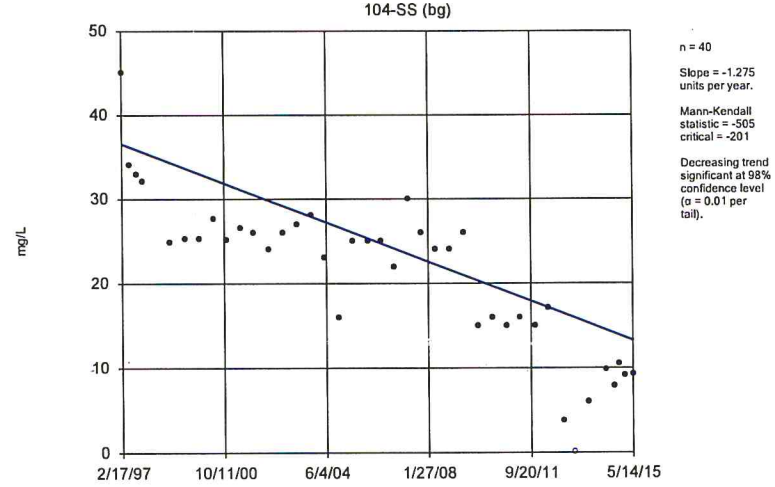
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = -1.275 units per year.

Mann-Kendall statistic = -505
critical = -201

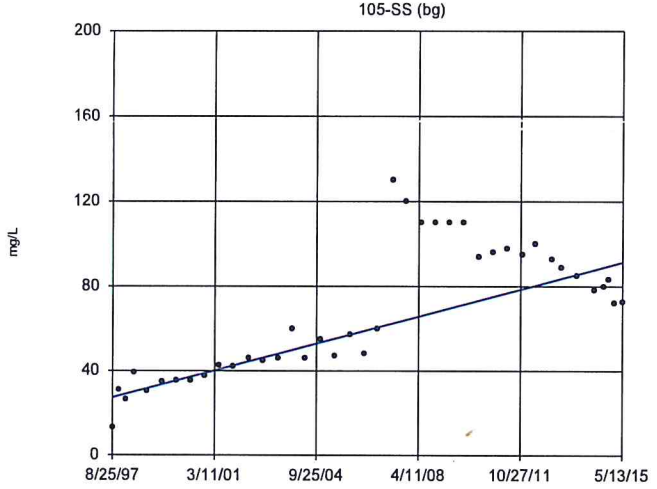
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 3.61 units per year.

Mann-Kendall statistic = 428 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:06 PM

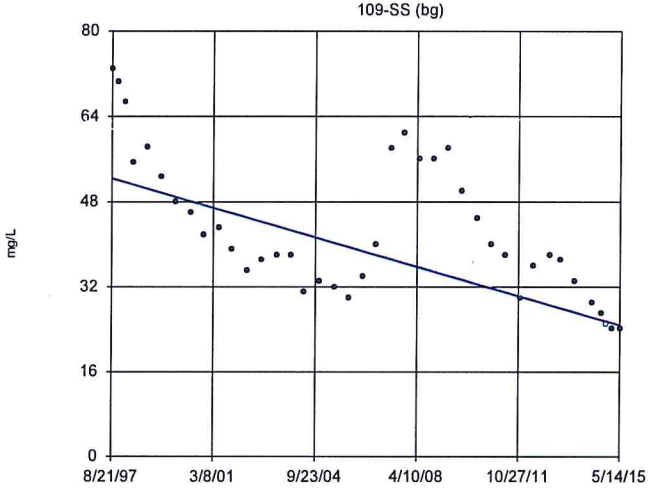
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)




n = 40

Slope = -1.556 units per year.

Mann-Kendall statistic = -397 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

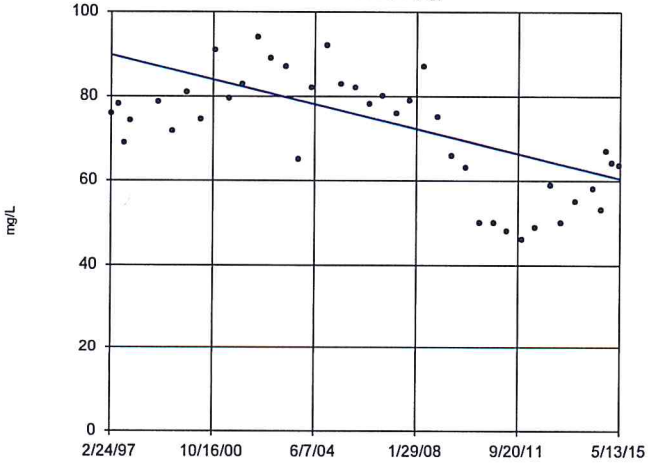
Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

110-SS (bg)




n = 40

Slope = -1.606 units per year.

Mann-Kendall statistic = -300 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

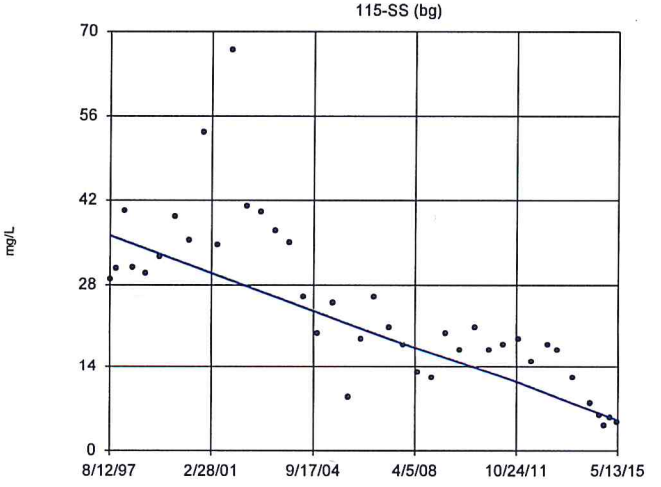
Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = -1.746 units per year.

Mann-Kendall statistic = -505 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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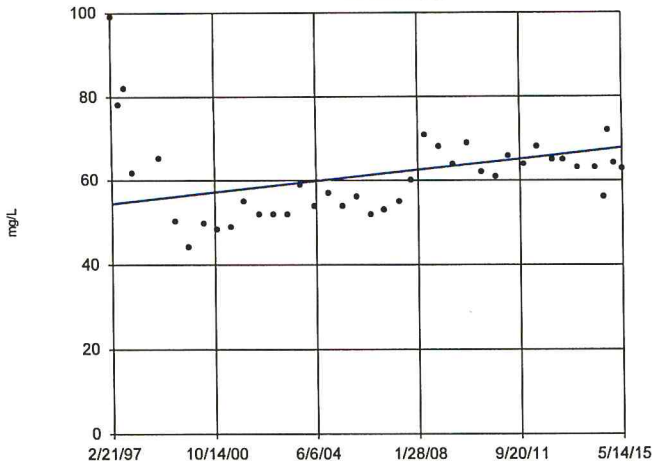
## Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = 0.7361 units per year.

Mann-Kendall statistic = 205
critical = 201

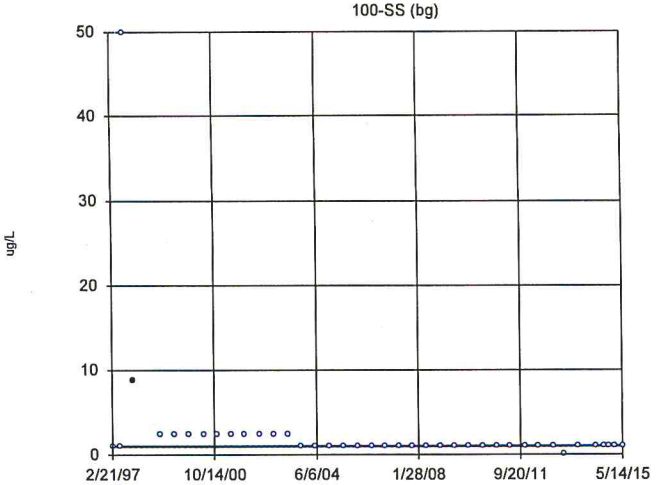
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -324
critical = -201

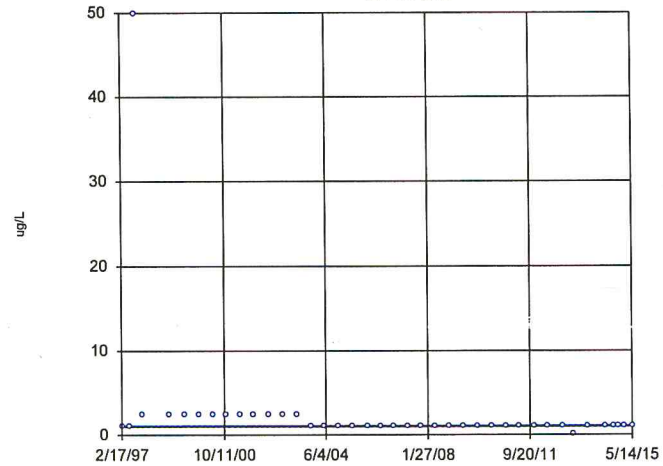
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

104-SS (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -314
critical = -201

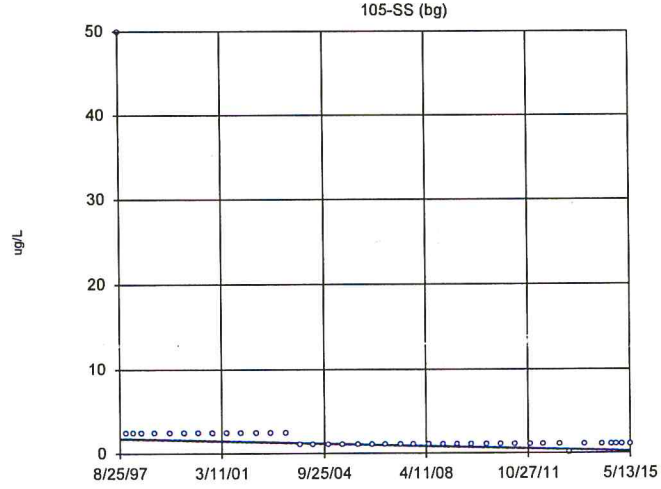
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = -0.08868 units per year.

Mann-Kendall statistic = -390
critical = -201

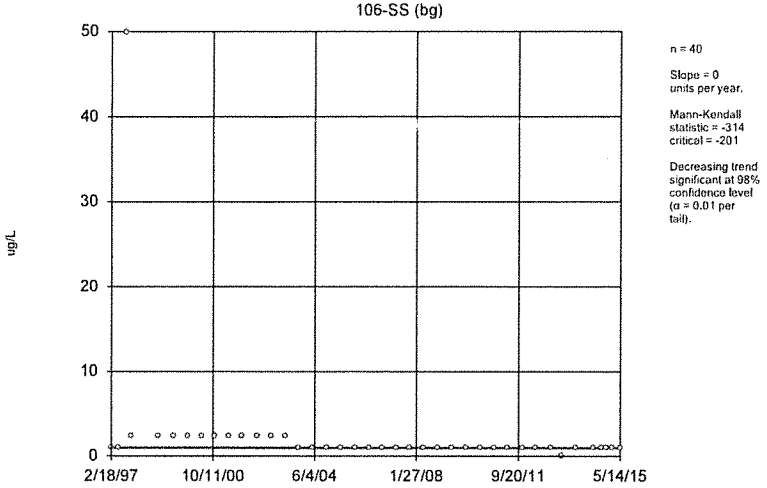
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)

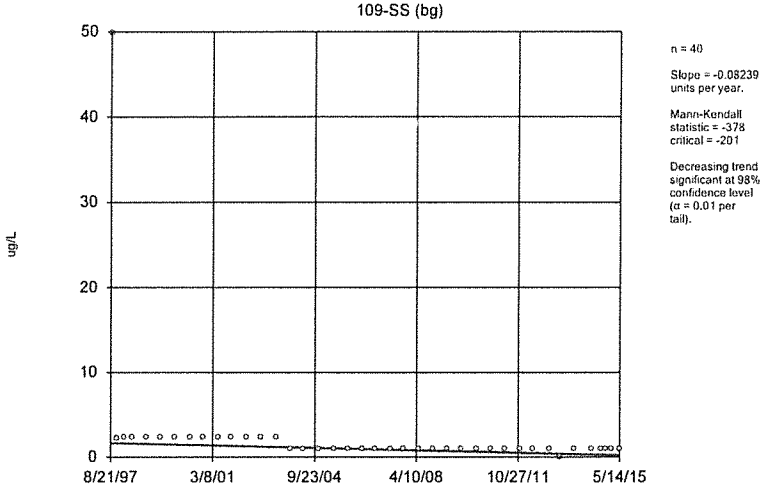



Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)

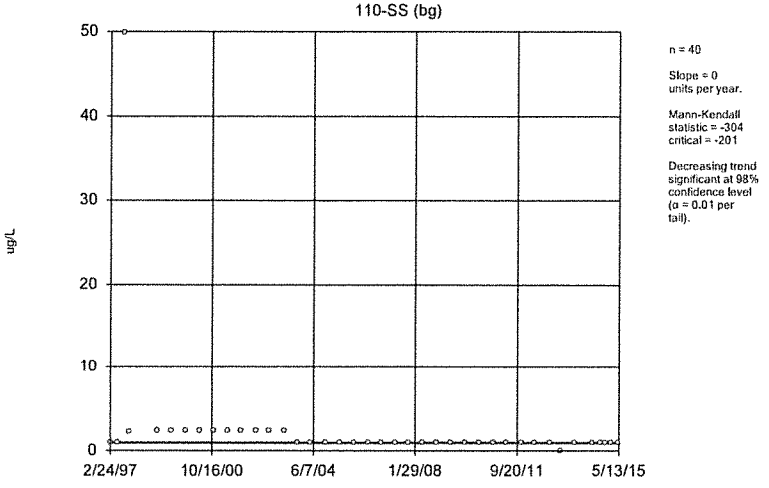



Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

110-SS (bg)

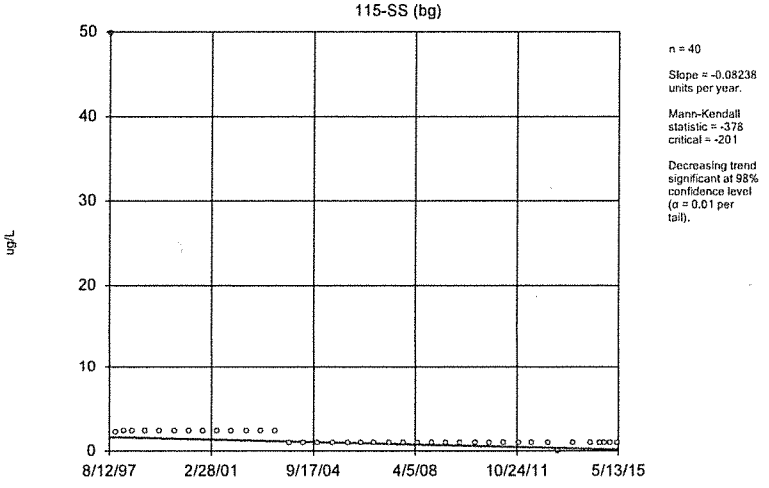



Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)

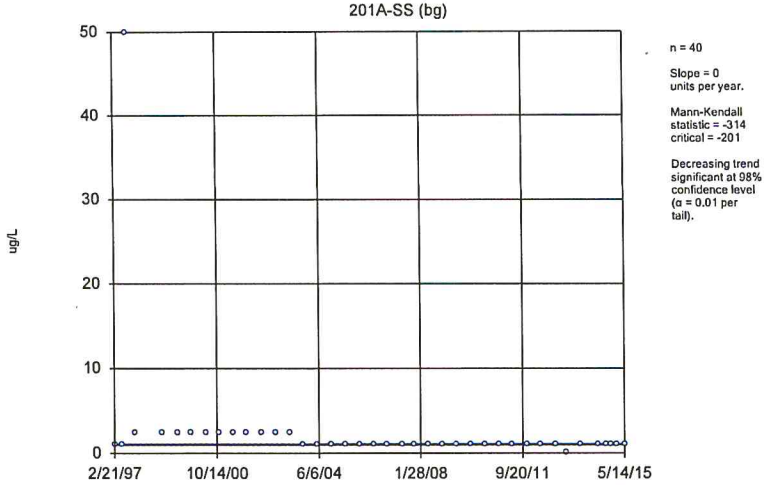



Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)




n = 40

Slope = 0
units per year.

Mann-Kendall
statistic = -314
critical = -201

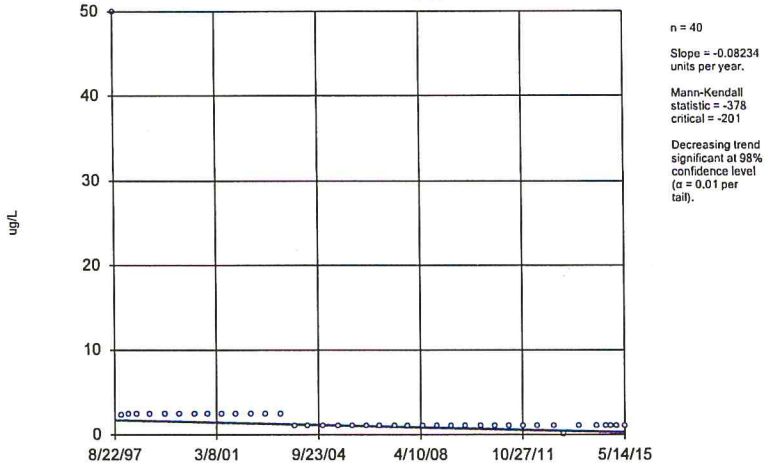
Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = -0.08234
units per year.

Mann-Kendall
statistic = -378
critical = -201

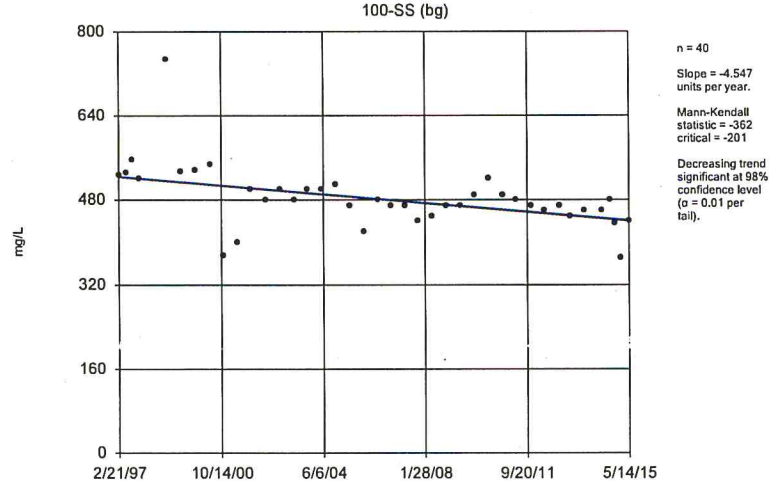
Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

100-SS (bg)




n = 40

Slope = -4.547
units per year.

Mann-Kendall
statistic = -362
critical = -201

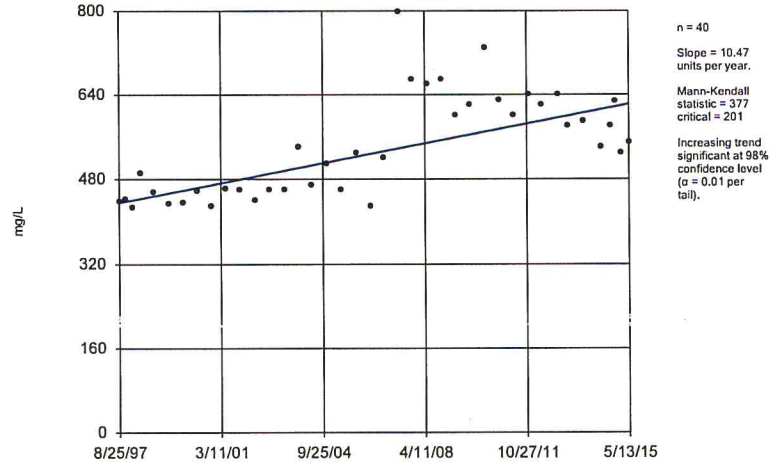
Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

105-SS (bg)




n = 40

Slope = 10.47
units per year.

Mann-Kendall
statistic = 377
critical = 201

Increasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 1/7/2016 1:06 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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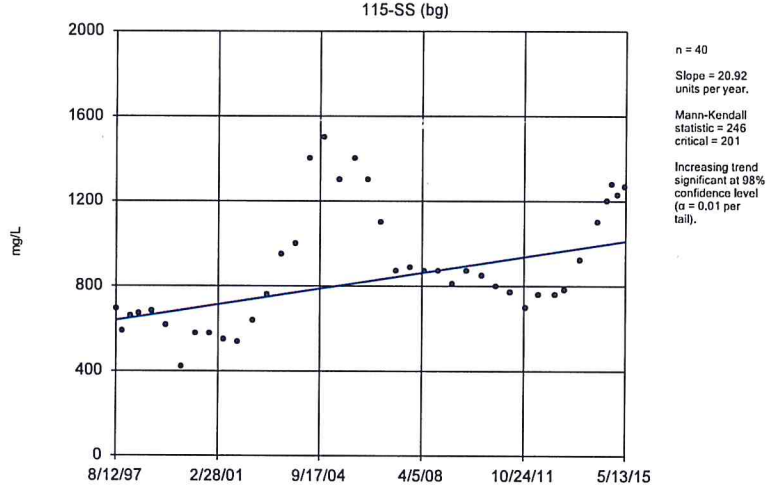
## Sen's Slope Estimator

115-SS (bg)




n = 40

Slope = 20.92 units per year.

Mann-Kendall statistic = 246 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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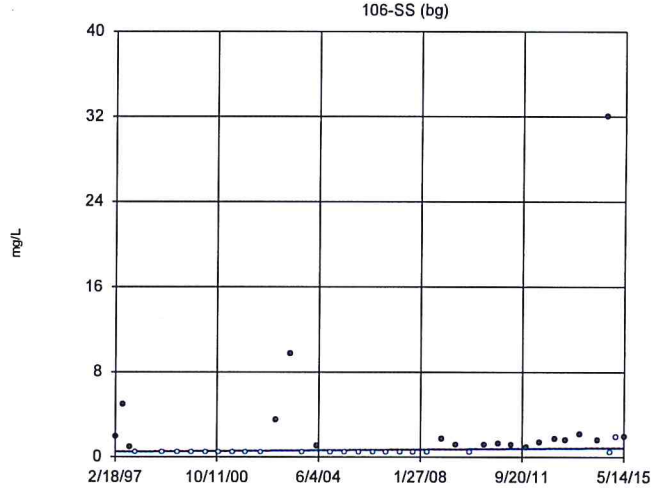
Hollow symbols indicate censored values.

## Sen's Slope Estimator

106-SS (bg)




n = 40

Slope = 0.02137 units per year.

Mann-Kendall statistic = 213 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Organic Carbon [TOC] Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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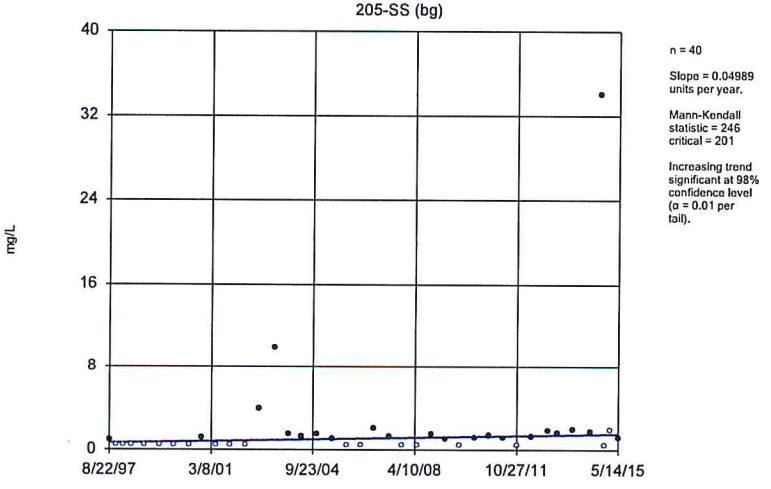
Hollow symbols indicate censored values.

## Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = 0.04989 units per year.

Mann-Kendall statistic = 246 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Organic Carbon [TOC] Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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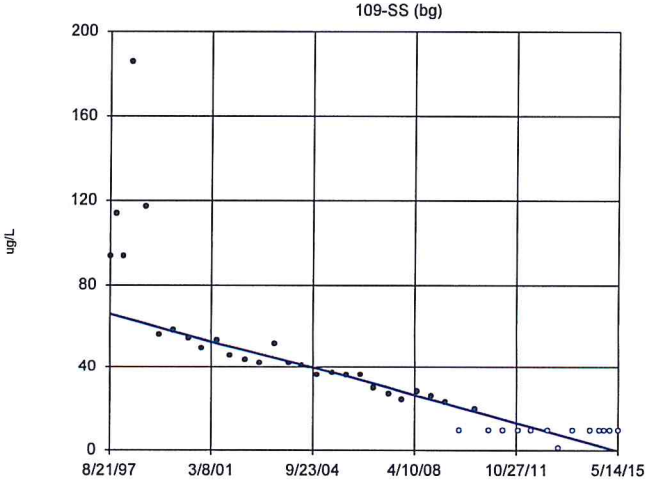
Hollow symbols indicate censored values.

## Sen's Slope Estimator

109-SS (bg)




n = 40

Slope = -3.762 units per year.

Mann-Kendall statistic = -661 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

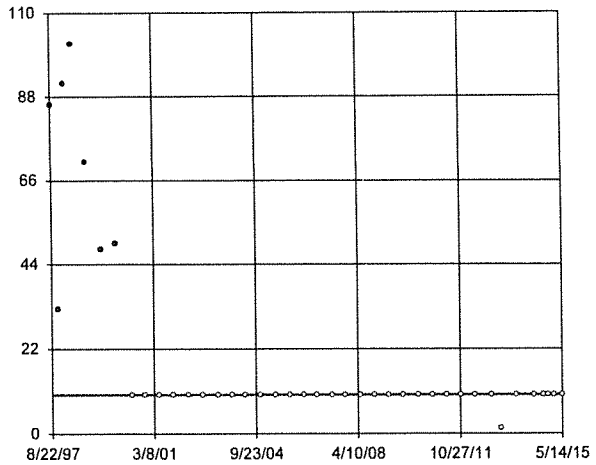
Constituent: Zinc Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)




n = 40

Slope = 0
units per year.

Mann-Kendall
statistic = -254
critical = -201

Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Zinc Total Analysis Run 1/7/2016 1:06 PM

Bridgeton LF Client: RSI Data: BRIDGETON

# INTRA-WELL PREDICTION LIMITS

Background data were evaluated for increasing statistical trends (or either increasing or decreasing trends for field pH). In those cases where the background data were determined to exhibit a statistical trend, typically the most recent background data were excluded until the data no longer exhibited a statistical trend. For each of the constituent-well pairs listed below, the specified modified background data period was utilized in the determination of the intra-well prediction limit.

**St. Louis Formation Zone**

- Arsenic (Total) at PZ-115-SS (8/97 through 2/15)
- Barium (Total) at PZ-104-SS (2/97 through 9/14)
- Barium (Total) at PZ-105-SS (8/97 through 11/02)
- Barium (Total) at PZ-110-SS (2/97 through 5/07)
- Barium (Total) at PZ-115-SS (8/97 through 10/13)
- Barium (Total) at PZ-205-SS (8/97 through 2/15)
- Boron (Total) at PZ-100-SS (2/97 through 5/12)
- Boron (Total) at PZ-104-SS (2/97 through 5/06)
- Boron (Total) at PZ-115-SS (8/97 through 5/14)
- Calcium (Total) at PZ-105-SS (8/97 through 11/01)
- Calcium (Total) at PZ-106-SS (2/97 through 11/11)
- Calcium (Total) at PZ-110-SS (2/97 through 11/06)
- Calcium (Total) at PZ-115-SS (8/97 through 5/14)
- Calcium (Total) at PZ-201A-SS (2/97 through 5/07)
- Calcium (Total) at PZ-205-SS (8/97 through 11/09)
- Chloride at PZ-104-SS (2/97 through 11/12)
- Chloride at PZ-105-SS (8/97 through 11/99)
- Chloride at PZ-106-SS (2/97 through 11/10)
- Chloride at PZ-110-SS (2/97 through 11/10)
- Chloride at PZ-115-SS (8/97 through 9/14)
- Chloride at PZ-201A-SS (2/97 through 5/08)
- Chloride at PZ-205-SS (8/97 through 5/12)
- Fluoride at PZ-109-SS (8/97 through 9/14)
- Hardness (Total) at PZ-105-SS (8/97 through 5/04)
- Hardness (Total) at PZ-106-SS (2/97 through 11/11)
- Hardness (Total) at PZ-110-SS (2/97 through 11/06)
- Hardness (Total) at PZ-115-SS (8/97 through 10/13)
- Hardness (Total) at PZ-201A-SS (2/97 through 5/07)
- Hardness (Total) at PZ-205-SS (8/97 through 11/07)
- Iron (Total) at PZ-106-SS (2/97 through 5/09)
- Iron (Total) at PZ-115-SS (8/97 through 5/08)
- Magnesium (Total) at PZ-104-SS (2/97 through 5/12)
- Magnesium (Total) at PZ-105-SS (8/97 through 11/01)
- Magnesium (Total) at PZ-106-SS (2/97 through 5/09)
- Magnesium (Total) at PZ-110-SS (2/97 through 5/05)
- Magnesium (Total) at PZ-115-SS (8/97 through 9/14)
- Magnesium (Total) at PZ-201A-SS (2/97 through 11/02)
- Magnesium (Total) at PZ-205-SS (8/97 through 11/04)
- Manganese (Total) at PZ-110-SS (2/97 through 5/03)
- Manganese (Total) at PZ-115-SS (8/97 through 5/02)
- Nickel (Total) at PZ-115-SS (8/97 through 9/14)

- Nitrate + Nitrite as N at PZ-201A-SS (2/97 through 11/09)
- pH (Field) at PZ-104-SS (2/97 through 10/13)
- pH (Field) at PZ-105-SS (8/97 through 5/12)
- pH (Field) at PZ-106-SS (2/97 through 11/11)
- pH (Field) at PZ-110-SS (2/97 through 11/12)
- pH (Field) at PZ-201A-SS (2/97 through 5/11)
- pH (Field) at PZ-205-SS (8/97 through 5/12)
- Phosphorous (Total) at PZ-115-SS (8/97 through 11/11)
- Sodium (Total) at PZ-105-SS (8/97 through 11/10)
- Sodium (Total) at PZ-106-SS (2/97 through 11/09)
- Sodium (Total) at PZ-115-SS (8/97 through 10/13)
- Specific conductance (Field) at PZ-105-SS (8/97 through 5/07)
- Specific conductance (Field) at PZ-110-SS (2/97 through 11/07)
- Specific conductance (Field) at PZ-115-SS (8/97 through 5/14)
- Sulfate at $SO_4$ at PZ-105-SS (11/97 through 11/00)
- Sulfate at $SO_4$ at PZ-201A-SS (2/97 through 11/14)
- Total dissolved solids at PZ-105-SS (8/97 through 5/06)
- Total dissolved solids at PZ-115-SS (8/97 through 9/14)
- Total organic carbon at PZ-106-SS (2/97 through 2/15)
- Total organic carbon at PZ-205-SS (8/97 through 4/13)

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 1:37 PM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N (mg/L) | 100-SS | 0.80 | n/a | 9/7/2016 | 0.05ND | No | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Ammonia as N (mg/L) | 104-SS | 0.47 | n/a | 8/24/2016 | 0.05ND | No | 40 | n/a | n/a | 80 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Ammonia as N (mg/L) | 105-SS | 0.14 | n/a | 8/23/2016 | 0.05ND | No | 40 | n/a | n/a | 85 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Ammonia as N (mg/L) | 106-SS | 0.80 | n/a | 8/23/2016 | 0.24 | No | 40 | n/a | n/a | 67.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Ammonia as N (mg/L) | 109-SS | 0.31 | n/a | 8/23/2016 | 0.05ND | No | 40 | n/a | n/a | 87.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Ammonia as N (mg/L) | 110-SS | 0.6 | n/a | 8/23/2016 | 0.4 | No | 38 | 0.2966 | 0.1164 | 5.263 | None | No | 0.00008608 | Param Intra 1 of 2 |
| **Ammonia as N (mg/L)** | **115-SS** | **0.34** | **n/a** | **9/6/2016** | **0.99** | **Yes** | **40** | **n/a** | **n/a** | **67.5** | **n/a** | **n/a** | **0.001152** | **NP Intra (NDs) 1 of 2** |
| Ammonia as N (mg/L) | 201A-SS | 0.32 | n/a | 8/24/2016 | 0.11 | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Ammonia as N (mg/L) | 205-SS | 0.34 | n/a | 9/7/2016 | 0.05ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 100-SS | 770 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 104-SS | 50 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 105-SS | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 106-SS | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 109-SS | 1800 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 110-SS | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 115-SS | 50 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 201A-SS | 50 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 205-SS | 50 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 100-SS | 3000 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 104-SS | 11 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 105-SS | 3.0 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 106-SS | 11 | n/a | 8/23/2016 | 6.1 | No | 40 | n/a | n/a | 55 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 109-SS | 5800 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 110-SS | 5.2 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 115-SS | 19 | n/a | 9/6/2016 | 6.6 | No | 39 | n/a | n/a | 56.41 | n/a | n/a | 0.001219 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 201A-SS | 6.5 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 87.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 205-SS | 5.2 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Barium Total (ug/L) | 100-SS | 80 | n/a | 9/7/2016 | 68.6 | No | 40 | 319653 | 75641 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Barium Total (ug/L) | 104-SS | 110 | n/a | 8/24/2016 | 102 | No | 36 | 8075 | 1743 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| Barium Total (ug/L) | 105-SS | 190 | n/a | 8/23/2016 | 187 | No | 13 | 4.594 | 0.3338 | 0 | None | x^(1/3) | 0.00008608 | Param Intra 1 of 2 |
| **Barium Total (ug/L)** | **106-SS** | **170** | **n/a** | **8/23/2016** | **176** | **Yes** | **39** | **5.223** | **0.1277** | **0** | **None** | **x^(1/3)** | **0.00008608** | **Param Intra 1 of 2** |
| Barium Total (ug/L) | 109-SS | 76 | n/a | 8/23/2016 | 57.9 | No | 40 | 4156 | 605.3 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| **Barium Total (ug/L)** | **110-SS** | **280** | **n/a** | **8/23/2016** | **281** | **Yes** | **22** | **42528** | **13153** | **0** | **None** | **x^2** | **0.00008608** | **Param Intra 1 of 2** |
| Barium Total (ug/L) | 115-SS | 600 | n/a | 9/6/2016 | 483 | No | 35 | 228 | 139.9 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Barium Total (ug/L) | 201A-SS | 150 | n/a | 8/24/2016 | 131 | No | 39 | 111.8 | 14.77 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Barium Total (ug/L) | 205-SS | 180 | n/a | 9/7/2016 | 140 | No | 39 | n/a | n/a | 0 | n/a | n/a | 0.001219 | NP Intra (normality) 1 of 2 |
| Beryllium Total (ug/L) | 100-SS | 1.0 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 104-SS | 1.0 | n/a | 8/24/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 105-SS | 1.0 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 106-SS | 1.0 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 109-SS | 1.0 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 110-SS | 1.0 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 115-SS | 1.0 | n/a | 9/6/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 201A-SS | 1.0 | n/a | 8/24/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 205-SS | 1.0 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 100-SS | 140 | n/a | 9/7/2016 | 118 | No | 32 | 1.7e8 | 9.7e7 | 12.5 | None | x^4 | 0.00008608 | Param Intra 1 of 2 |
| Boron Total (ug/L) | 104-SS | 160 | n/a | 8/24/2016 | 132 | No | 20 | n/a | n/a | 40 | n/a | n/a | 0.004219 | NP Intra (normality) 1 of 2 |
| Boron Total (ug/L) | 105-SS | 50 | n/a | 8/23/2016 | 50ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 106-SS | 50 | n/a | 8/23/2016 | 50ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 109-SS | 330 | n/a | 8/23/2016 | 178 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 1:37 PM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Boron Total (ug/L) | 110-SS | 320 | n/a | 8/23/2016 | 225 | No | 38 | 5.529 | 0.09624 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Boron Total (ug/L) | 115-SS | 1000 | n/a | 9/6/2016 | 460 | No | 36 | n/a | n/a | 30.56 | n/a | n/a | 0.00142 | NP Intra (normality) 1 of 2 |
| Boron Total (ug/L) | 201A-SS | 50 | n/a | 8/24/2016 | 50ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 205-SS | 280 | n/a | 9/7/2016 | 50ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 100-SS | 2.5 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 104-SS | 2.5 | n/a | 8/24/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 105-SS | 2.5 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 106-SS | 2.5 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 109-SS | 4.6 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 110-SS | 2.5 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 115-SS | 2.5 | n/a | 9/6/2016 | 0.1ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 201A-SS | 2.5 | n/a | 8/24/2016 | 0.1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 205-SS | 5.8 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 87.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Calcium Total (ug/L) | 100-SS | 110000 | n/a | 9/7/2016 | 93200 | No | 39 | 11.46 | 0.04697 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 104-SS | 95000 | n/a | 8/24/2016 | 81900 | No | 33 | 6.6e9 | 9.2e8 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| **Calcium Total (ug/L)** | **105-SS** | **87000** | **n/a** | **8/23/2016** | **107000** | **Yes** | **11** | **11.08** | **0.07786** | **0** | **None** | **ln(x)** | **0.00008608** | **Param Intra 1 of 2** |
| Calcium Total (ug/L) | 106-SS | 110000 | n/a | 8/23/2016 | 103000 | No | 29 | 11.46 | 0.06699 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 109-SS | 96000 | n/a | 8/23/2016 | 87200 | No | 39 | 4.0e29 | 1.4e29 | 0 | None | x^6 | 0.00008608 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 110-SS | 260000 | n/a | 8/23/2016 | 210000 | No | 20 | 8.6e15 | 2.9e15 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 115-SS | 350000 | n/a | 9/6/2016 | 210000 | No | 36 | 11.89 | 0.3286 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 201A-SS | 100000 | n/a | 8/24/2016 | 93200 | No | 22 | 85186 | 6232 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 205-SS | 100000 | n/a | 9/7/2016 | 99000 | No | 27 | n/a | n/a | 0 | n/a | n/a | 0.002475 | NP Intra (normality) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 100-SS | 21 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 104-SS | 96 | n/a | 8/24/2016 | 31.7 | No | 40 | n/a | n/a | 75 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 105-SS | 42 | n/a | 8/23/2016 | 12.3 | No | 40 | n/a | n/a | 75 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 106-SS | 66 | n/a | 8/23/2016 | 21.2 | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 109-SS | 18 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 110-SS | 110 | n/a | 8/23/2016 | 65.2 | No | 40 | 6.76 | 1.404 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 115-SS | 180 | n/a | 9/6/2016 | 37.6 | No | 40 | n/a | n/a | 30 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 201A-SS | 27 | n/a | 8/24/2016 | 5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 205-SS | 52 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chloride (mg/L) | 100-SS | 12 | n/a | 9/7/2016 | 5.1 | No | 40 | 1.706 | 0.3034 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Chloride (mg/L) | 104-SS | 5.2 | n/a | 8/24/2016 | 4.2 | No | 40 | n/a | n/a | 40 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| **Chloride (mg/L)** | **105-SS** | **26** | **n/a** | **8/23/2016** | **65** | **Yes** | **7** | **2.586** | **0.1213** | **0** | **None** | **ln(x)** | **0.00008608** | **Param Intra 1 of 2** |
| **Chloride (mg/L)** | **106-SS** | **17** | **n/a** | **8/23/2016** | **37.7** | **Yes** | **29** | **n/a** | **n/a** | **0** | **n/a** | **n/a** | **0.002152** | **NP Intra (normality) 1 of 2** |
| Chloride (mg/L) | 109-SS | 17 | n/a | 8/23/2016 | 3.9 | No | 37 | n/a | n/a | 0 | n/a | n/a | 0.001353 | NP Intra (normality) 1 of 2 |
| Chloride (mg/L) | 110-SS | 280 | n/a | 8/23/2016 | 213 | No | 28 | 176 | 36.15 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Chloride (mg/L) | 115-SS | 680 | n/a | 9/6/2016 | 477 | No | 37 | 13.59 | 4.687 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Chloride (mg/L) | 201A-SS | 4.0 | n/a | 8/24/2016 | 3.7 | No | 24 | n/a | n/a | 50 | n/a | n/a | 0.003083 | NP Intra (normality) 1 of 2 |
| Chloride (mg/L) | 205-SS | 50 | n/a | 9/7/2016 | 32.8 | No | 32 | 2.998 | 0.2584 | 0 | None | x^(1/3) | 0.00008608 | Param Intra 1 of 2 |
| Chromium Total (ug/L) | 100-SS | 21 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 104-SS | 6.6 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 105-SS | 6.4 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 106-SS | 8.0 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 109-SS | 14 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 110-SS | 38 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 115-SS | 5.5 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 201A-SS | 7.5 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 205-SS | 52 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 85 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 100-SS | 10 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 1:37 PM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cobalt Total (ug/L) | 104-SS | 10 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 105-SS | 10 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 106-SS | 10 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 109-SS | 10 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 110-SS | 10 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 115-SS | 62 | n/a | 9/6/2016 | 28.4 | No | 40 | n/a | n/a | 42.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Cobalt Total (ug/L) | 201A-SS | 10 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 205-SS | 10 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 100-SS | 20 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 104-SS | 10 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 105-SS | 10 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 106-SS | 10 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 109-SS | 31 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 110-SS | 41 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 70 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 115-SS | 21 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 201A-SS | 10 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 205-SS | 46 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Fluoride (mg/L) | 100-SS | 0.94 | n/a | 9/7/2016 | 0.64 | No | 25 | 0.3625 | 0.1685 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 104-SS | 0.97 | n/a | 8/24/2016 | 0.79 | No | 24 | 0.4327 | 0.1674 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 105-SS | 1.1 | n/a | 8/23/2016 | 0.56 | No | 26 | 0.6903 | 0.1403 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 106-SS | 2.5 | n/a | 8/23/2016 | 2 | No | 26 | 0.6576 | 0.08543 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 109-SS | 2.7 | n/a | 8/23/2016 | 2.5 | No | 26 | 4.504 | 0.9566 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 110-SS | 1.5 | n/a | 8/23/2016 | 0.47 | No | 26 | -0.8833 | 0.4611 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 115-SS | 2.7 | n/a | 9/6/2016 | 0.52 | No | 26 | 0.9509 | 0.1594 | 0 | None | x^(1/3) | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 201A-SS | 0.65 | n/a | 8/24/2016 | 0.36 | No | 25 | 0.4567 | 0.06897 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 205-SS | 0.6 | n/a | 9/7/2016 | 0.42 | No | 25 | -0.909 | 0.1421 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 100-SS | 510 | n/a | 9/7/2016 | 454 | No | 39 | 2.0e13 | 5.2e12 | 0 | None | x^5 | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 104-SS | 460 | n/a | 8/24/2016 | 409 | No | 39 | 2.7e10 | 7.1e9 | 0 | None | x^4 | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 105-SS | 510 | n/a | 8/23/2016 | 503 | No | 15 | 5.79 | 0.1385 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 106-SS | 510 | n/a | 8/23/2016 | 466 | No | 29 | 20.59 | 0.6924 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 109-SS | 740 | n/a | 8/23/2016 | 430 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Hardness Total (mg/L) | 110-SS | 1000 | n/a | 8/23/2016 | 886 | No | 19 | 6.2e8 | 1.8e8 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 115-SS | 1600 | n/a | 9/6/2016 | 953 | No | 35 | 6.483 | 0.3251 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 201A-SS | 500 | n/a | 8/24/2016 | 423 | No | 21 | 19.72 | 0.9201 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 205-SS | 520 | n/a | 9/7/2016 | 480 | No | 23 | 8.0e15 | 3.9e15 | 0 | None | x^6 | 0.00008608 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 100-SS | 2000 | n/a | 9/7/2016 | 25ND | No | 40 | n/a | n/a | 25 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Iron Total (ug/L) | 104-SS | 8600 | n/a | 8/24/2016 | 310 | No | 40 | 10.96 | 3.646 | 0 | None | x^(1/3) | 0.00008608 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 105-SS | 13000 | n/a | 8/23/2016 | 5460 | No | 40 | 7.052 | 0.9184 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| **Iron Total (ug/L)** | **106-SS** | **1400** | **n/a** | **8/23/2016** | **2310** | **Yes** | **26** | **5.605** | **0.5835** | **0** | **None** | **ln(x)** | **0.00008608** | **Param Intra 1 of 2** |
| Iron Total (ug/L) | 109-SS | 5400 | n/a | 8/23/2016 | 25ND | No | 40 | 5.028 | 1.361 | 5 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 110-SS | 10000 | n/a | 8/23/2016 | 6590 | No | 39 | 4.9e7 | 2.0e7 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 115-SS | 7200 | n/a | 9/6/2016 | 3360 | No | 24 | n/a | n/a | 0 | n/a | n/a | 0.003083 | NP Intra (normality) 1 of 2 |
| Iron Total (ug/L) | 201A-SS | 5800 | n/a | 8/24/2016 | 102 | No | 40 | 5.9 | 1.058 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 205-SS | 5400 | n/a | 9/7/2016 | 127 | No | 40 | 6.53 | 0.7894 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Lead Total (ug/L) | 100-SS | 2700 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 104-SS | 25 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 105-SS | 25 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 106-SS | 25 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 109-SS | 3400 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 110-SS | 25 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 1:37 PM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead Total (ug/L) | 115-SS | 25 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 201A-SS | 25 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 205-SS | 89 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 87.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Magnesium Total (ug/L) | 100-SS | 60000 | n/a | 9/7/2016 | 53600 | No | 40 | 1.5e14 | 2.5e13 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Magnesium Total (ug/L) | 104-SS | 55000 | n/a | 8/24/2016 | 49700 | No | 32 | 1.1e14 | 2.3e13 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| **Magnesium Total (ug/L)** | **105-SS** | **47000** | **n/a** | **8/23/2016** | **57500** | **Yes** | **11** | **10.46** | **0.07764** | **0** | **None** | **ln(x)** | **0.00008608** | **Param Intra 1 of 2** |
| Magnesium Total (ug/L) | 106-SS | 54000 | n/a | 8/23/2016 | 51000 | No | 25 | 10.69 | 0.07281 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Magnesium Total (ug/L) | 109-SS | 57000 | n/a | 8/23/2016 | 51500 | No | 39 | 2.0e28 | 5.9e27 | 0 | None | x^6 | 0.00008608 | Param Intra 1 of 2 |
| Magnesium Total (ug/L) | 110-SS | 100000 | n/a | 8/23/2016 | 88000 | No | 17 | 11.28 | 0.07957 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Magnesium Total (ug/L) | 115-SS | 140000 | n/a | 9/6/2016 | 104000 | No | 37 | 11.23 | 0.2383 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Magnesium Total (ug/L) | 201A-SS | 51000 | n/a | 8/24/2016 | 46300 | No | 13 | 10.57 | 0.08112 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Magnesium Total (ug/L) | 205-SS | 64000 | n/a | 9/7/2016 | 56600 | No | 17 | 224 | 9.563 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Manganese Total (ug/L) | 100-SS | 75 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 57.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Manganese Total (ug/L) | 104-SS | 100 | n/a | 8/24/2016 | 22.7 | No | 39 | 5.486 | 1.746 | 2.564 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| **Manganese Total (ug/L)** | **105-SS** | **68** | **n/a** | **8/23/2016** | **133** | **Yes** | **39** | **2.59** | **0.5683** | **2.564** | **None** | **x^(1/3)** | **0.00008608** | **Param Intra 1 of 2** |
| Manganese Total (ug/L) | 106-SS | 52 | n/a | 8/23/2016 | 14.5 | No | 38 | 4.249 | 1.13 | 2.632 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Manganese Total (ug/L) | 109-SS | 120 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 42.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Manganese Total (ug/L) | 110-SS | 230 | n/a | 8/23/2016 | 156 | No | 10 | 30012 | 5451 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| **Manganese Total (ug/L)** | **115-SS** | **19** | **n/a** | **9/6/2016** | **73.9** | **Yes** | **11** | **8.983** | **2.739** | **9.091** | **None** | **No** | **0.00008608** | **Param Intra 1 of 2** |
| Manganese Total (ug/L) | 201A-SS | 1100 | n/a | 8/24/2016 | 23.4 | No | 40 | 4.69 | 0.8887 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Manganese Total (ug/L) | 205-SS | 100 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 30 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Mercury Total (ug/L) | 100-SS | 0.10 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 104-SS | 0.30 | n/a | 8/24/2016 | 0.1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 105-SS | 0.10 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 106-SS | 0.10 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 109-SS | 0.10 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 110-SS | 0.10 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 115-SS | 0.10 | n/a | 9/6/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 201A-SS | 0.35 | n/a | 8/24/2016 | 0.1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 205-SS | 0.10 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 100-SS | 56 | n/a | 9/7/2016 | 10.1 | No | 40 | 2.743 | 0.491 | 10 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Nickel Total (ug/L) | 104-SS | 23 | n/a | 8/24/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 105-SS | 20 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 106-SS | 20 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 109-SS | 20 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 110-SS | 55 | n/a | 8/23/2016 | 12.7 | No | 40 | n/a | n/a | 25 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Nickel Total (ug/L) | 115-SS | 140 | n/a | 9/6/2016 | 72 | No | 37 | n/a | n/a | 32.43 | n/a | n/a | 0.001353 | NP Intra (normality) 1 of 2 |
| Nickel Total (ug/L) | 201A-SS | 20 | n/a | 8/24/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 205-SS | 32 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 100-SS | 0.27 | n/a | 9/7/2016 | 0.05ND | No | 40 | n/a | n/a | 75 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 104-SS | 0.39 | n/a | 8/24/2016 | 0.05ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 105-SS | 0.12 | n/a | 8/23/2016 | 0.05ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 106-SS | 0.54 | n/a | 8/23/2016 | 0.05ND | No | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 109-SS | 0.50 | n/a | 8/23/2016 | 0.05ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 110-SS | 5.0 | n/a | 8/23/2016 | 0.05ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 115-SS | 5.0 | n/a | 9/6/2016 | 0.05ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 201A-SS | 0.33 | n/a | 8/24/2016 | 0.31 | No | 27 | n/a | n/a | 66.67 | n/a | n/a | 0.002475 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 205-SS | 0.15 | n/a | 9/7/2016 | 0.05ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| pH [Field] (su) | 100-SS | 8.0 | 6.6 | 9/7/2016 | 7.06 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.002305 | NP Intra (normality) 1 of 2 |
| pH [Field] (su) | 104-SS | 8.5 | 6.2 | 8/24/2016 | 6.7 | No | 35 | 1.983 | 0.05825 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 1:37 PM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| pH [Field] (su) | 105-SS | 8.3 | 6.7 | 8/23/2016 | 7.1 | No | 32 | 2.012 | 0.04035 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |
| pH [Field] (su) | 106-SS | 8.3 | 6.3 | 8/23/2016 | 7 | No | 31 | 1.98 | 0.05226 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |
| pH [Field] (su) | 109-SS | 8 | 6.5 | 8/23/2016 | 7.11 | No | 39 | 1.973 | 0.04155 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |
| pH [Field] (su) | 110-SS | 7.7 | 6 | 8/23/2016 | [illegible] | Nc | 33 | 1.914 | 0.04822 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |
| pH [Field] (su) | 115-SS | 7.6 | 6 | 9/6/2016 | 6.68 | No | 39 | 1.911 | 0.04272 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |
| pH [Field] (su) | 201A-SS | 8.5 | 6.4 | 8/24/2016 | 7.2 | No | 30 | 1.993 | 0.05282 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |
| pH [Field] (su) | 205-SS | 7.9 | 6.5 | 9/7/2016 | 6.96 | No | 32 | 1.969 | 0.03712 | 0 | None | ln(x) | 0.00004304 | Param Intra 1 of 2 |
| Phosphorus Total (mg/L) | 100-SS | 0.21 | n/a | 9/7/2016 | 0.025ND | No | 40 | n/a | n/a | 70 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Phosphorus Total (mg/L) | 104-SS | 0.46 | n/a | 8/24/2016 | 0.025ND | No | 40 | n/a | n/a | 60 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Phosphorus Total (mg/L) | 105-SS | 0.22 | n/a | 8/23/2016 | 0.025ND | No | 40 | n/a | n/a | 50 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Phosphorus Total (mg/L) | 106-SS | 0.38 | n/a | 8/23/2016 | 0.025ND | No | 40 | n/a | n/a | 72.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Phosphorus Total (mg/L) | 109-SS | 0.25 | n/a | 8/23/2016 | 0.025ND | No | 40 | n/a | n/a | 72.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Phosphorus Total (mg/L) | 110-SS | 0.47 | n/a | 8/23/2016 | 0.15 | No | 39 | -1.798 | 0.3985 | 2.564 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Phosphorus Total (mg/L) | 115-SS | 0.45 | n/a | 9/6/2016 | 0.26 | No | 31 | 0.2985 | 0.1361 | 12.9 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Phosphorus Total (mg/L) | 201A-SS | 0.37 | n/a | 8/24/2016 | 0.025ND | No | 40 | n/a | n/a | 70 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Phosphorus Total (mg/L) | 205-SS | 0.11 | n/a | 9/7/2016 | 0.025ND | No | 40 | n/a | n/a | 70 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 100-SS | 50 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 104-SS | 50 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 105-SS | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 106-SS | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 109-SS | 39 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 80 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 110-SS | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 115-SS | 50 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 201A-SS | 50 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 205-SS | 50 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 100-SS | 5.0 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 104-SS | 5.0 | n/a | 8/24/2016 | 2.5ND | No | 39 | n/a | n/a | 100 | n/a | n/a | 0.001219 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 105-SS | 5.0 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 106-SS | 5.0 | n/a | 8/23/2016 | 2.5ND | No | 38 | n/a | n/a | 100 | n/a | n/a | 0.001286 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 109-SS | 5.0 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 110-SS | 5.0 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 115-SS | 5.9 | n/a | 9/6/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 201A-SS | 5.0 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 205-SS | 5.0 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Sodium Total (ug/L) | 100-SS | 39000 | n/a | 9/7/2016 | 11500 | No | 40 | 9.808 | 0.295 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sodium Total (ug/L) | 104-SS | 27000 | n/a | 8/24/2016 | 14600 | No | 39 | 9.617 | 0.2257 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sodium Total (ug/L) | 105-SS | 80000 | n/a | 8/23/2016 | 41400 | No | 29 | 10.89 | 0.1457 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| **Sodium Total (ug/L)** | **106-SS** | **17000** | **n/a** | **8/23/2016** | **22600** | **Yes** | **26** | **1.7e8** | **4.0e7** | **0** | **None** | **x^2** | **0.00008608** | **Param Intra 1 of 2** |
| Sodium Total (ug/L) | 109-SS | 49000 | n/a | 8/23/2016 | 10300 | No | 39 | 9.978 | 0.3165 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sodium Total (ug/L) | 110-SS | 120000 | n/a | 8/23/2016 | 79500 | No | 39 | 83210 | 14554 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Sodium Total (ug/L) | 115-SS | 460000 | n/a | 9/6/2016 | 161000 | No | 35 | 10.78 | 0.8461 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sodium Total (ug/L) | 201A-SS | 66000 | n/a | 8/24/2016 | 11500 | No | 40 | 30.24 | 3.85 | 0 | None | x^(1/3) | 0.00008608 | Param Intra 1 of 2 |
| Sodium Total (ug/L) | 205-SS | 56000 | n/a | 9/7/2016 | 15500 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 100-SS | 1000 | n/a | 9/7/2016 | 618 | No | 39 | 6.746 | 0.06655 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 104-SS | 930 | n/a | 8/24/2016 | 791 | No | 39 | 4.6e8 | 1.3e8 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 105-SS | 1100 | n/a | 8/23/2016 | 1071 | No | 22 | 813.5 | 87.59 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 106-SS | 950 | n/a | 8/23/2016 | 939 | No | 39 | 4.6e11 | 1.3e11 | 0 | None | x^4 | 0.00008608 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 109-SS | 990 | n/a | 8/23/2016 | 792 | No | 37 | 824 | 63.94 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 110-SS | 2200 | n/a | 8/23/2016 | 1915 | No | 23 | 1.9e16 | 1.0e16 | 0 | None | x^5 | 0.00008608 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 115-SS | 3500 | n/a | 9/6/2016 | 1920 | No | 36 | 7.284 | 0.335 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 1:37 PM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance [Field] (umhos/cm) | 201A-SS | 970 | n/a | 8/24/2016 | 766 | No | 39 | 660296 | 108124 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 205-SS | 1300 | n/a | 9/7/2016 | 772 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Sulfate (mg/L) | 100-SS | 92 | n/a | 9/7/2016 | 37.9 | No | 40 | 4.009 | 0.1952 | 2.5 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 104-SS | 45 | n/a | 8/24/2016 | 12.2 | No | 40 | 21.19 | 9.203 | 2.5 | None | No | 0.00008608 | Param Intra 1 of 2 |
| **Sulfate (mg/L)** | **105-SS** | **47** | **n/a** | **8/23/2016** | **49.5** | **Yes** | **8** | **40346** | **14371** | **0** | **None** | **x^3** | **0.00008608** | **Param Intra 1 of 2** |
| Sulfate (mg/L) | 106-SS | 66 | n/a | 8/23/2016 | 46.5 | No | 40 | 3.901 | 0.1104 | 2.5 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 109-SS | 89 | n/a | 8/23/2016 | 23.6 | No | 40 | 3.71 | 0.2988 | 2.5 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 110-SS | 100 | n/a | 8/23/2016 | 51.2 | No | 40 | 5251 | 1909 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 115-SS | 71 | n/a | 9/6/2016 | 3.5 | No | 40 | 4.715 | 1.41 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 201A-SS | 86 | n/a | 8/24/2016 | 61.2 | No | 37 | 4.083 | 0.141 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 205-SS | 73 | n/a | 9/7/2016 | 52.5 | No | 39 | 50.72 | 8.593 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Thallium Total (ug/L) | 100-SS | 50 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 104-SS | 50 | n/a | 8/24/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 105-SS | 50 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 106-SS | 50 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 109-SS | 50 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 110-SS | 50 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 115-SS | 50 | n/a | 9/6/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 201A-SS | 50 | n/a | 8/24/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 205-SS | 50 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 100-SS | 570 | n/a | 9/7/2016 | 437 | No | 39 | 1.1e8 | 2.8e7 | 0 | None | x^3 | 0.00008608 | Param Intra 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 104-SS | 510 | n/a | 8/24/2016 | 410 | No | 38 | 6.039 | 0.07516 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| **Total Dissolved Solids [TDS] (mg/L)** | **105-SS** | **540** | **n/a** | **8/23/2016** | **608** | **Yes** | **20** | **n/a** | **n/a** | **0** | **n/a** | **n/a** | **0.004219** | **NP Intra (normality) 1 of 2** |
| Total Dissolved Solids [TDS] (mg/L) | 106-SS | 540 | n/a | 8/23/2016 | 536 | No | 39 | 21.4 | 0.6626 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 109-SS | 570 | n/a | 8/23/2016 | 417 | No | 40 | 6.134 | 0.07956 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 110-SS | 1400 | n/a | 8/23/2016 | 1160 | No | 40 | 1135 | 116.3 | 0 | None | No | 0.00008608 | Param Intra 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 115-SS | 1800 | n/a | 9/6/2016 | 1490 | No | 37 | 6.71 | 0.3007 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 201A-SS | 560 | n/a | 8/24/2016 | 461 | No | 39 | 226671 | 33845 | 0 | None | x^2 | 0.00008608 | Param Intra 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 205-SS | 580 | n/a | 9/7/2016 | 512 | No | 39 | 6.217 | 0.05445 | 0 | None | ln(x) | 0.00008608 | Param Intra 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 100-SS | 31 | n/a | 9/7/2016 | 0.5ND | No | 40 | n/a | n/a | 72.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 104-SS | 28 | n/a | 8/24/2016 | 2ND | No | 40 | n/a | n/a | 47.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 105-SS | 29 | n/a | 8/23/2016 | 2ND | No | 40 | n/a | n/a | 17.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 106-SS | 32 | n/a | 8/23/2016 | 2ND | No | 39 | n/a | n/a | 53.85 | n/a | n/a | 0.001219 | NP Intra (NDs) 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 109-SS | 31 | n/a | 8/23/2016 | 0.5ND | No | 40 | n/a | n/a | 52.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 110-SS | 31 | n/a | 8/23/2016 | 18.6 | No | 39 | 3.564 | 0.7759 | 0 | None | sqrt(x) | 0.00008608 | Param Intra 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 115-SS | 56 | n/a | 9/6/2016 | 2ND | No | 40 | 1.813 | 0.7701 | 22.5 | Kaplan-Meier | x^(1/3) | 0.00008608 | Param Intra 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 201A-SS | 33 | n/a | 8/24/2016 | 0.5ND | No | 40 | n/a | n/a | 50 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 205-SS | 10 | n/a | 9/7/2016 | 0.5ND | No | 34 | n/a | n/a | 47.06 | n/a | n/a | 0.001587 | NP Intra (normality) 1 of 2 |
| Vanadium Total (ug/L) | 100-SS | 5.0 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 104-SS | 5.0 | n/a | 8/24/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 105-SS | 5.0 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 106-SS | 5.0 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 109-SS | 5.0 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 110-SS | 10 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 115-SS | 14 | n/a | 9/6/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 201A-SS | 5.0 | n/a | 8/24/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 205-SS | 110 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 100-SS | 230 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 104-SS | 220 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 85 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 105-SS | 43 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 85 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 1:37 PM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zinc Total (ug/L) | 106-SS | 40 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 109-SS | 190 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 32.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Zinc Total (ug/L) | 110-SS | 87 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 77.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 115-SS | 38 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 87.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 201A-SS | 180 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 85 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 205-SS | 100 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

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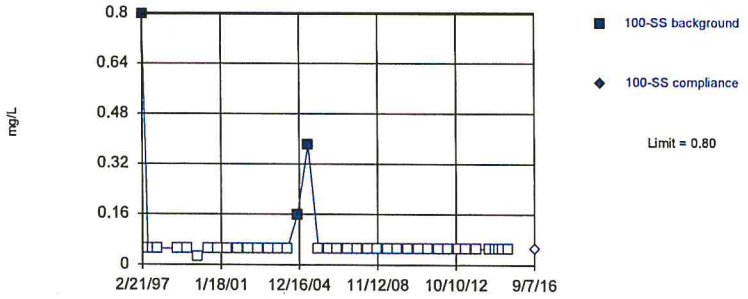
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

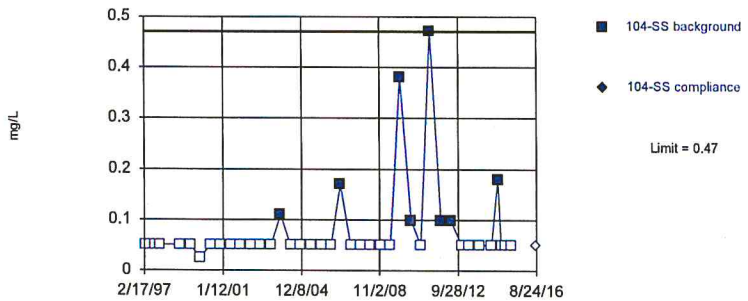
Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 80% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

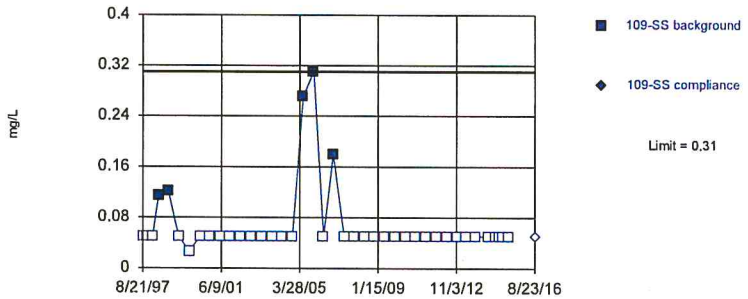
Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

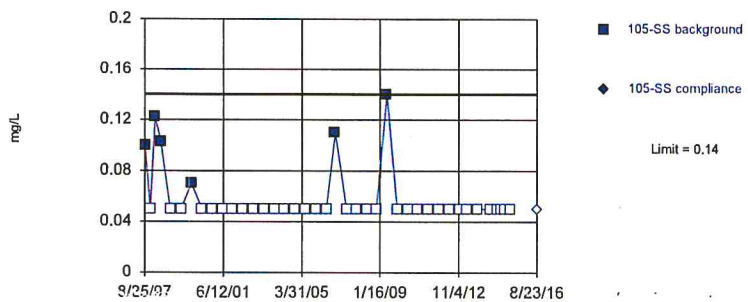
Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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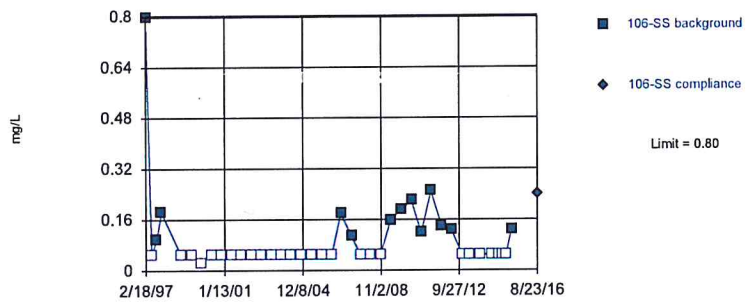
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 67.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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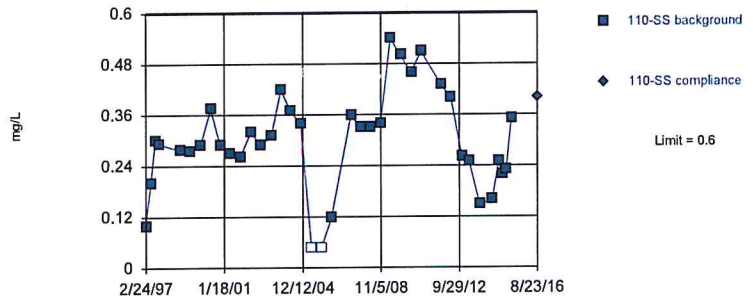
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=0.2966, Std. Dev.=0.1164, n=38, 5.263% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9725, critical = 0.916. Kappa = 2.635 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 0.77 (11/9/2006); 1.8 (5/10/2011).

Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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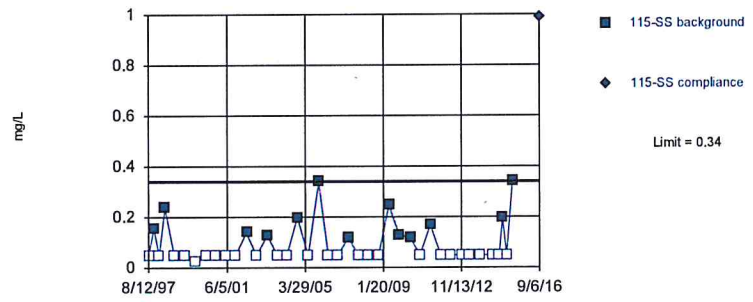
Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 67.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

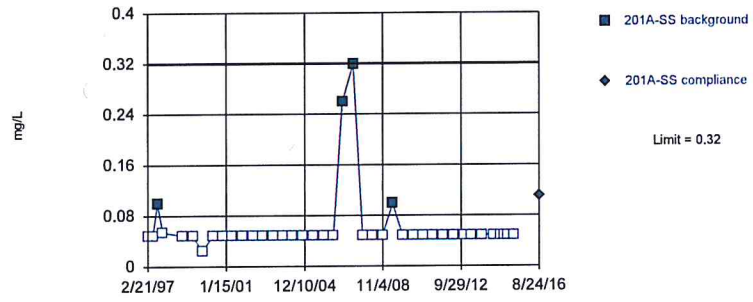
Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

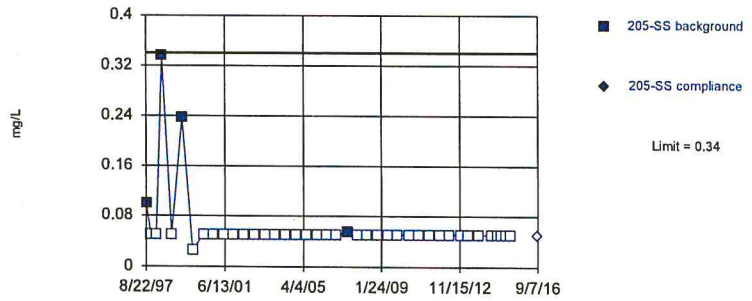
Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

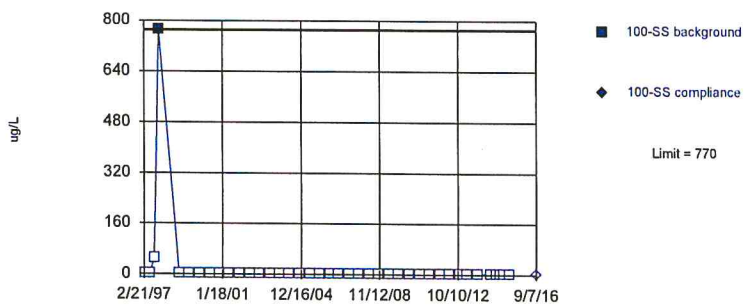
Constituent: Ammonia as N Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

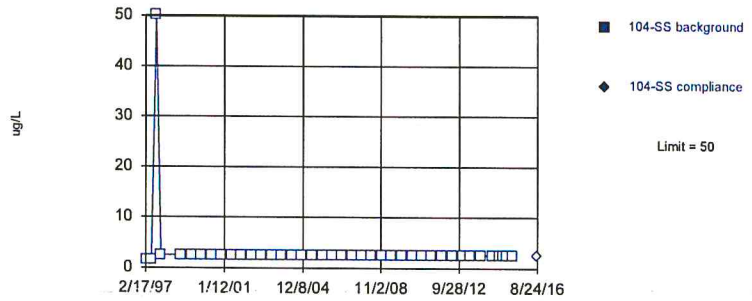
Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

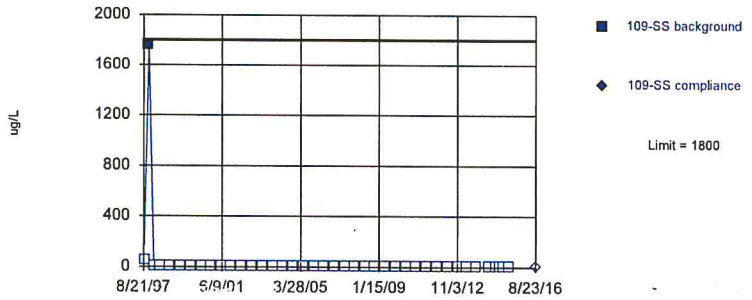
Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

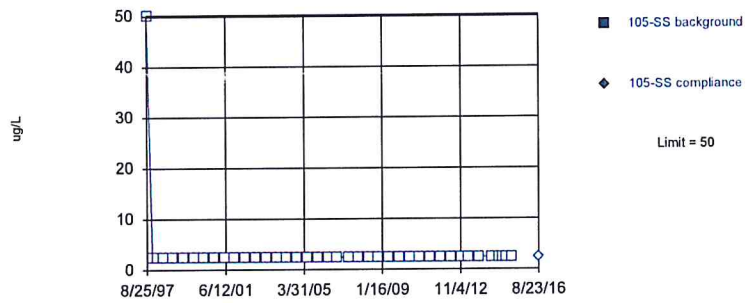
Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM

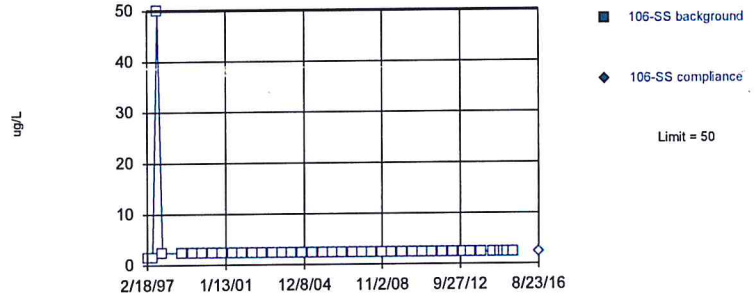
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM

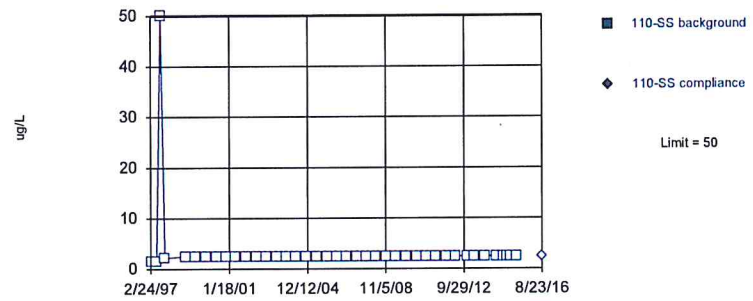
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM

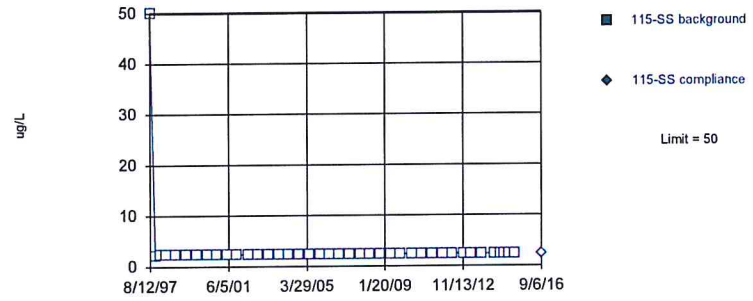
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM

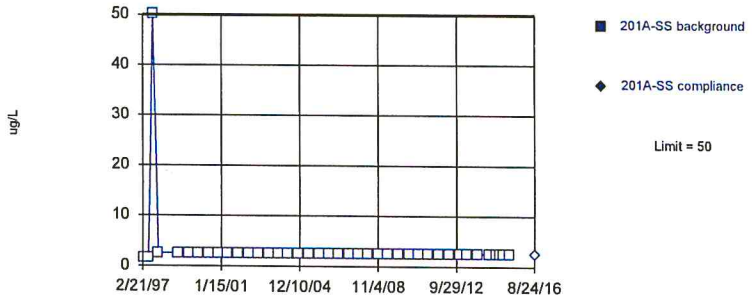
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

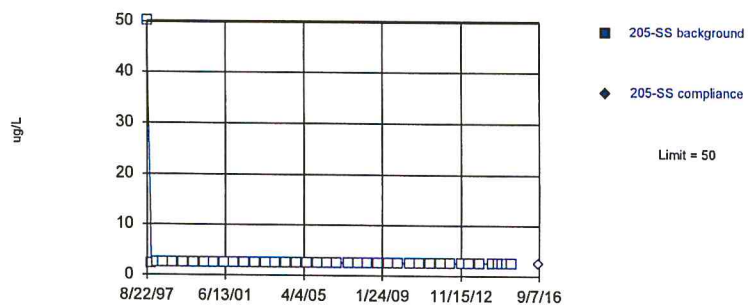
Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

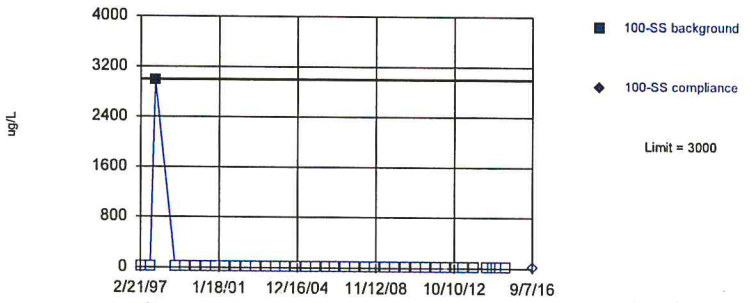
Constituent: Antimony Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

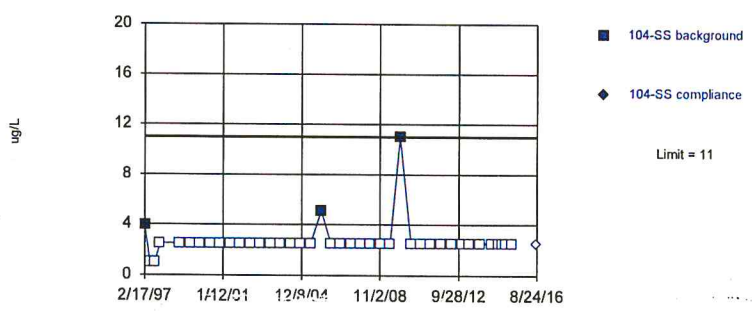
Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

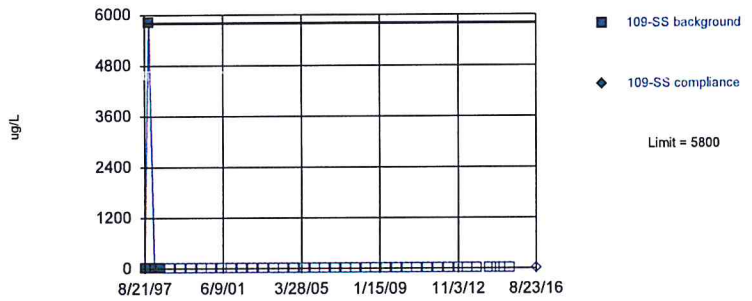
Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM

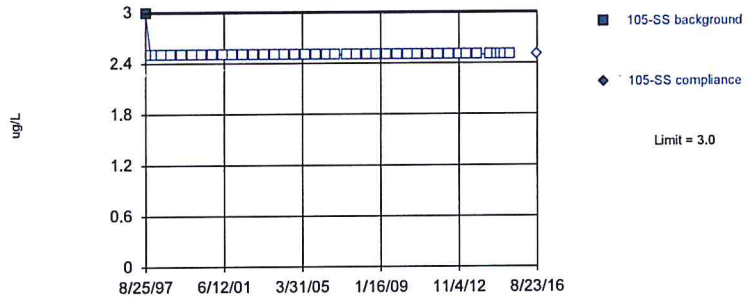
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM

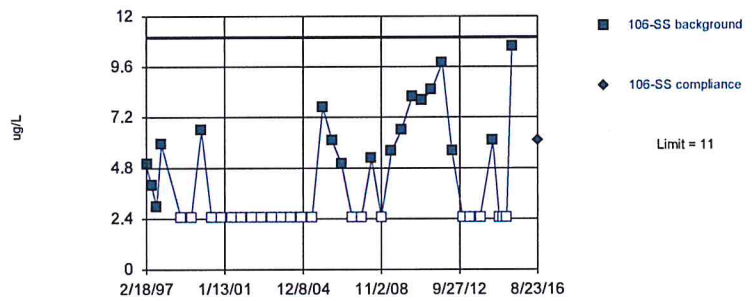
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 55% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM

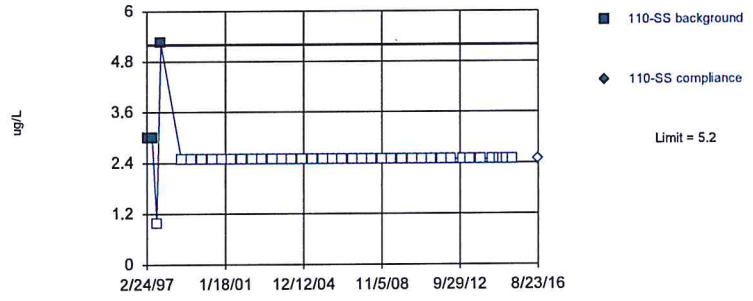
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM

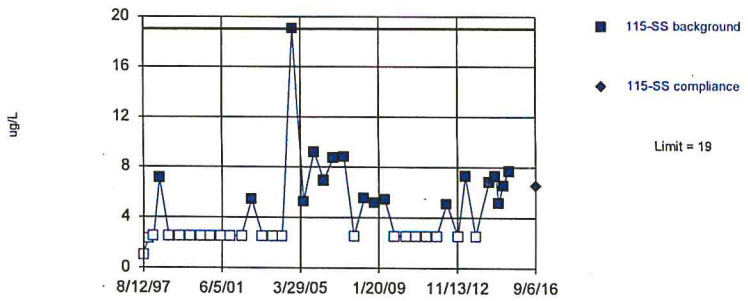
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 55% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

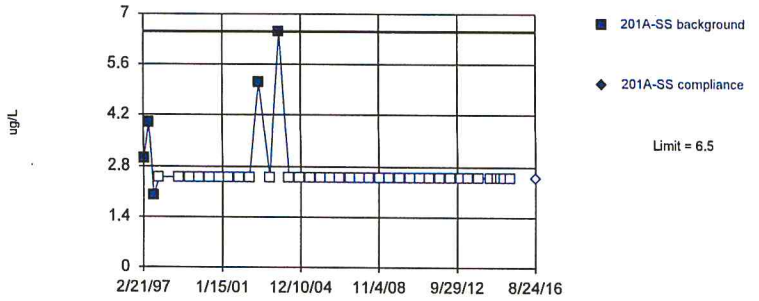
Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

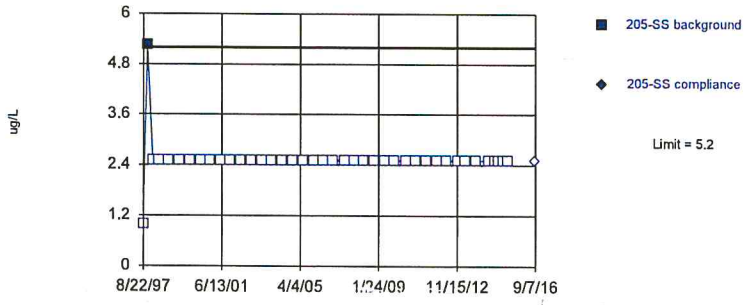
Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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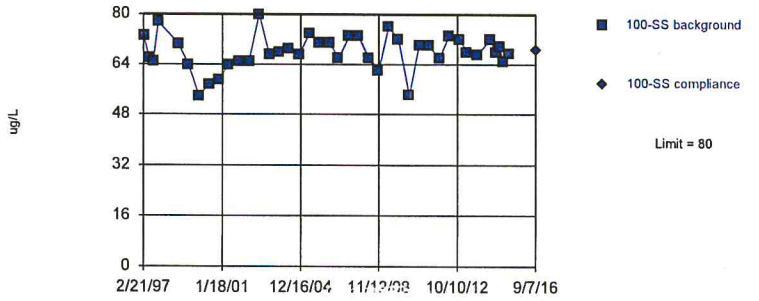
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=319653, Std. Dev.=75641, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9781, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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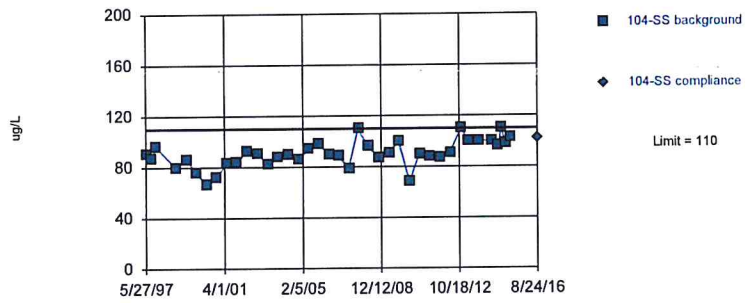
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=8286, Std. Dev.=1849, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 214 (2/17/1997).

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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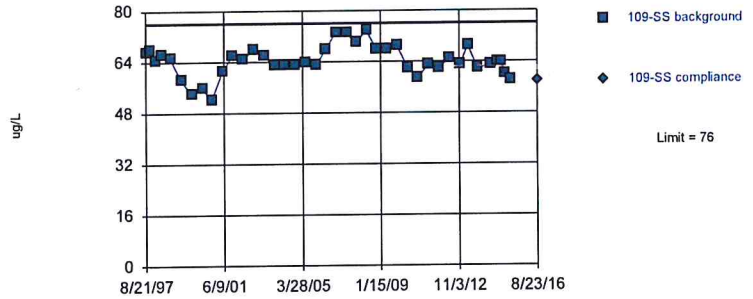
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=4156, Std. Dev.=605.3, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9757, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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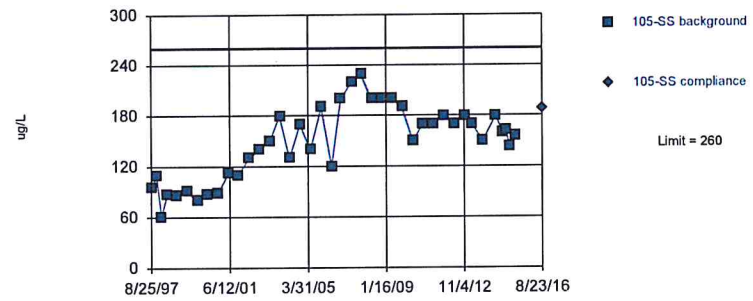
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=148.5, Std. Dev.=42.94, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9578, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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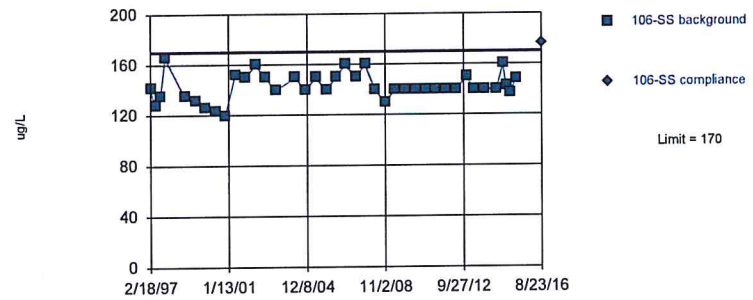
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=5.223, Std. Dev.=0.1277, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9465, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 78 (11/20/2003).

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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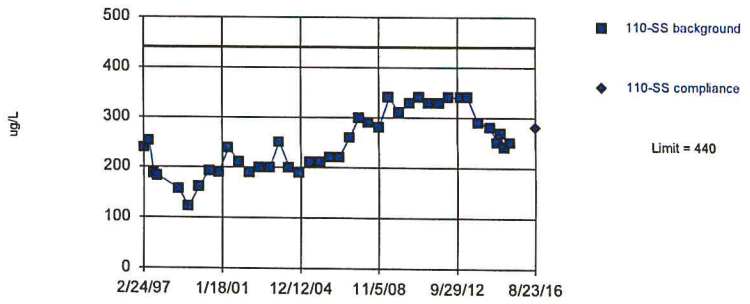
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=6.244, Std. Dev.=0.5182, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9456, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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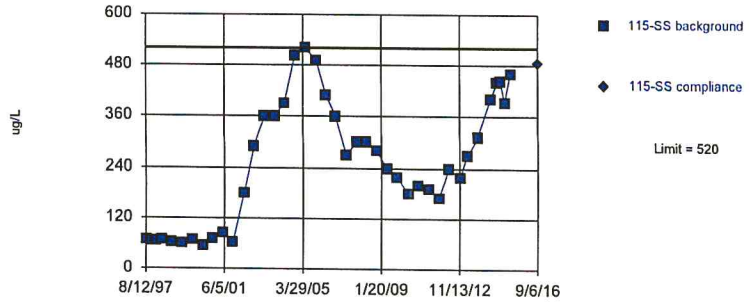
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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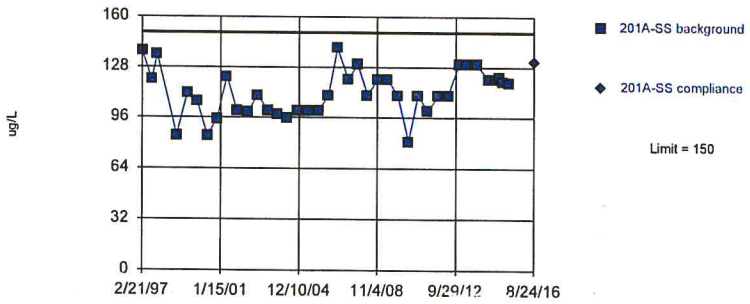
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=111.8, Std. Dev.=14.77, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9618, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 206 (5/27/1997).

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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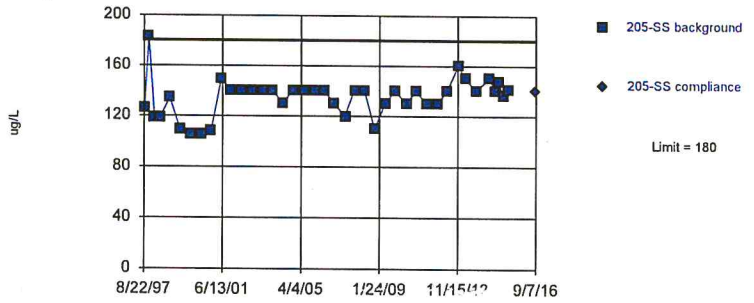
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Barium Total Analysis Run 10/10/2016 12:01 PM

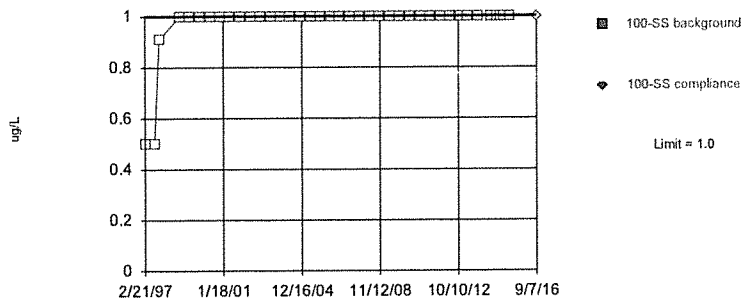
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

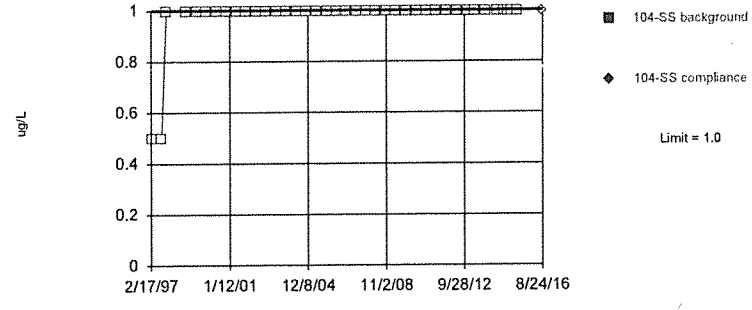
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

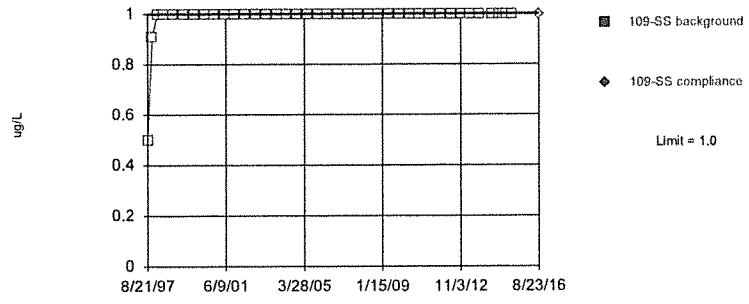
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

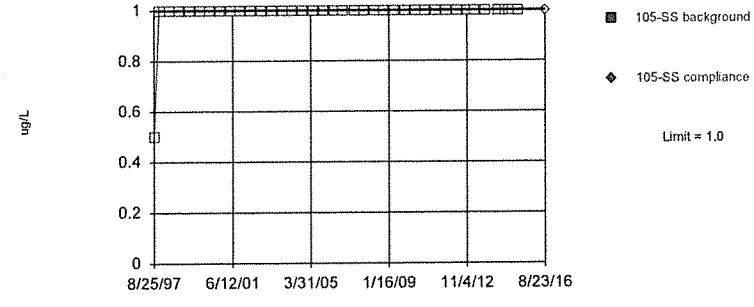
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

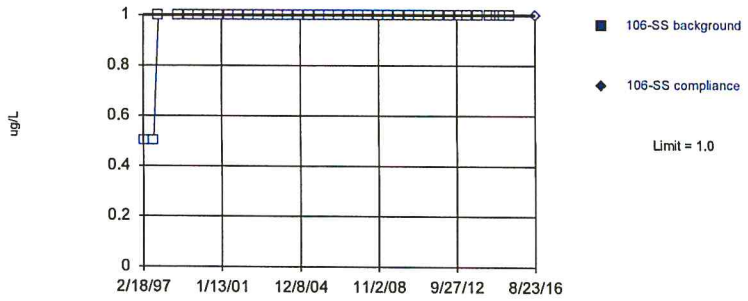
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

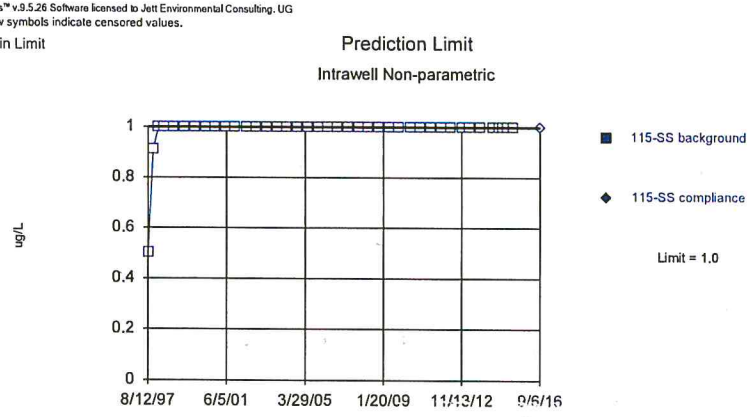
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

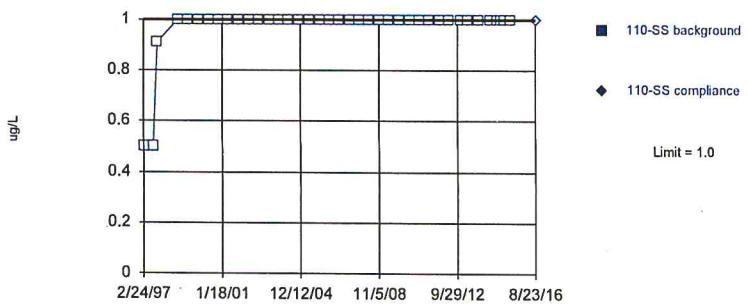
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

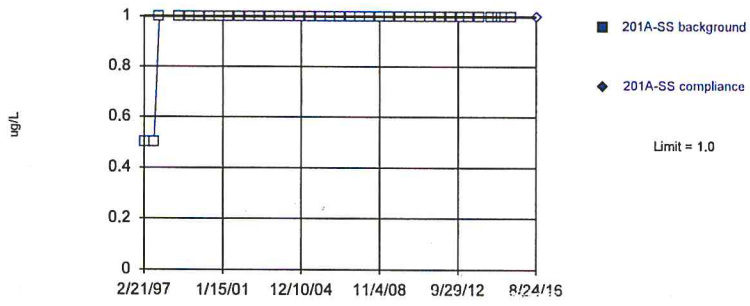
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

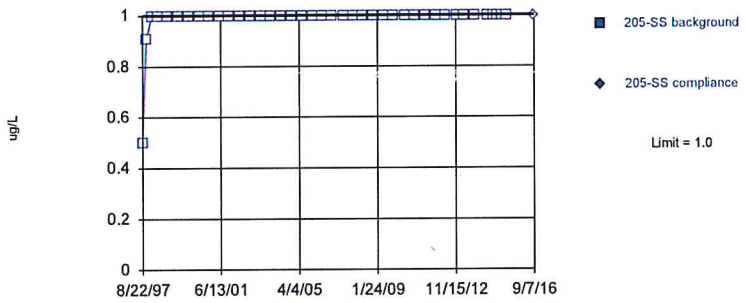
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

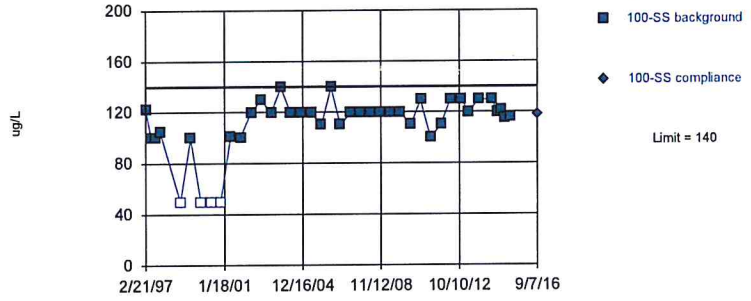
Constituent: Beryllium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=1.8e8, Std. Dev.=9.2e7, n=40, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9305, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. After outlier removal distribution was non-normal, so outlier results were invalidated.

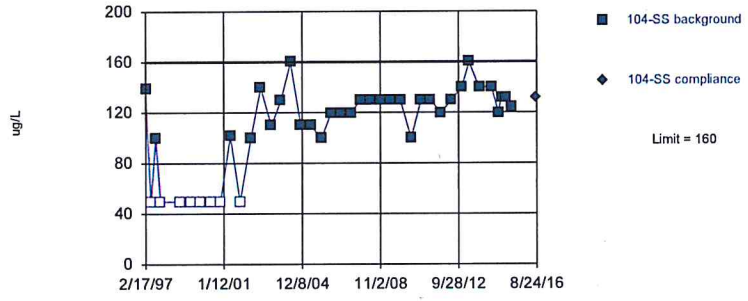
Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 20% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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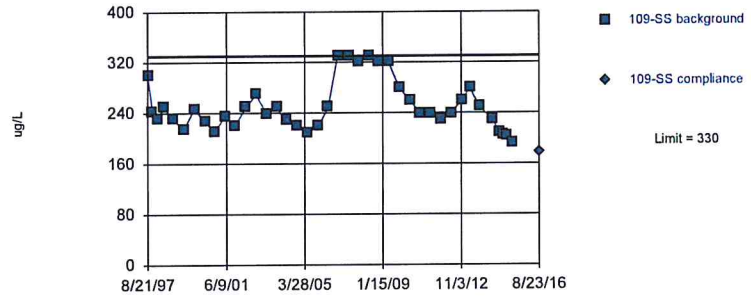
Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

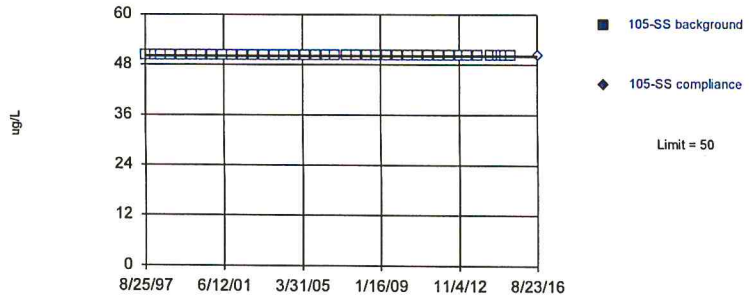
Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

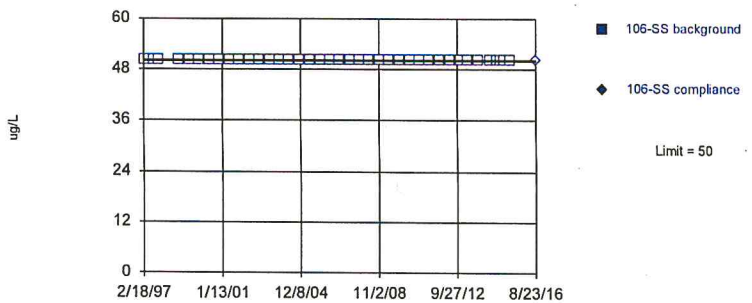
Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.529, Std. Dev.=0.09624, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9502, critical = 0.916. Kappa = 2.635 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: <100 (8/22/1997); 400 (11/20/2003).

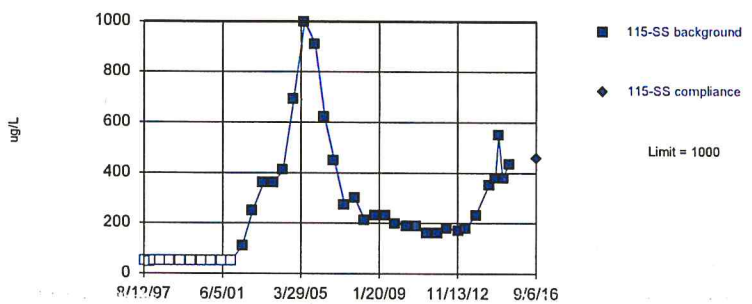
Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 27.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

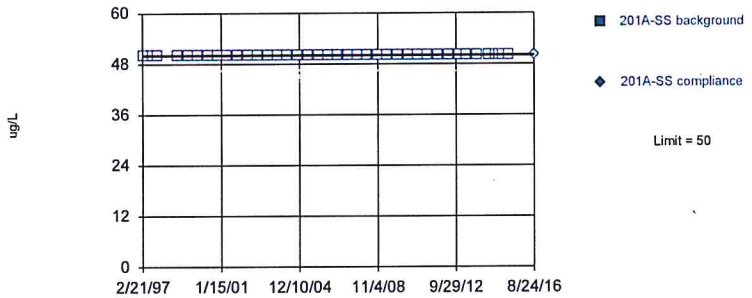
Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

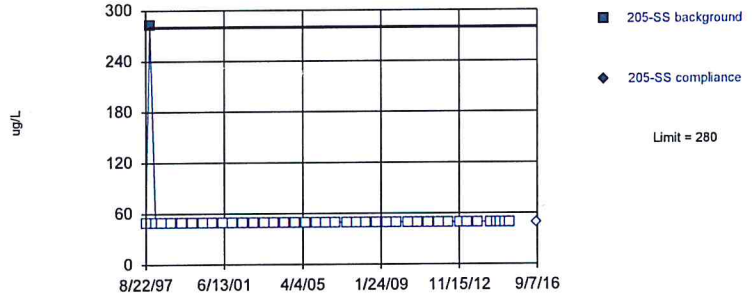
Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

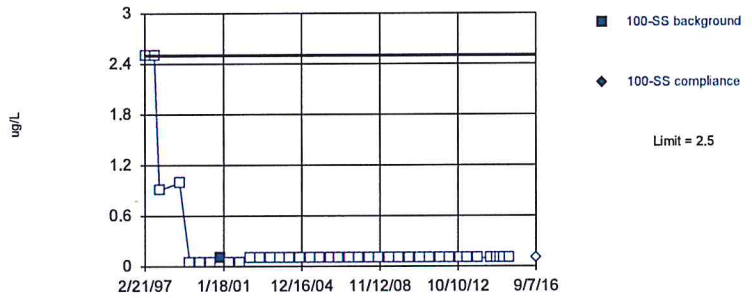
Constituent: Boron Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

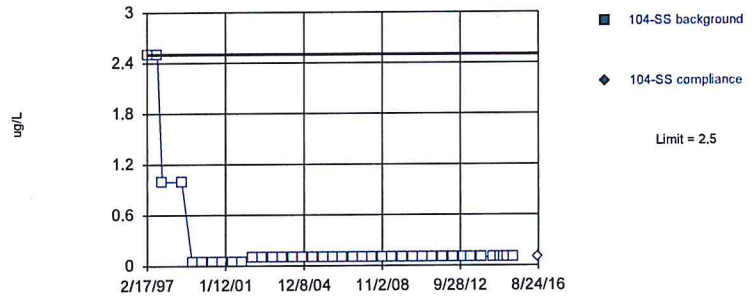
Constituent: Cadmium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

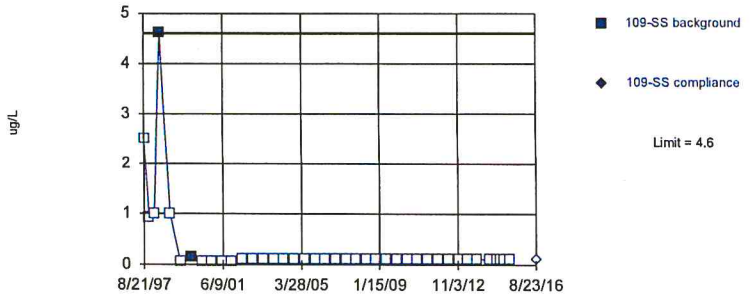
Constituent: Cadmium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

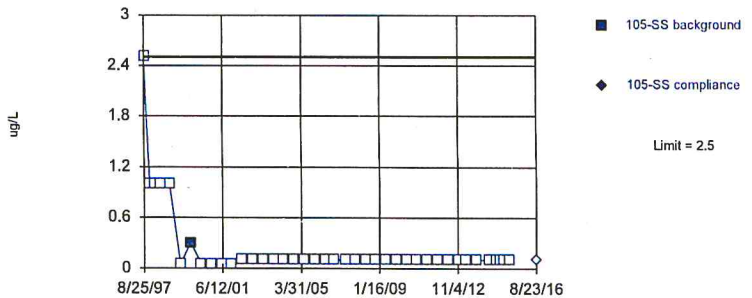
Constituent: Cadmium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

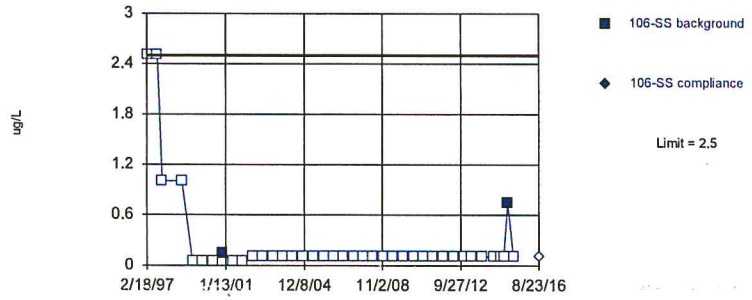
Constituent: Cadmium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

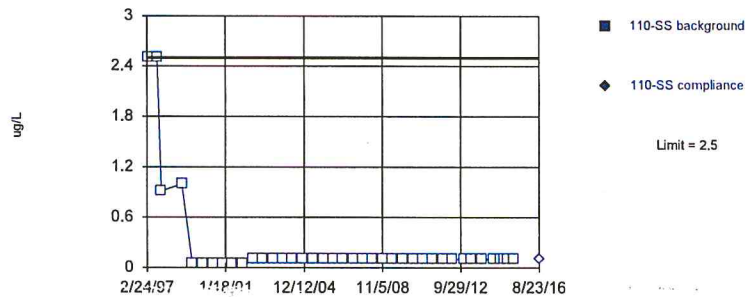
Constituent: Cadmium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

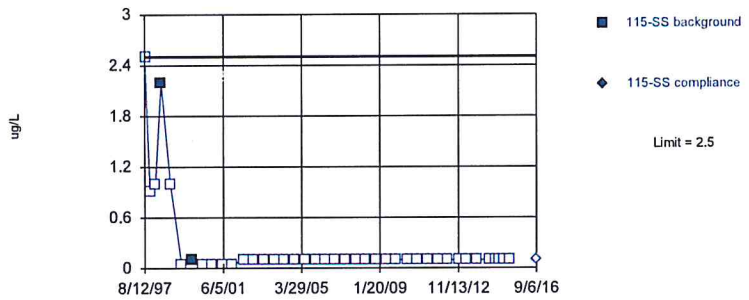
Constituent: Cadmium Total Analysis Run 10/10/2016 12:01 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

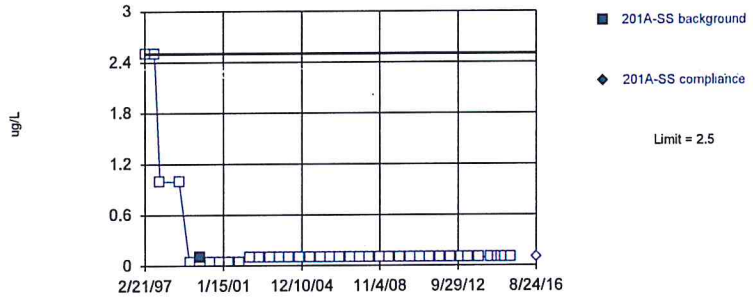
Constituent: Cadmium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

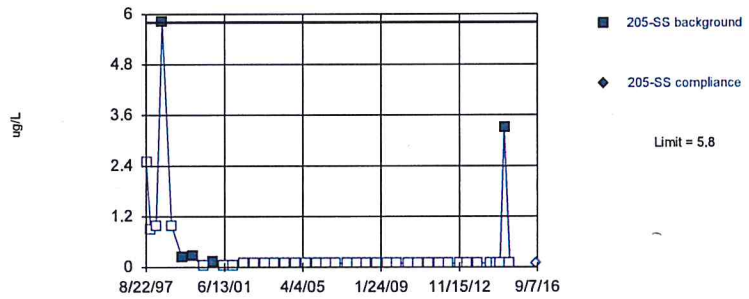
Constituent: Cadmium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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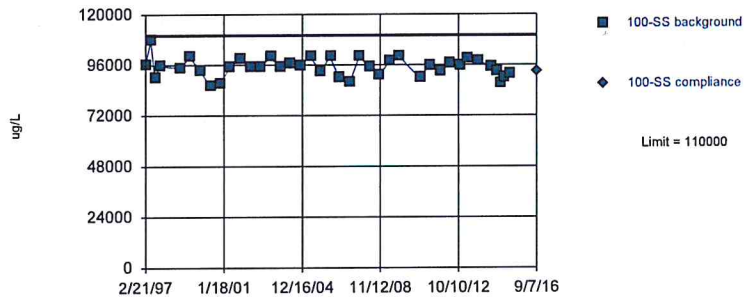
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.46, Std. Dev.=0.04697, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9614, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 76000 (5/19/2010).

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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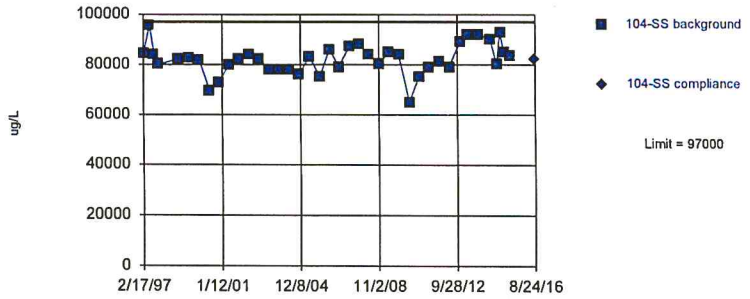
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=6.8e9, Std. Dev.=1.0e9, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9816, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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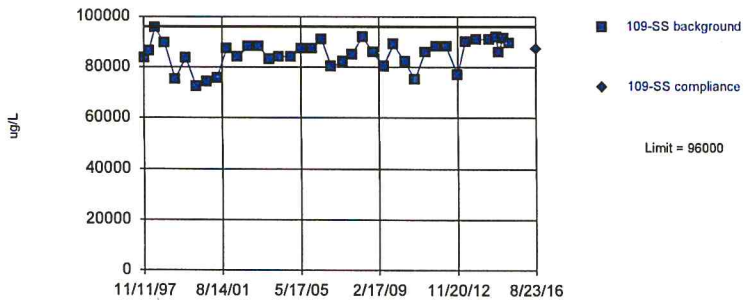
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^6 transformation): Mean=4.0e29, Std. Dev.=1.4e29, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9743, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 174000 (8/21/1997).

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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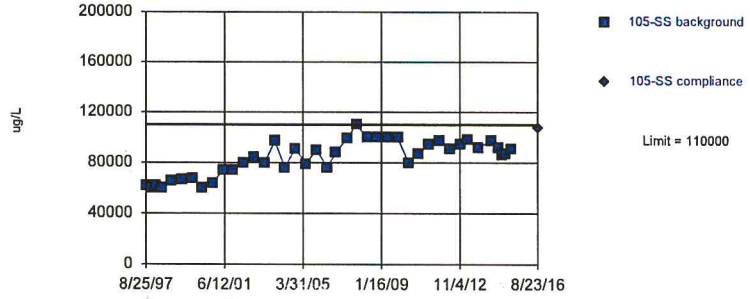
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=6.3e14, Std. Dev.=2.9e14, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9433, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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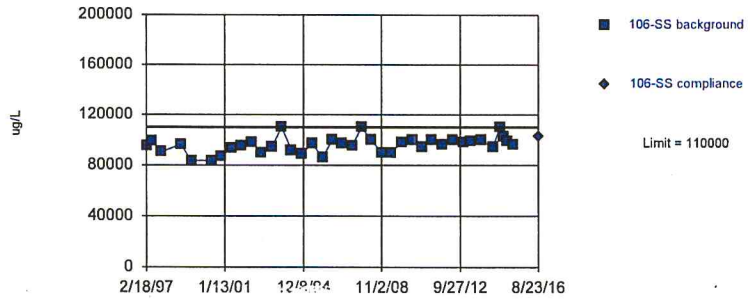
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.47, Std. Dev.=0.06606, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9503, critical = 0.916. Kappa = 2.635 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 60000 (8/25/1997); 9000 (11/19/1999).

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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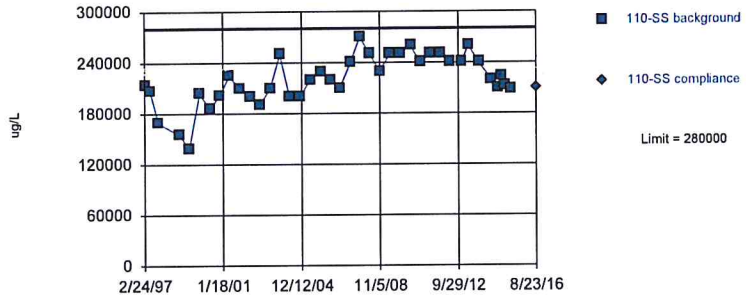
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.1e16, Std. Dev.=4.0e15, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9718, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 91000 (8/22/1997).

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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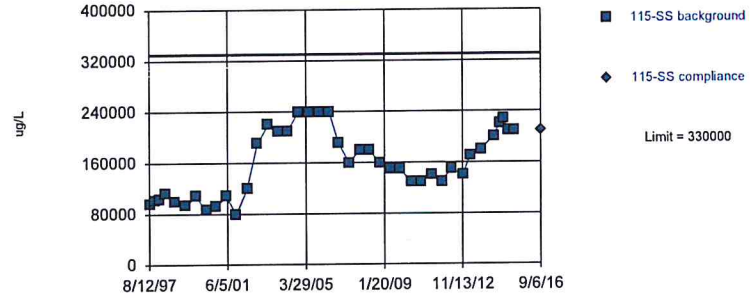
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=53.67, Std. Dev.=5.883, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9292, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

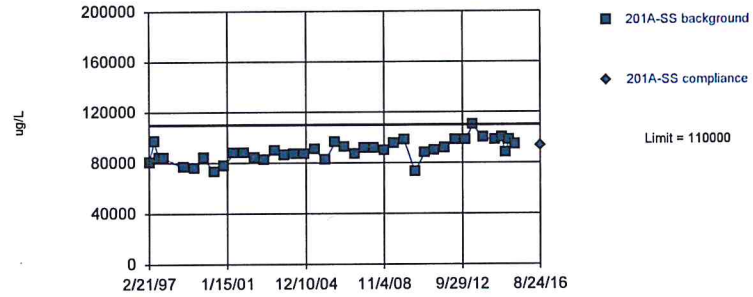
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=89200, Std. Dev.=8121, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9778, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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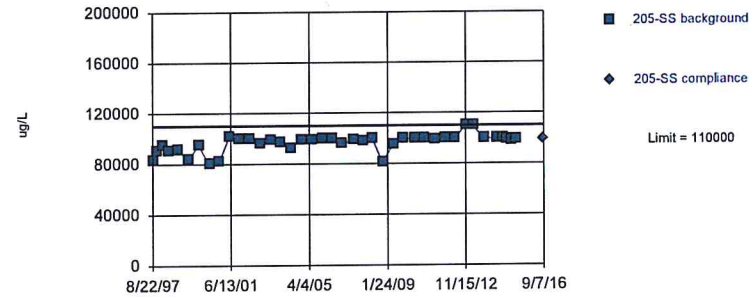
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Calcium Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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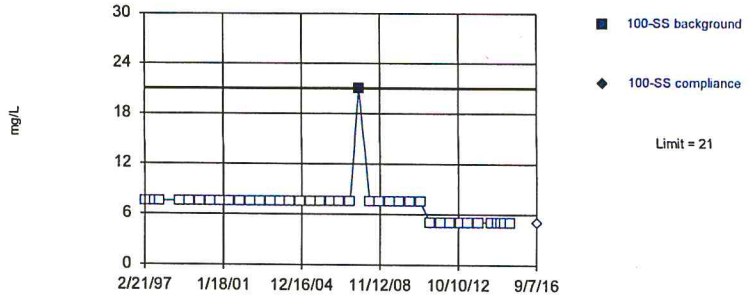
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

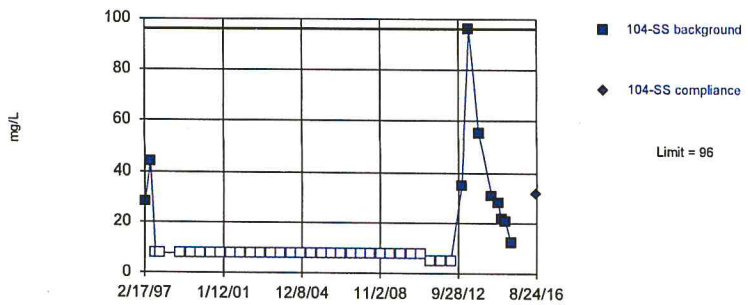
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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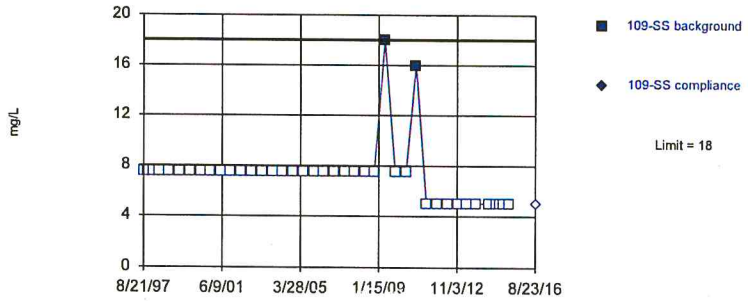
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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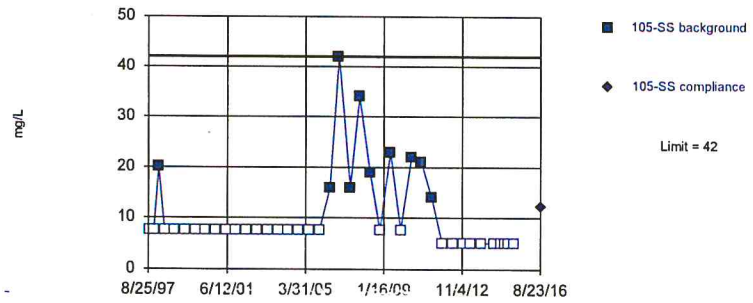
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

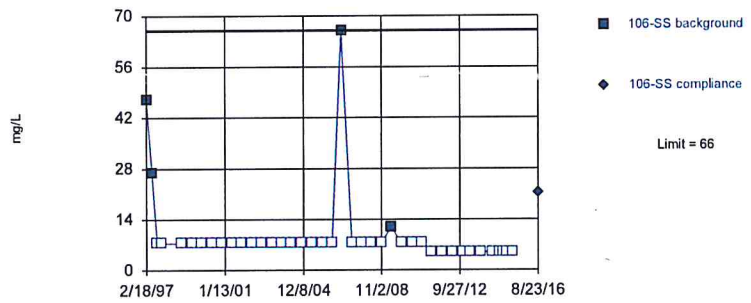
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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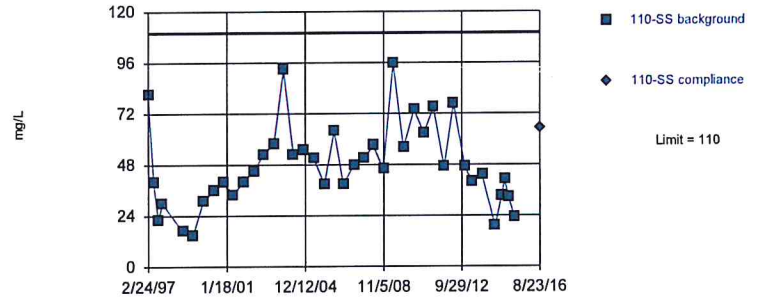
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=6.76, Std. Dev.=1.404, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9773, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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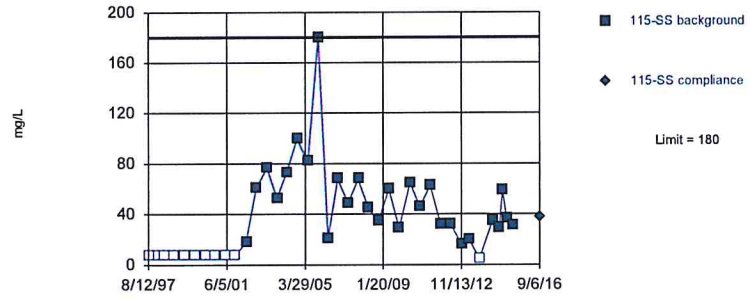
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 30% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

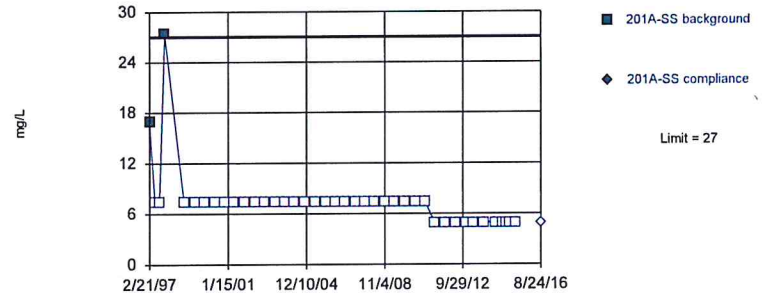
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

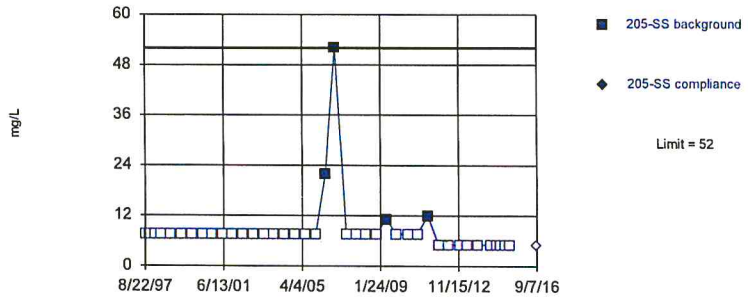
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 12:02 PM

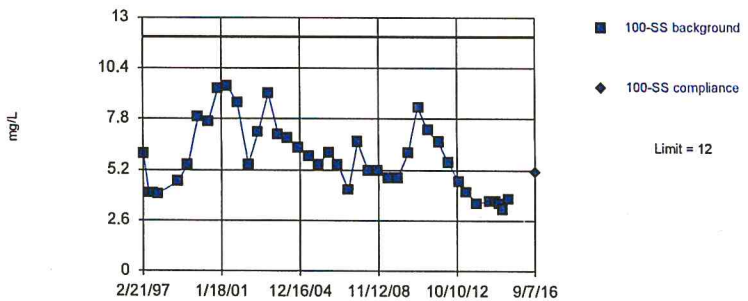
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.706, Std. Dev.=0.3034, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9578, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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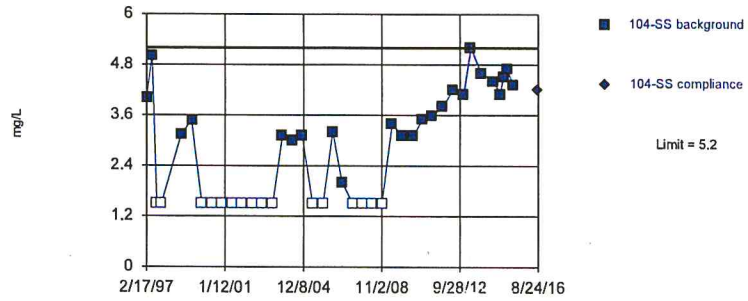
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 40% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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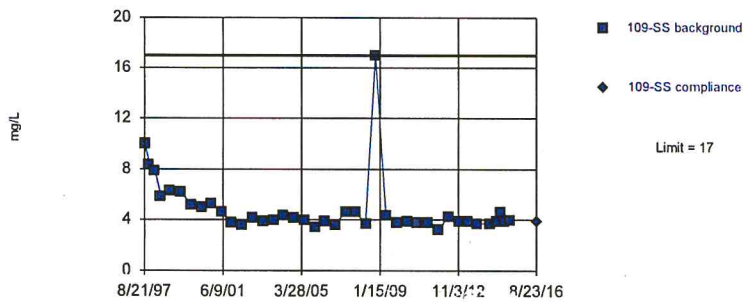
Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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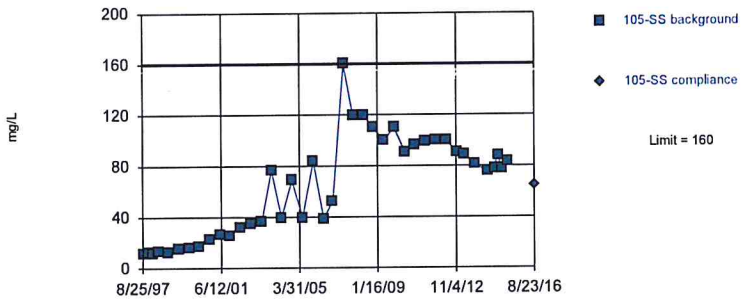
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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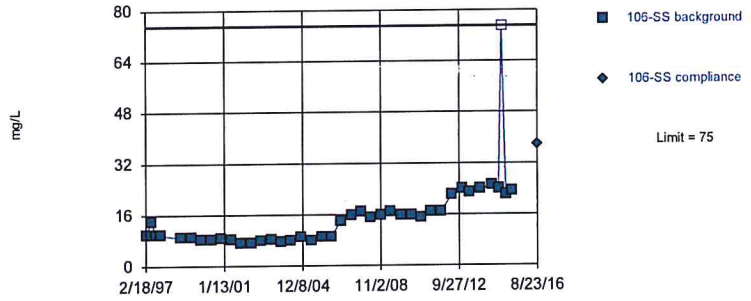
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 2.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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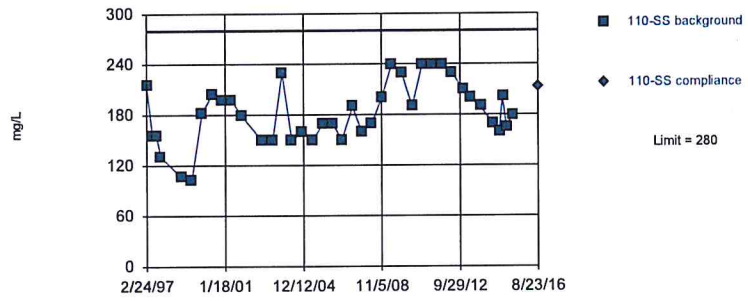
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=182.4, Std. Dev.=35.44, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9539, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: <3 (5/21/2002).

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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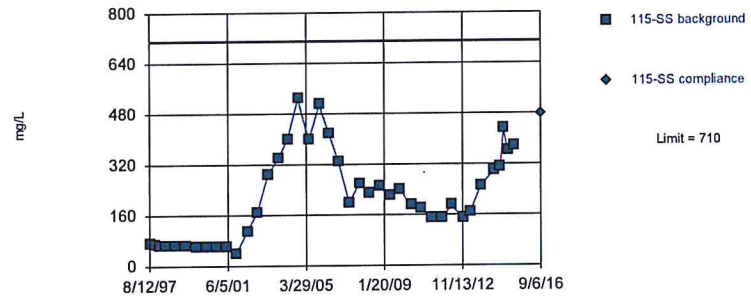
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=14.05, Std. Dev.=4.798, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9314, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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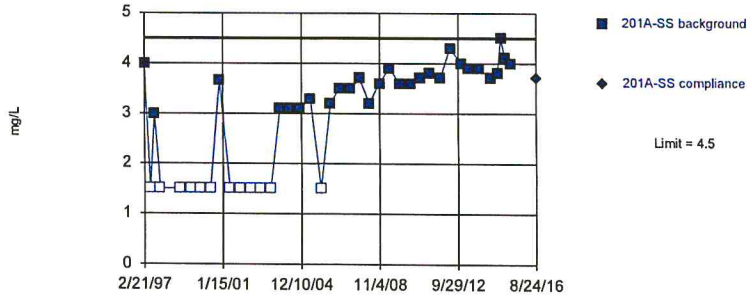
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 30% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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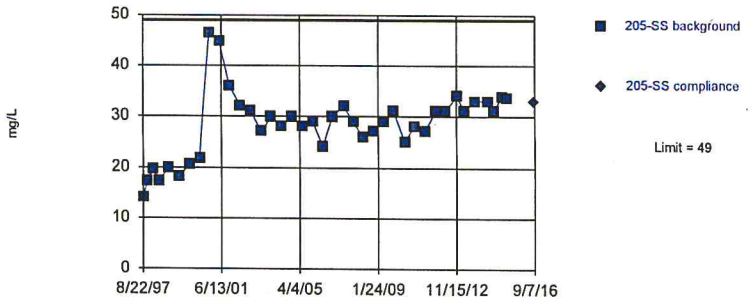
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=5.298, Std. Dev.=0.6393, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9436, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: <150 (11/20/2014).

Constituent: Chloride Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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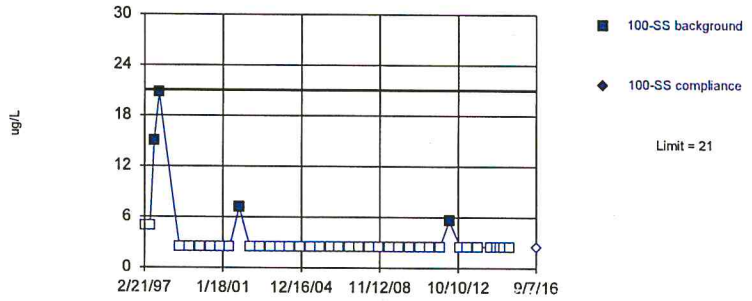
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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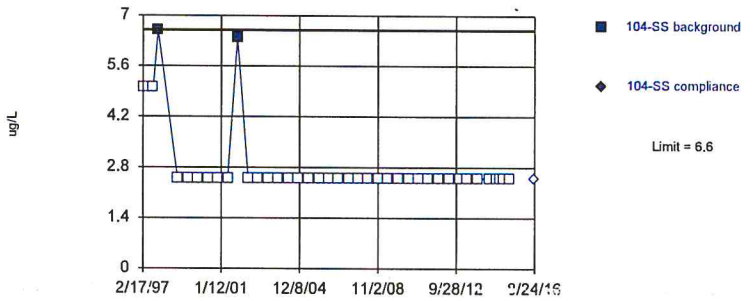
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

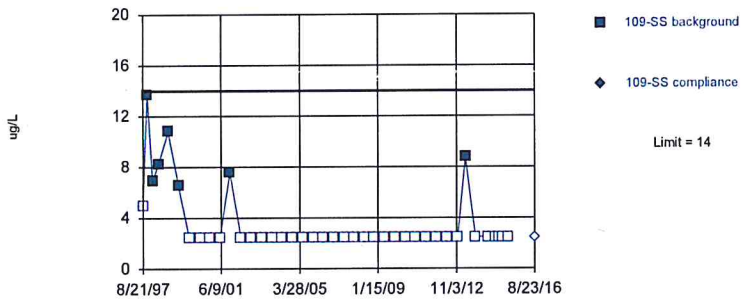
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

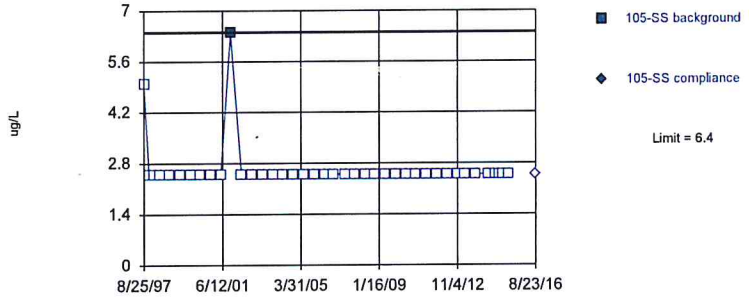
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

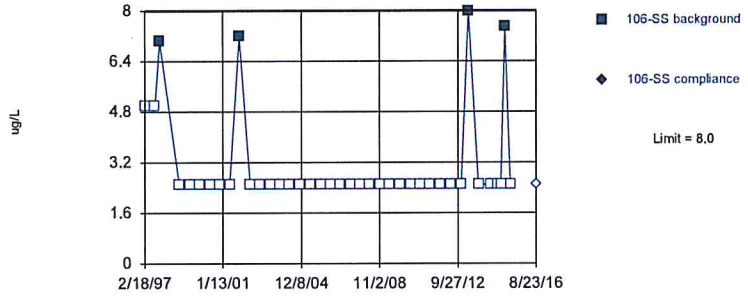
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

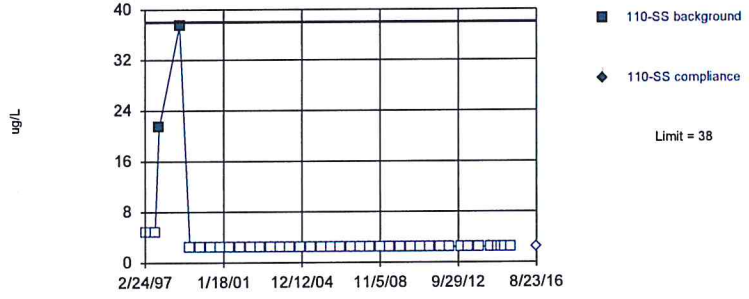
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

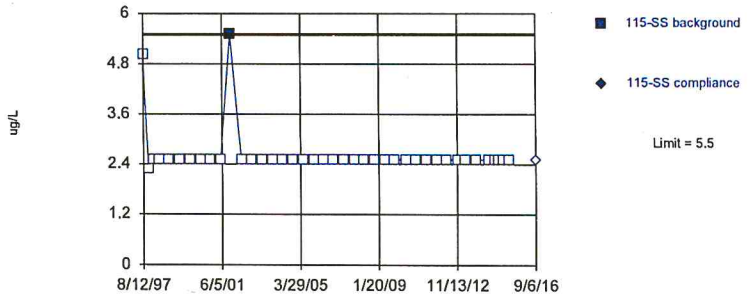
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

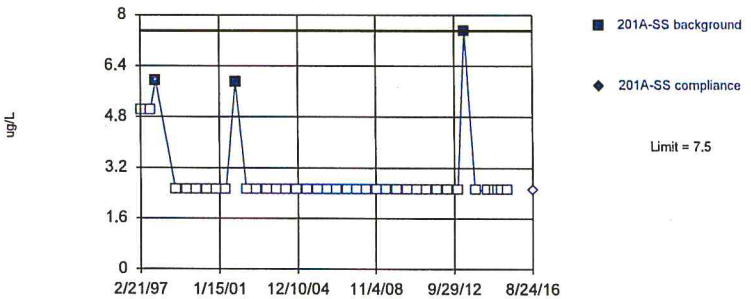
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

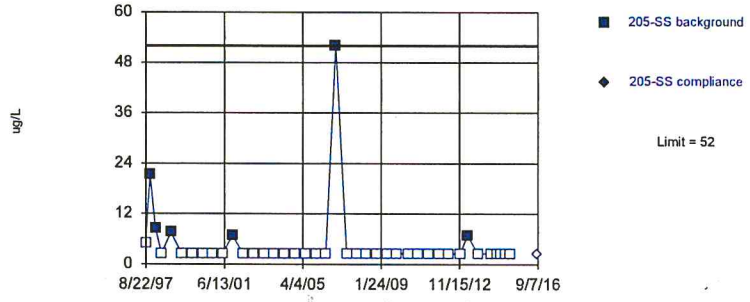
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

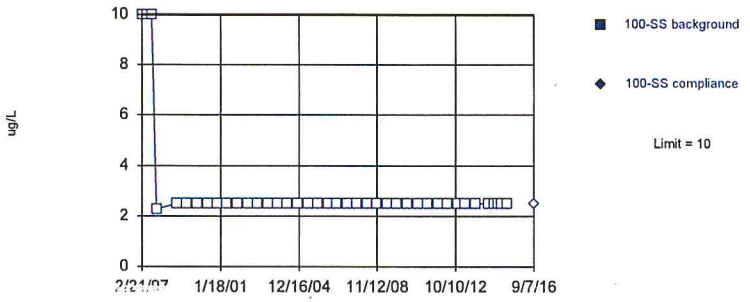
Constituent: Chromium Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

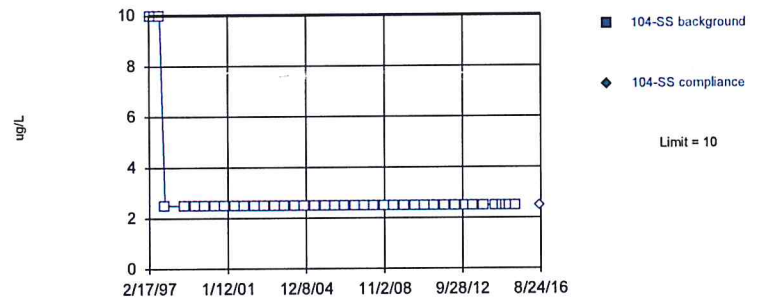
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

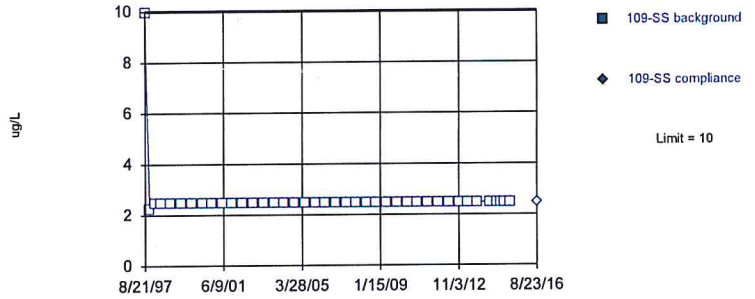
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

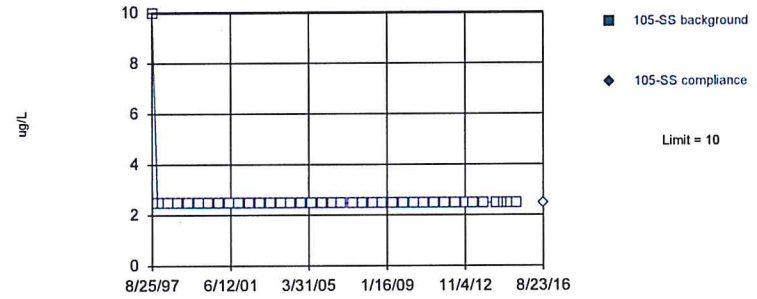
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

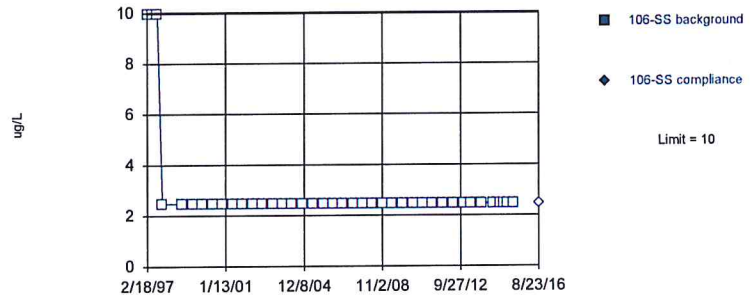
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

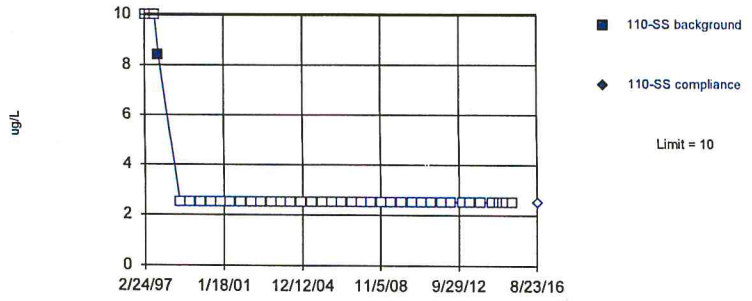
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

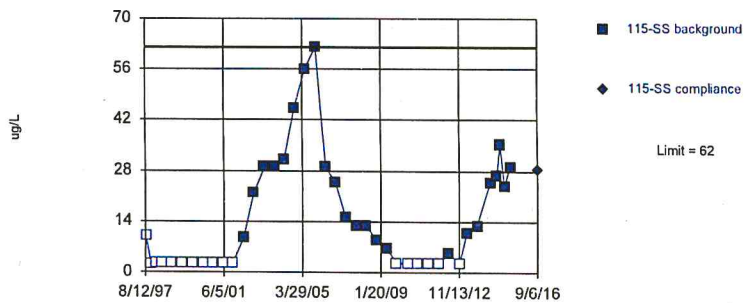
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 42.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

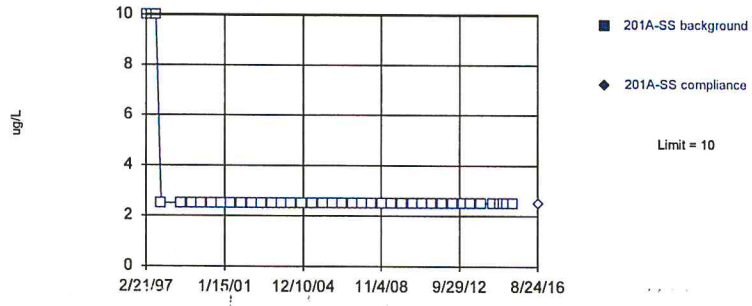
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

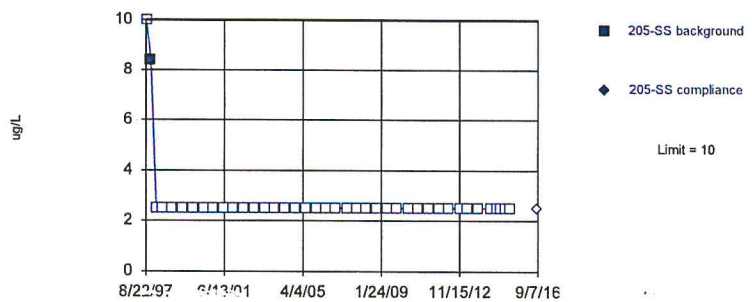
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

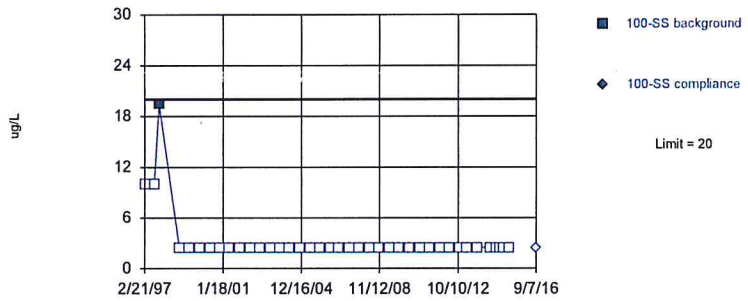
Constituent: Cobalt Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

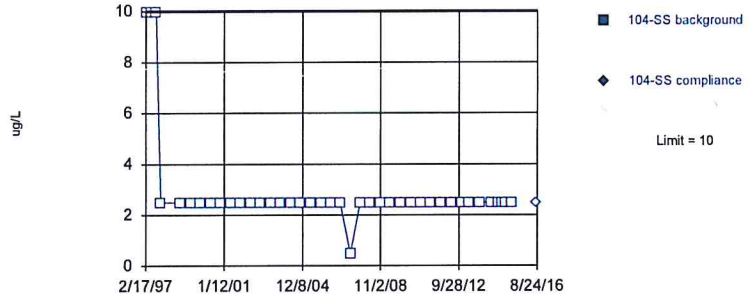
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

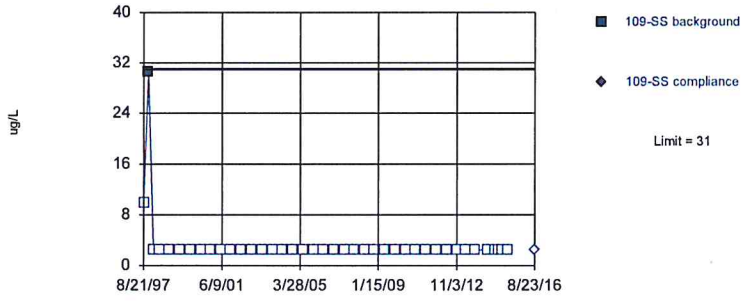
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

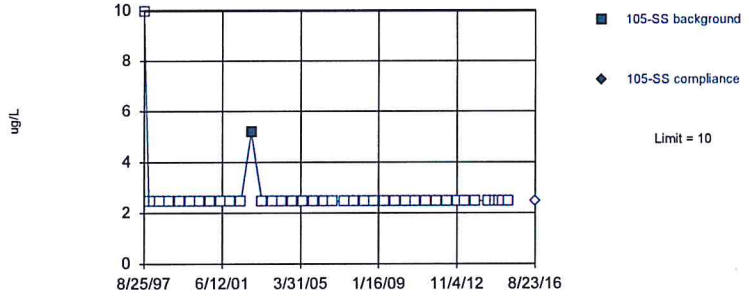
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

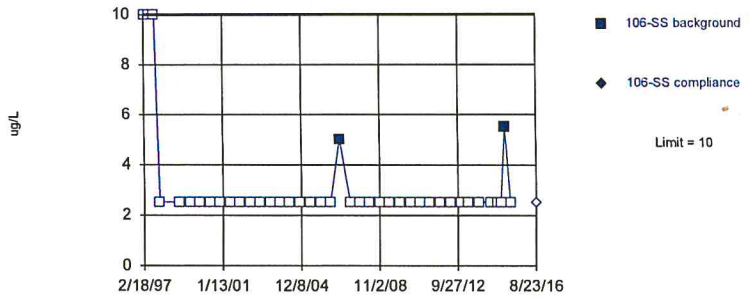
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

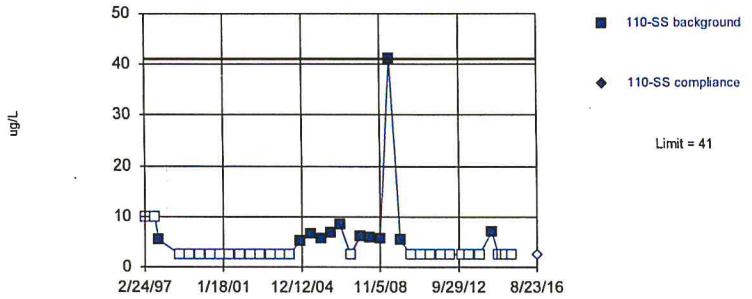
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 70% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

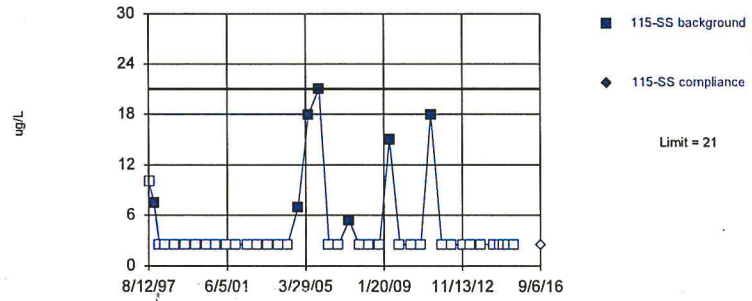
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

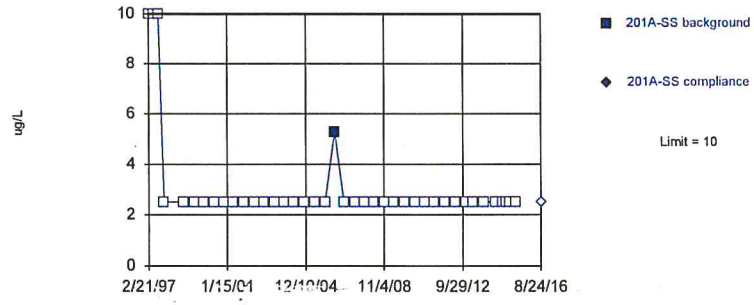
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

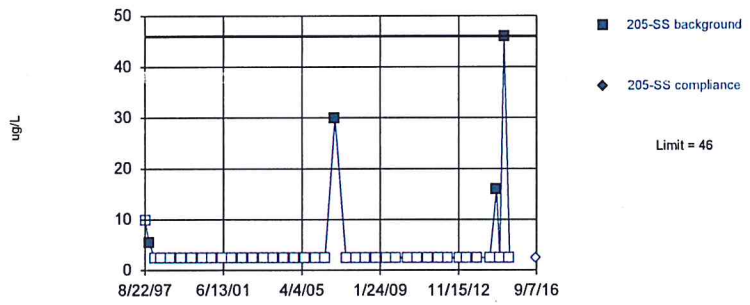
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

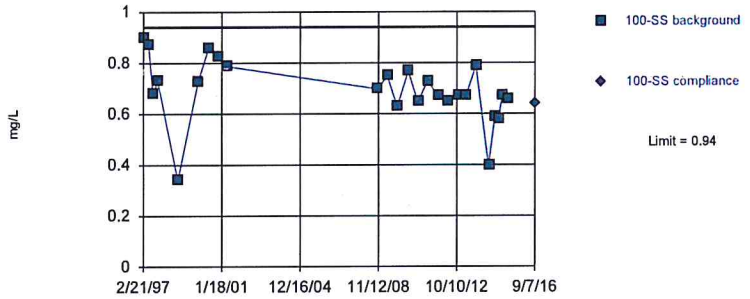
Constituent: Copper Total Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=0.3625, Std. Dev.=0.1685, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9619, critical = 0.888. Kappa = 2.812 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: <0.25 (5/18/1999).

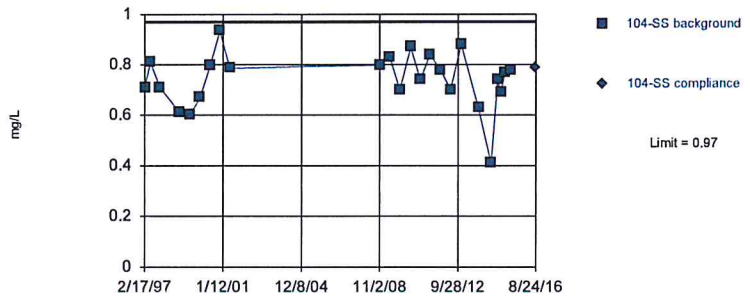
Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=0.4327, Std. Dev.=0.1674, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9904, critical = 0.884. Kappa = 2.841 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: <0.25 (8/28/1997); 0.3 (4/11/2013).

Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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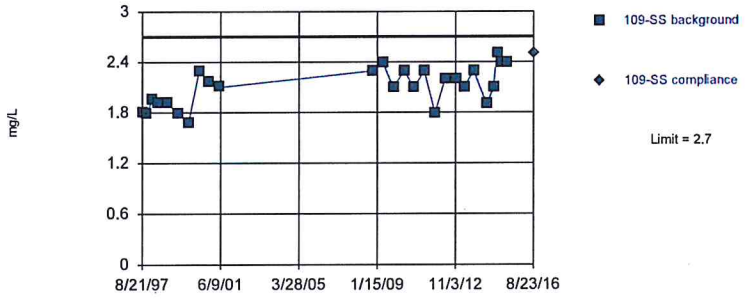
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=4.504, Std. Dev.=0.9566, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9495, critical = 0.891. Kappa = 2.795 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

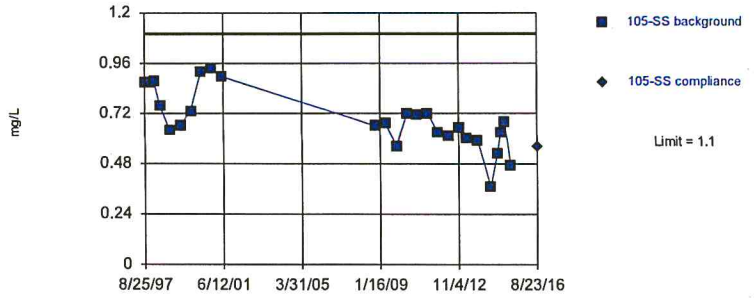
Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=0.6903, Std. Dev.=0.1403, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9562, critical = 0.891. Kappa = 2.795 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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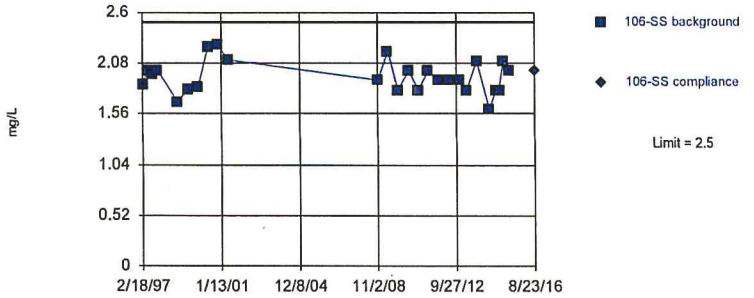
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=0.6576, Std. Dev.=0.08543, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9659, critical = 0.891. Kappa = 2.795 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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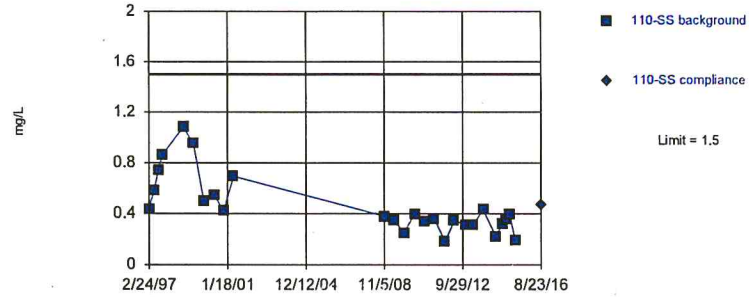
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=-0.8833, Std. Dev.=0.4611, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.891. Kappa = 2.795 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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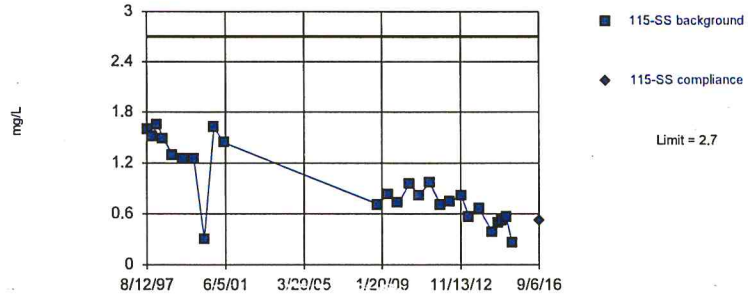
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=0.9509, Std. Dev.=0.1594, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9484, critical = 0.891. Kappa = 2.795 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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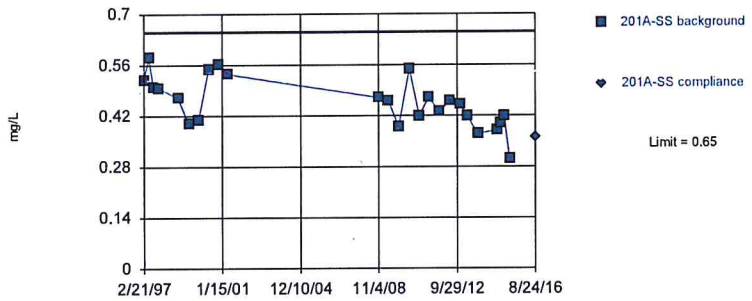
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=0.4567, Std. Dev.=0.06897, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9735, critical = 0.888. Kappa = 2.812 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 0.2 (5/28/2014).

Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=-0.909, Std. Dev.=0.1421, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9114, critical = 0.888. Kappa = 2.812 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 0.18 (5/28/2014).

Constituent: Fluoride Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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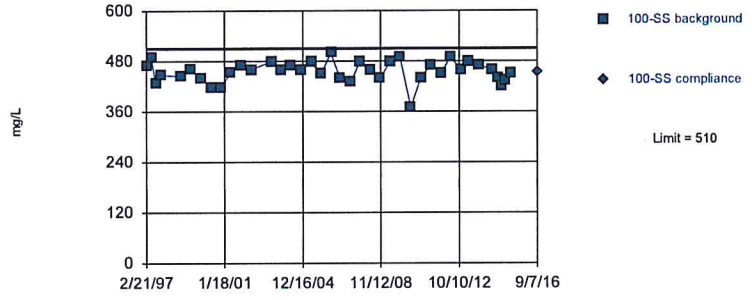
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^5 transformation): Mean=2.0e13, Std. Dev.=5.2e12, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9827, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 150 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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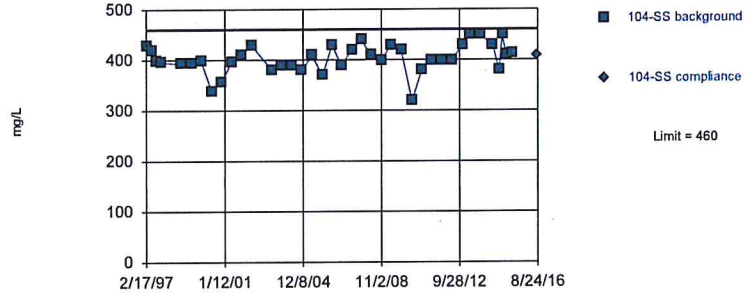
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=2.7e10, Std. Dev.=7.1e9, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9686, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 130 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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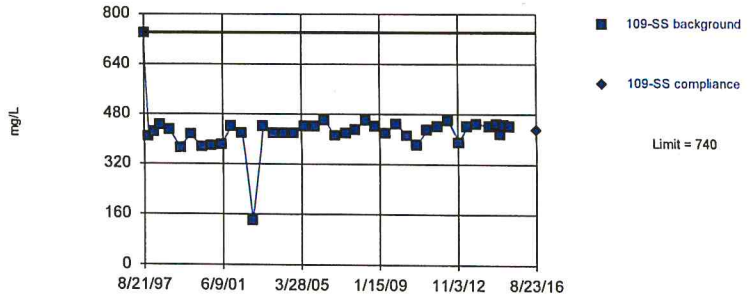
Within Limit

## Prediction Limit

### Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Hardness Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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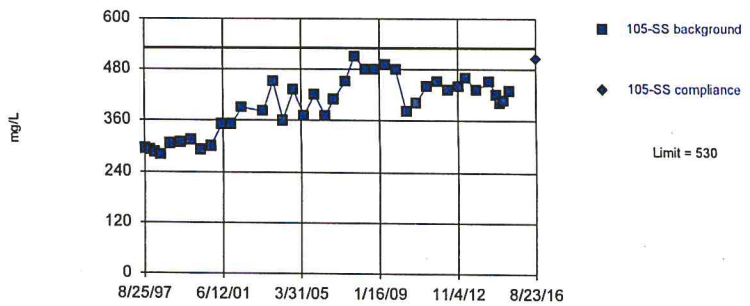
Within Limit

## Prediction Limit

### Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=6.6e7, Std. Dev.=3.0e7, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9477, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 130 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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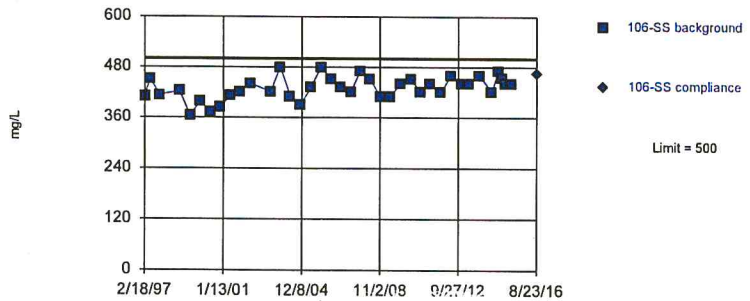
Within Limit

## Prediction Limit

### Intrawell Parametric




Background Data Summary (based on square transformation): Mean=185370, Std. Dev.=23529, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9721, critical = 0.916. Kappa = 2.635 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 265 (8/25/1997); 130 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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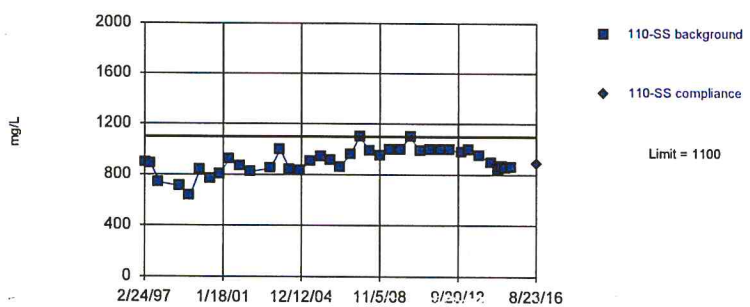
Within Limit

## Prediction Limit

### Intrawell Parametric




Background Data Summary (based on square transformation): Mean=828828, Std. Dev.=178557, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9687, critical = 0.916. Kappa = 2.635 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 437 (8/22/1997); 270 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 12:02 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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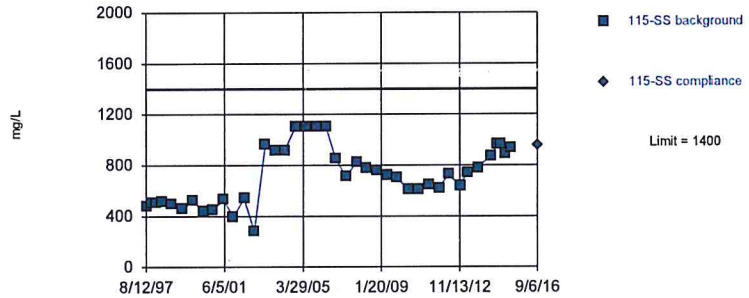
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=26.46, Std. Dev.=4.163, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9609, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Hardness Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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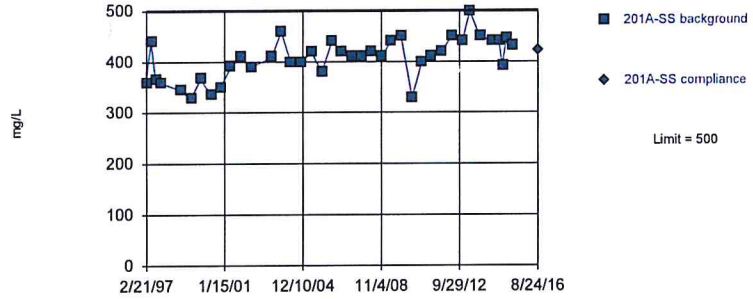
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=166992, Std. Dev.=31934, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 120 (11/19/2002).

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Bridgeton LF Client: RSI Data: Bridgeton LF

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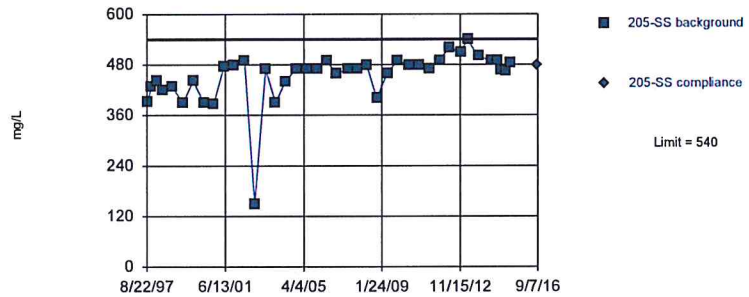
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^5 transformation): Mean=2.2e13, Std. Dev.=9.0e12, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9654, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Hardness Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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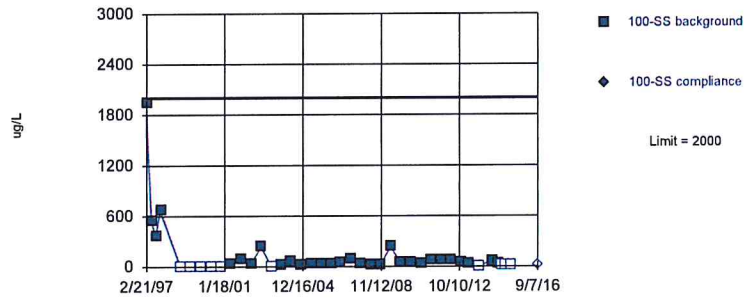
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 25% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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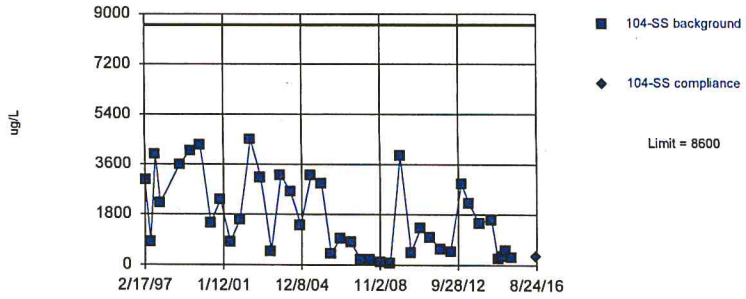
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=10.96, Std. Dev.=3.646, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9386, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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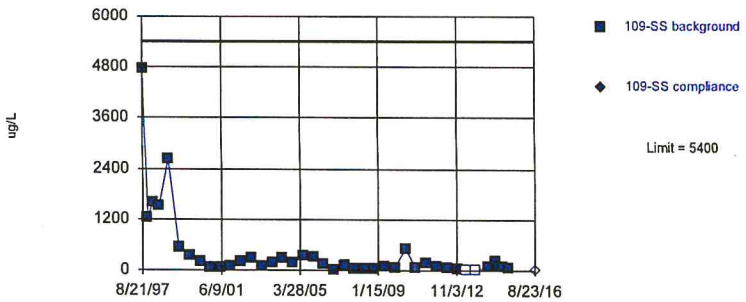
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.028, Std. Dev.=1.361, n=40, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9648, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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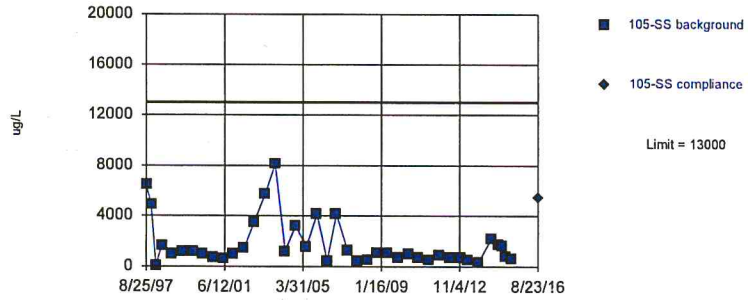
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=7.052, Std. Dev.=0.9184, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9596, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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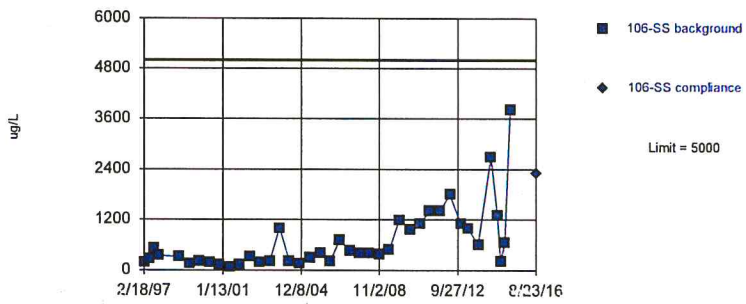
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.103, Std. Dev.=0.921, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9678, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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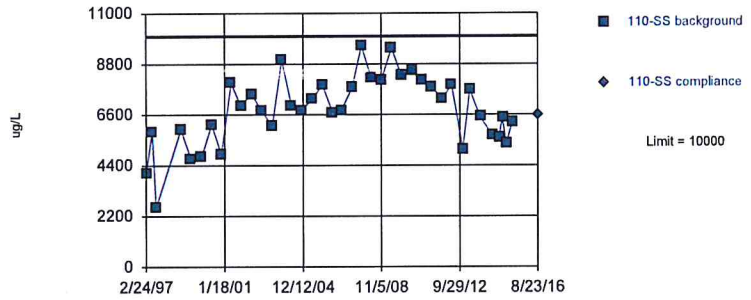
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=4.9e7, Std. Dev.=2.0e7, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9841, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: <18.2 (11/8/1997).

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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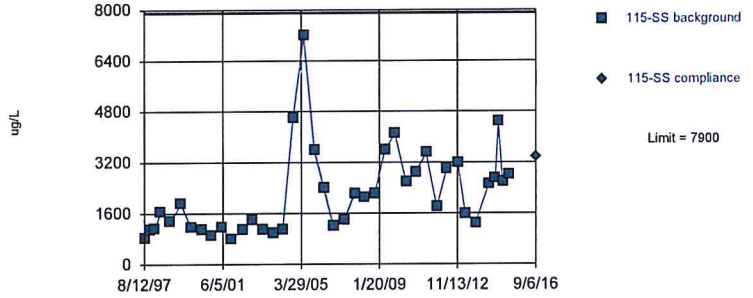
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=7.55, Std. Dev.=0.5467, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9494, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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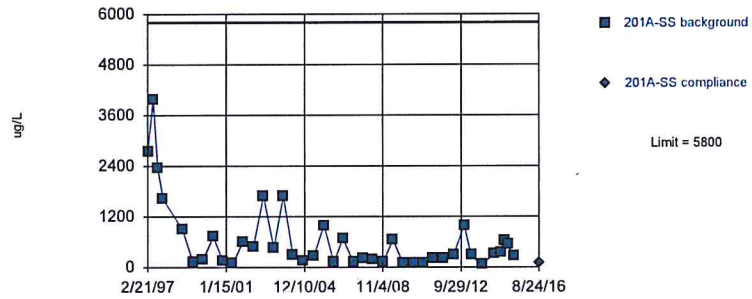
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.9, Std. Dev.=1.058, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9514, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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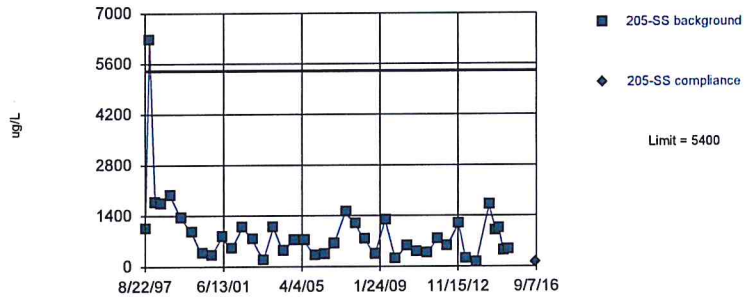
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.53, Std. Dev.=0.7894, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9844, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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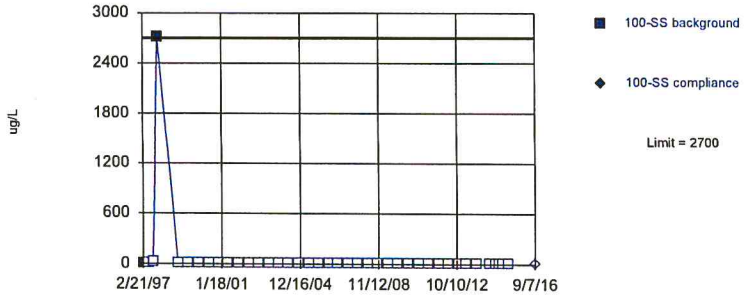
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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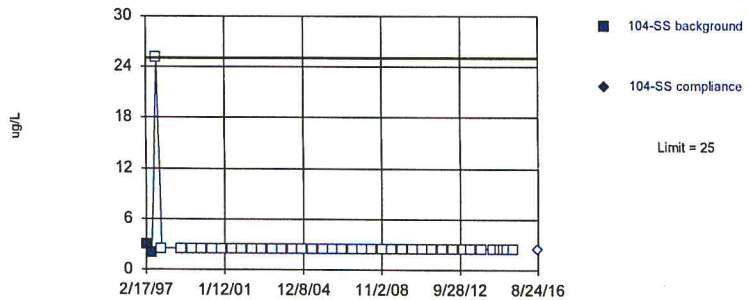
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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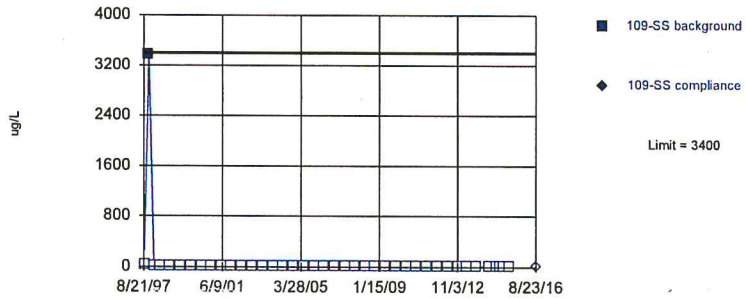
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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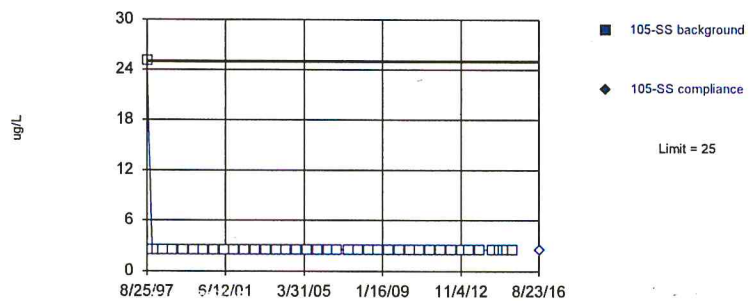
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

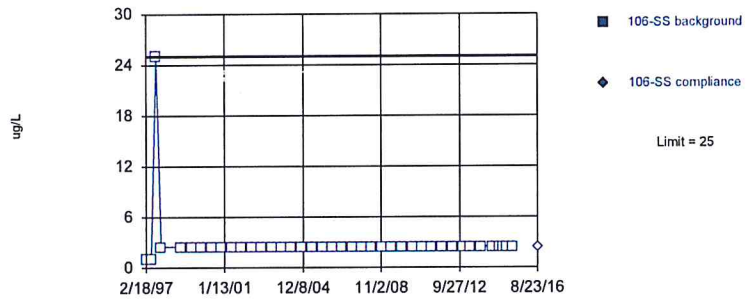
Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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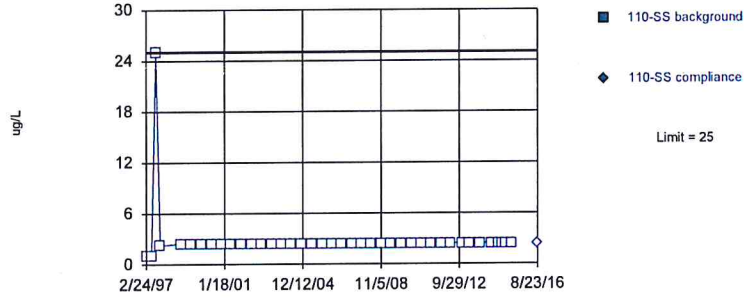
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

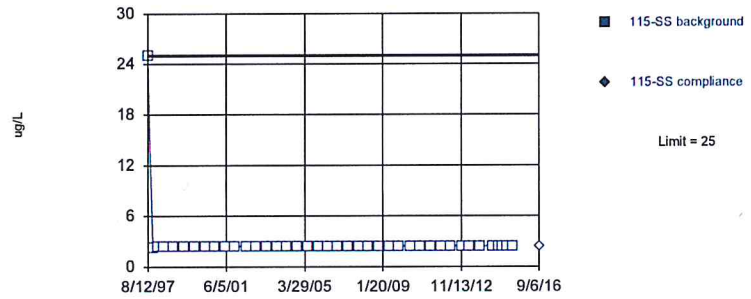
Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

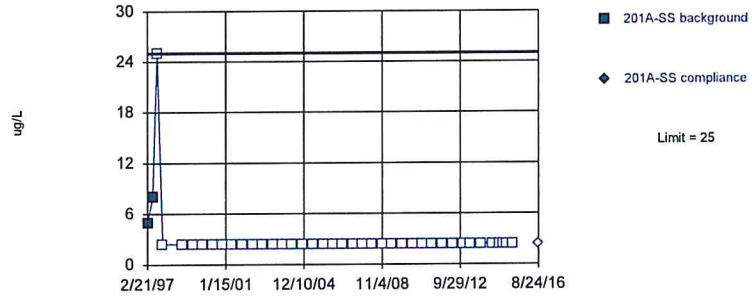
Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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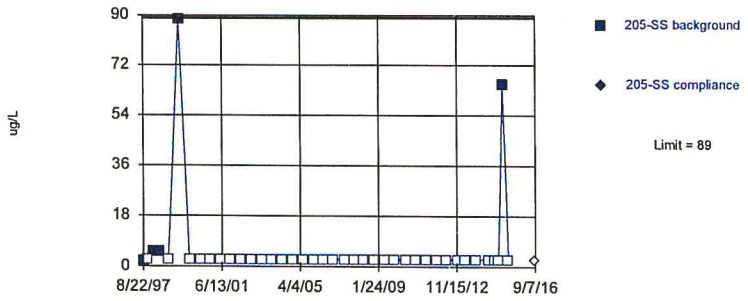
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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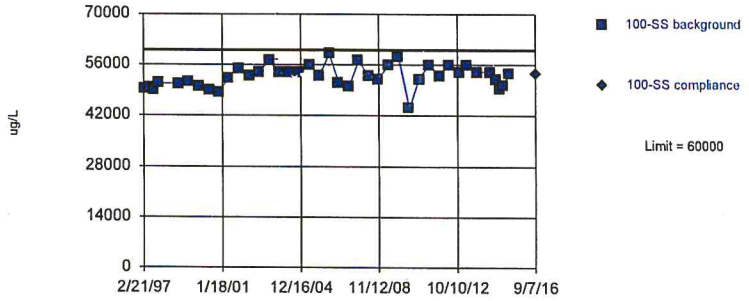
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.5e14, Std. Dev.=2.5e13, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9819, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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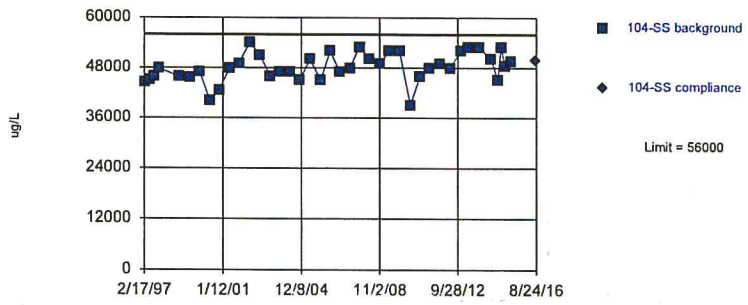
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.1e14, Std. Dev.=2.4e13, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9654, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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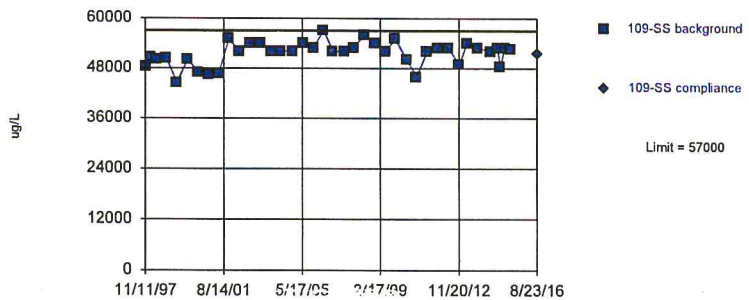
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^6 transformation): Mean=2.0e28, Std. Dev.=5.9e27, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9685, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 74000 (8/21/1997).

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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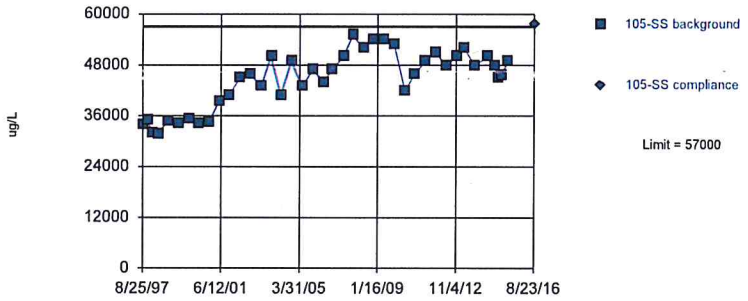
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=4.5e18, Std. Dev.=2.3e18, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.944, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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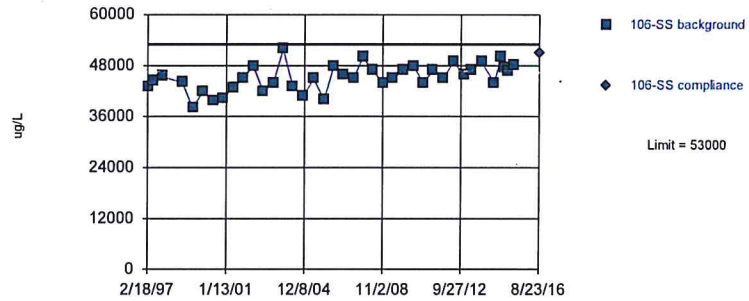
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=2.1e9, Std. Dev.=2.8e8, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9877, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 28000 (8/25/1997).

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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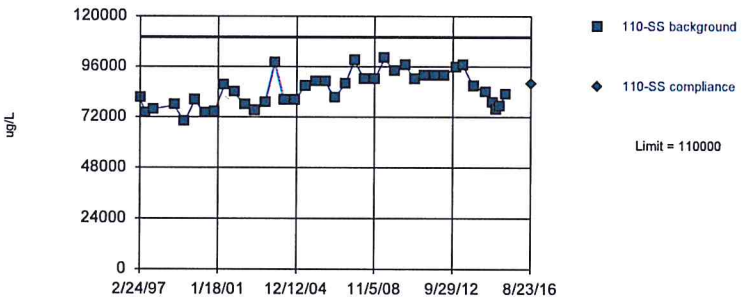
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.35, Std. Dev.=0.09625, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9548, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 51000 (8/22/1997).

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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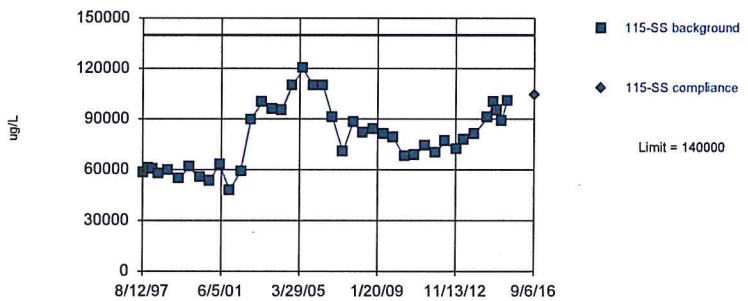
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=42.67, Std. Dev.=3.364, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9636, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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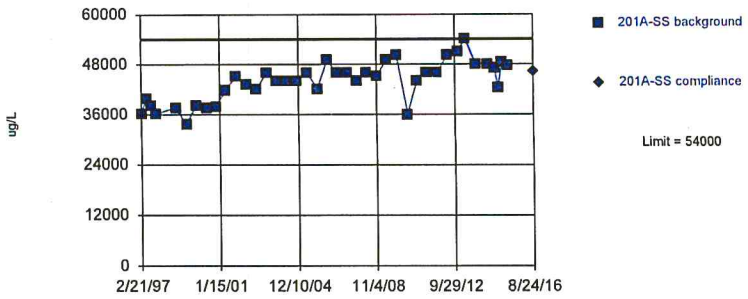
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=8.7e13, Std. Dev.=2.7e13, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9699, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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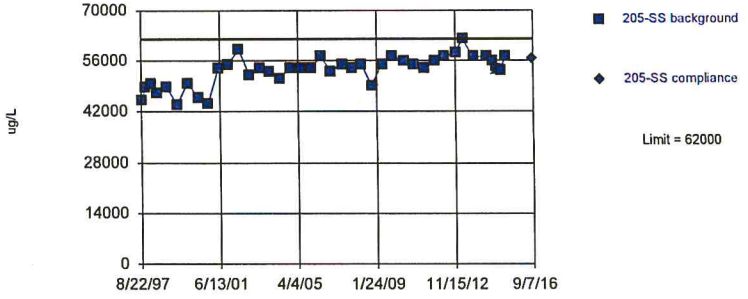
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=8.3e18, Std. Dev.=2.4e18, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9625, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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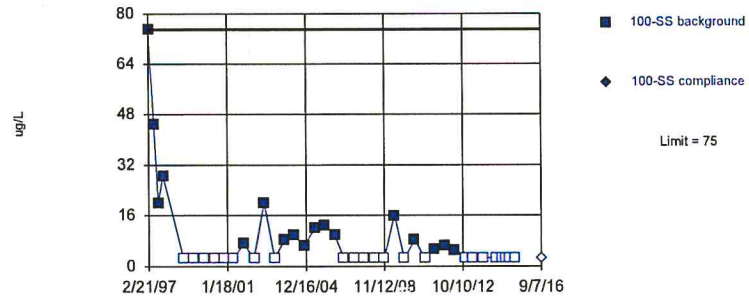
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 57.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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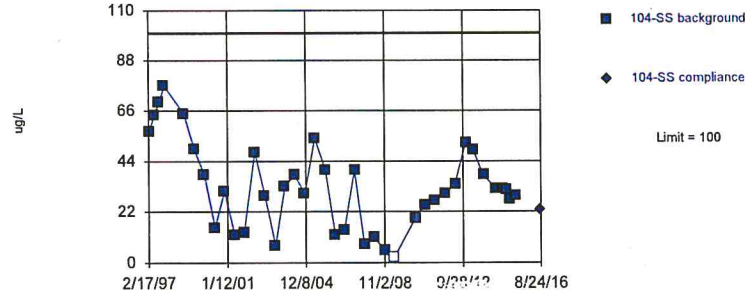
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=5.486, Std. Dev.=1.746, n=39, 2.564% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9696, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 160 (11/4/2009).

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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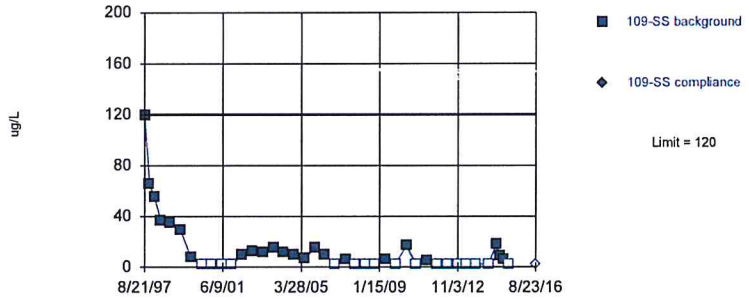
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 42.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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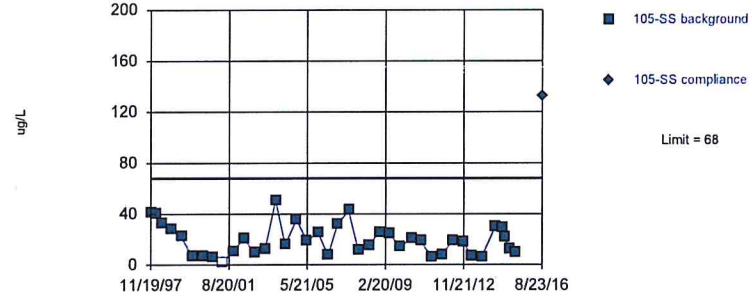
Hollow symbols indicate censored values.

Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=2.59, Std. Dev.=0.5683, n=39, 2.564% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9742, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 240 (8/25/1997).

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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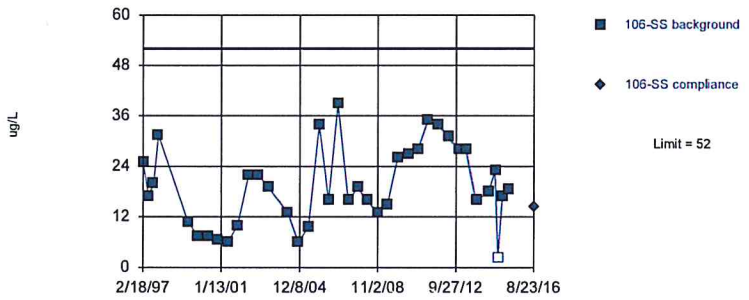
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=4.249, Std. Dev.=1.13, n=38, 2.632% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9715, critical = 0.916. Kappa = 2.635 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 84.2 (11/11/1998); 270 (11/20/2003).

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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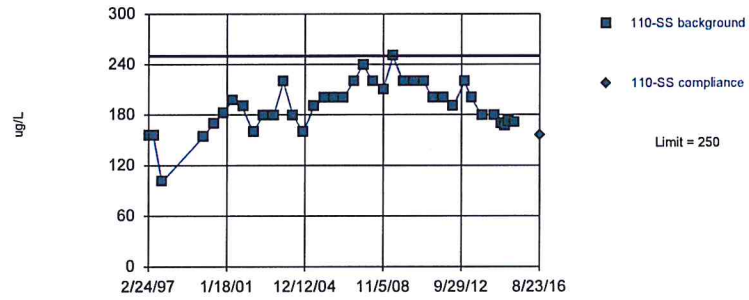
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=36863, Std. Dev.=10568, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9697, critical = 0.914. Kappa = 2.645 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Three background outliers were removed: 20 (8/22/1997); 70.8 (11/13/1998); 54.5 (5/18/1999).

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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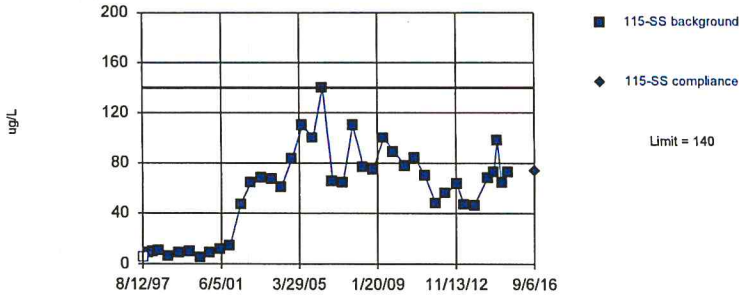
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 2.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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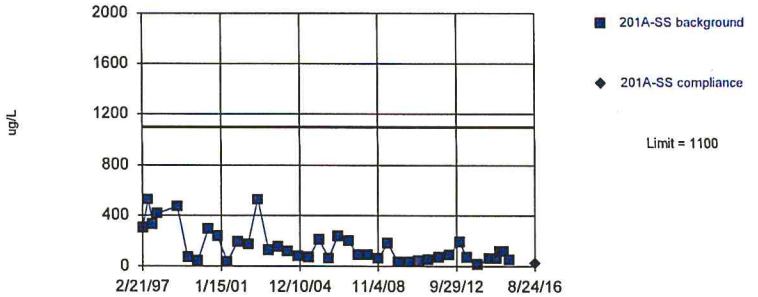
Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=4.69, Std. Dev.=0.8887, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9728, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM

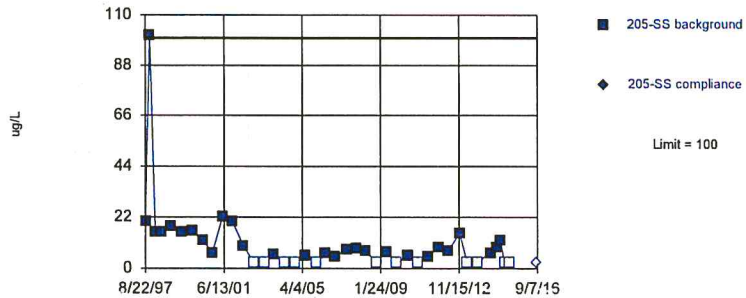
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 30% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 10/10/2016 12:03 PM

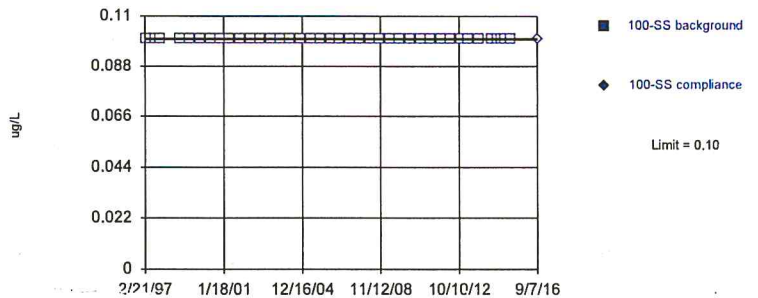
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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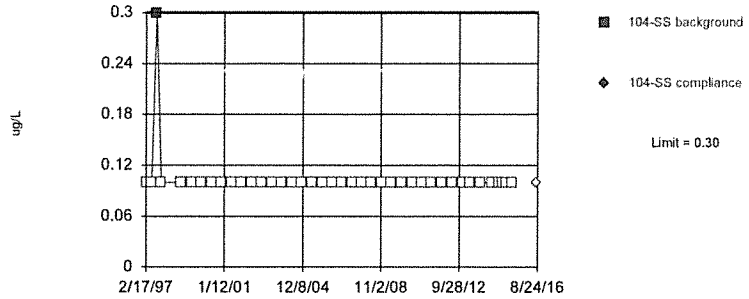
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

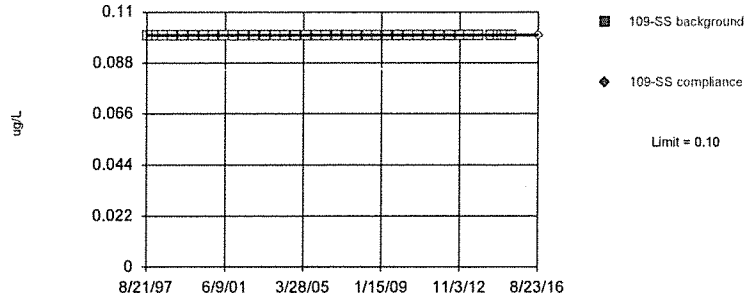
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

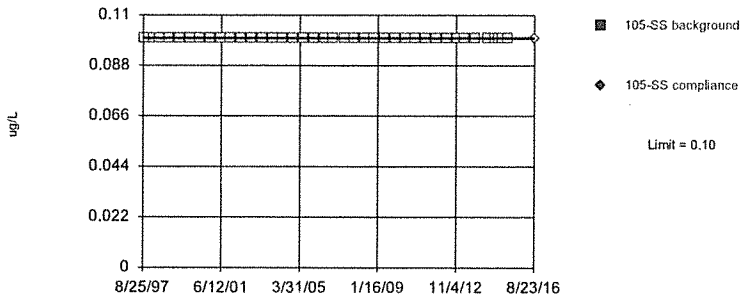
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

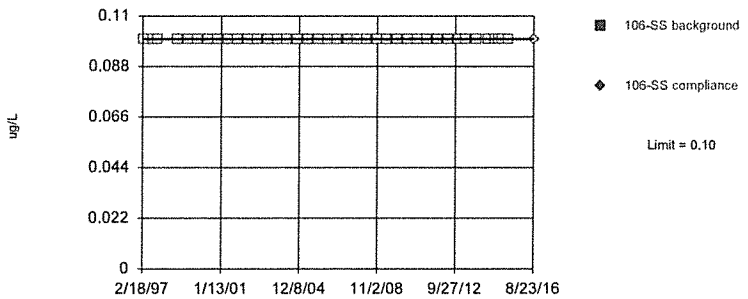
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

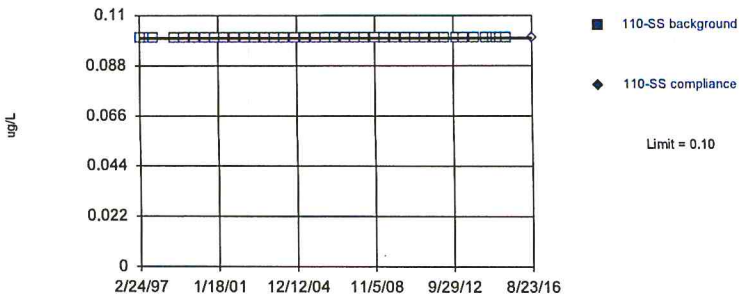
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

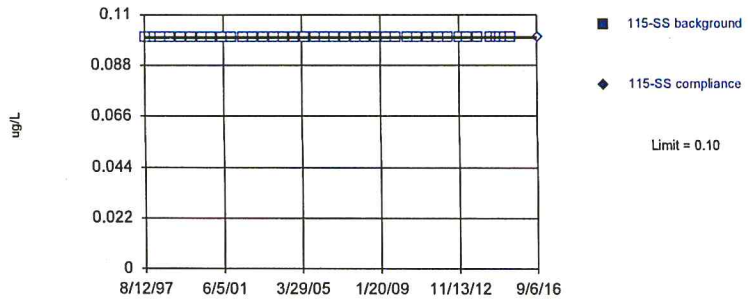
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

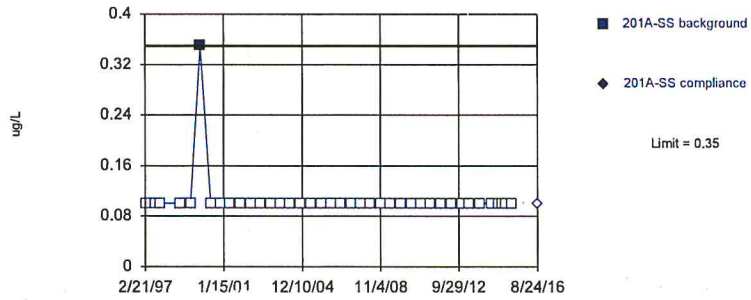
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

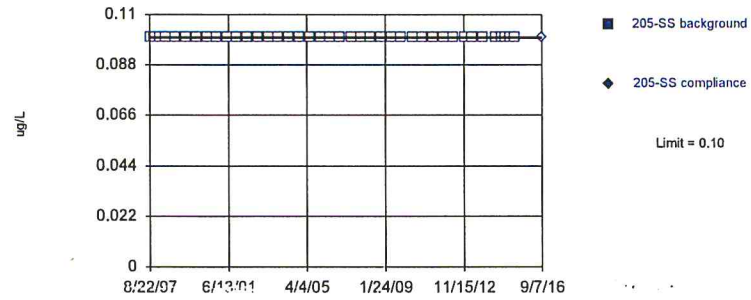
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

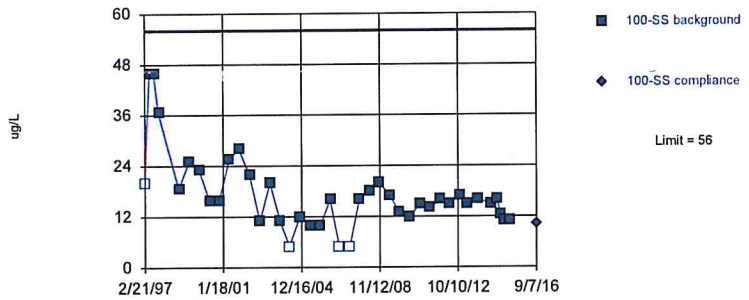
Constituent: Mercury Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=2.743, Std. Dev.=0.491, n=40, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9342, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM

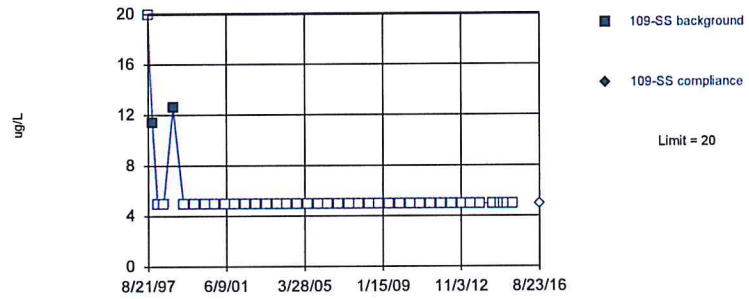
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM

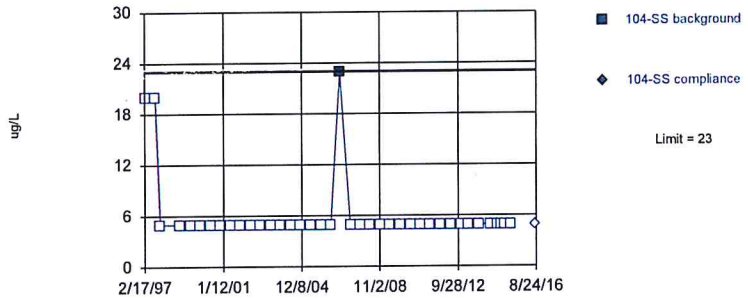
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM

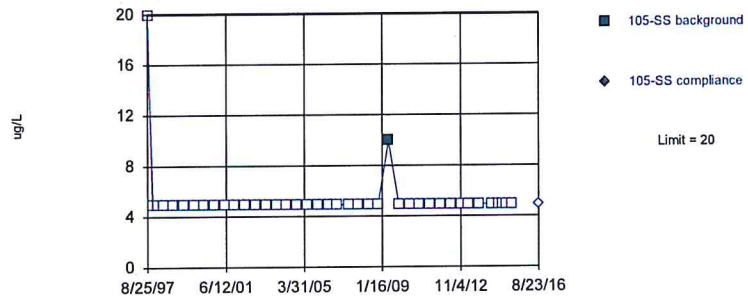
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM

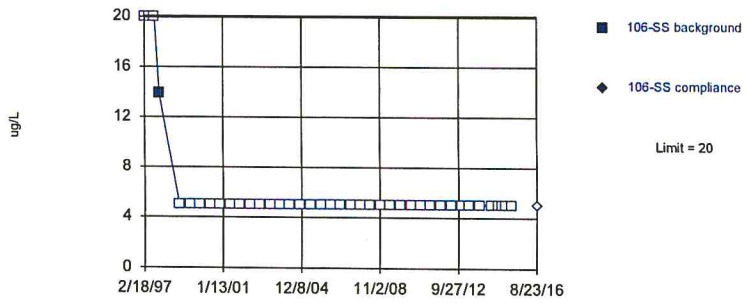
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

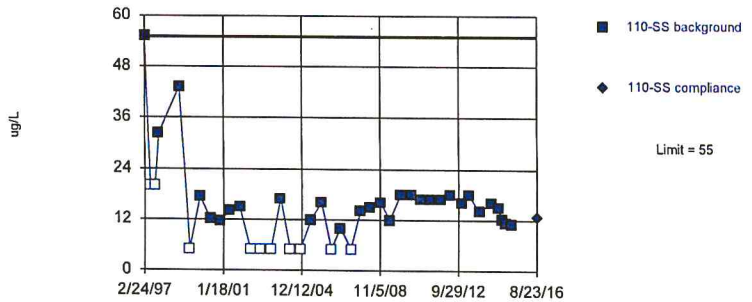
Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 25% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

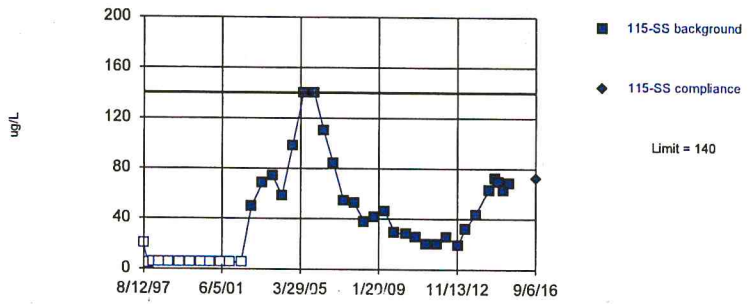
Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 30% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

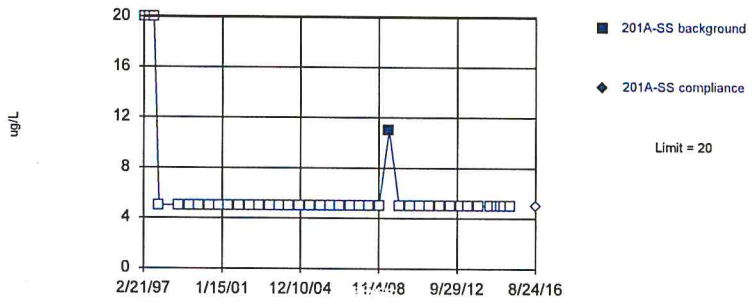
Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

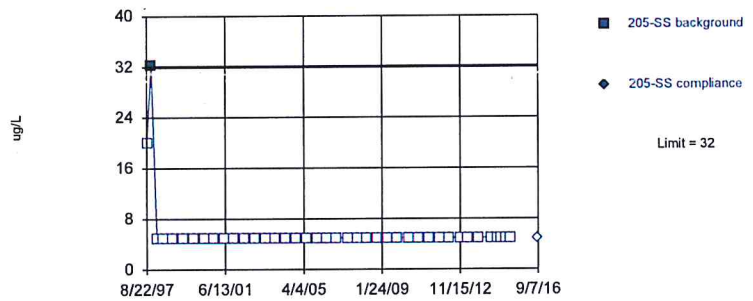
Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

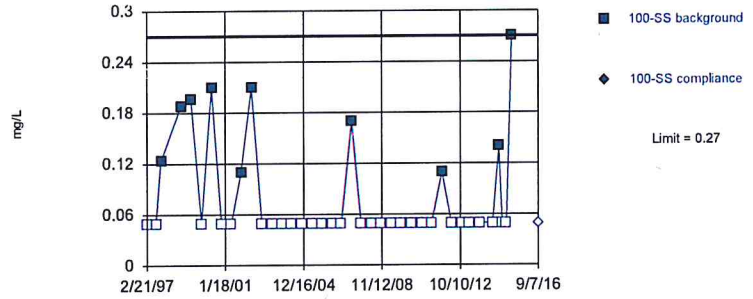
Constituent: Nickel Total Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

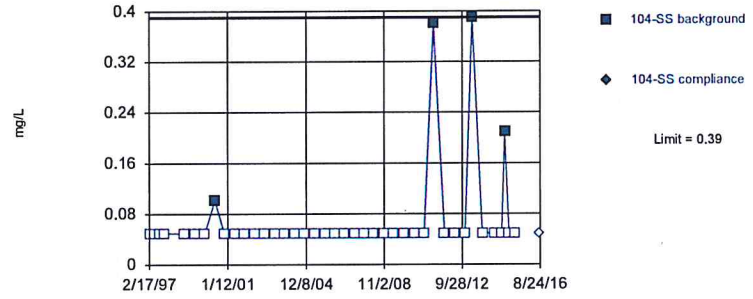
Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

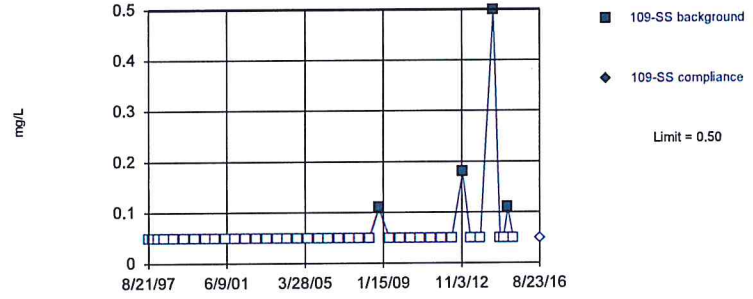
Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

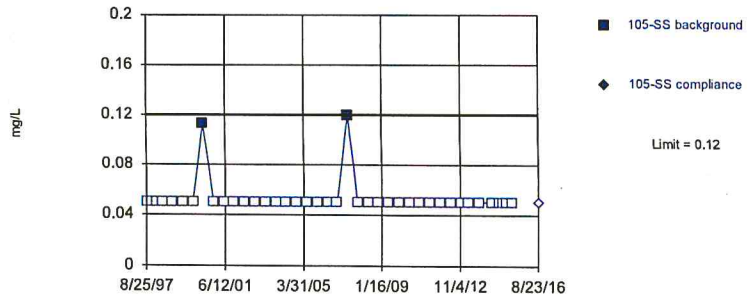
Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM

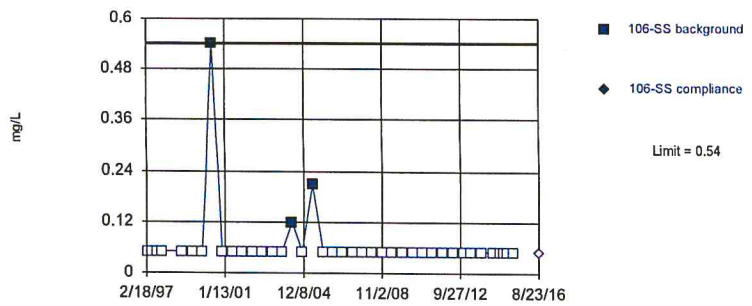
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM

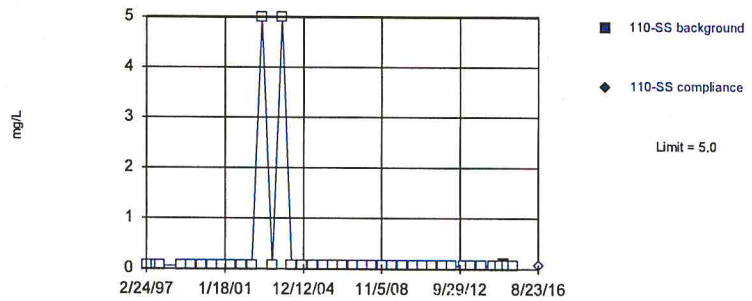
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM

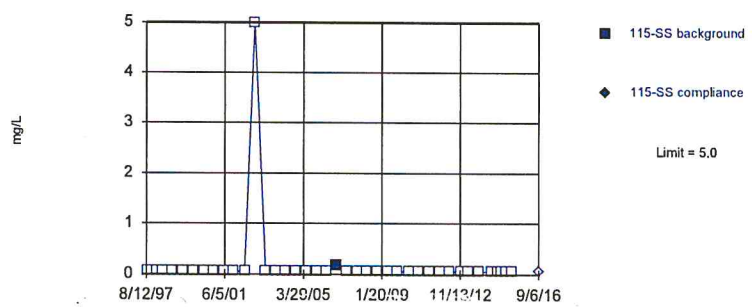
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM

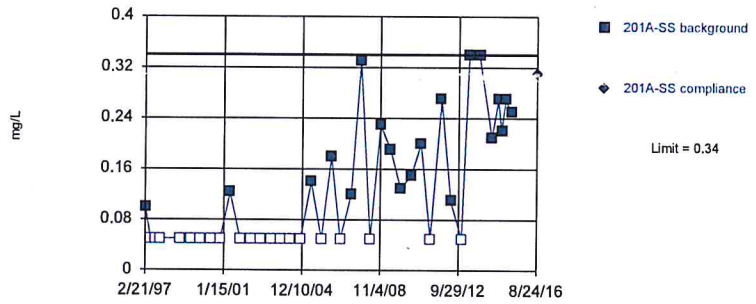
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 50% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM

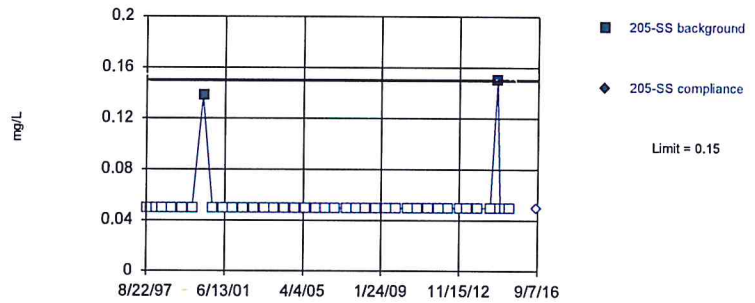
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 12:03 PM

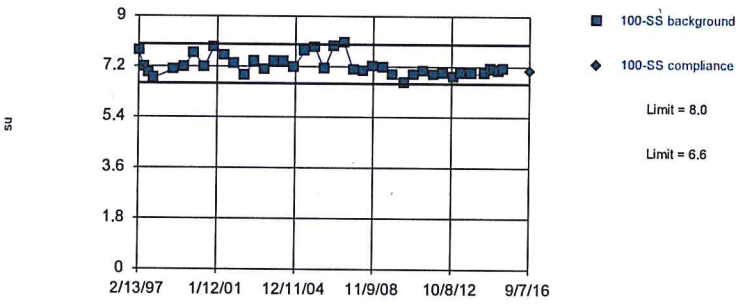
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 40 background values. Well-constituent pair annual alpha = 0.009204. Individual comparison alpha = 0.002305 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: pH [Field] Analysis Run 10/10/2016 12:03 PM

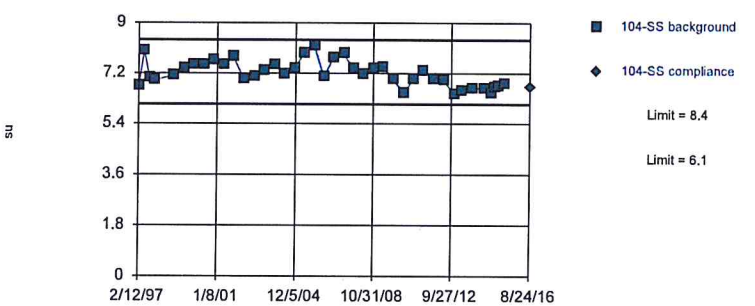
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.973, Std. Dev.=0.061, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9683, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 12:03 PM

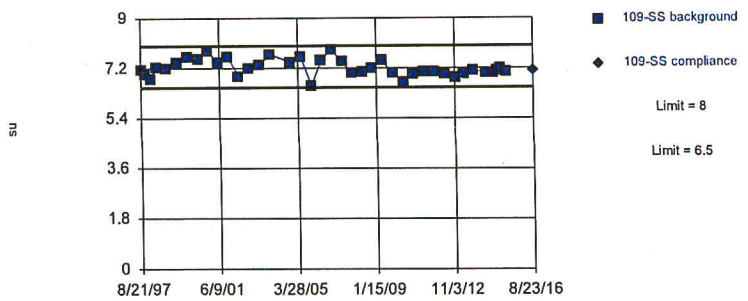
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.973, Std. Dev.=0.04155, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9715, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 10.9 (5/11/2004).

Constituent: pH [Field] Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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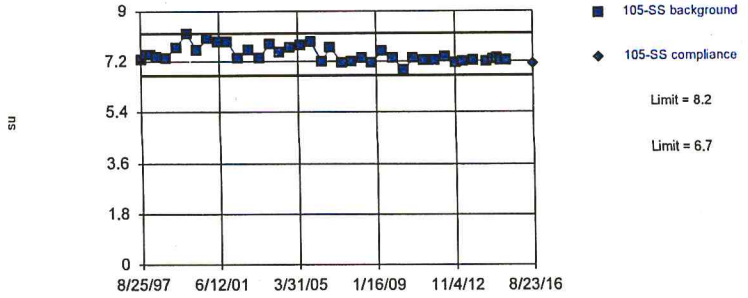
Within Limits

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=2.005, Std. Dev.=0.0387, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9193, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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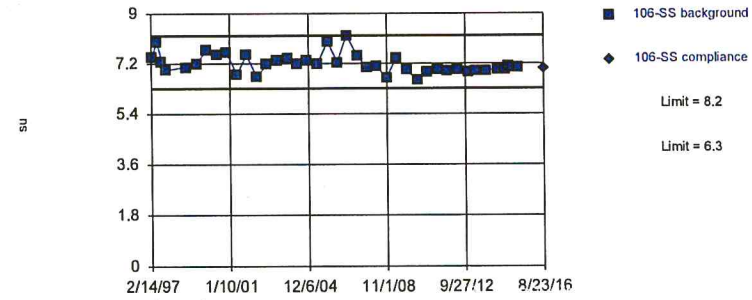
Within Limits

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.971, Std. Dev.=0.04852, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9462, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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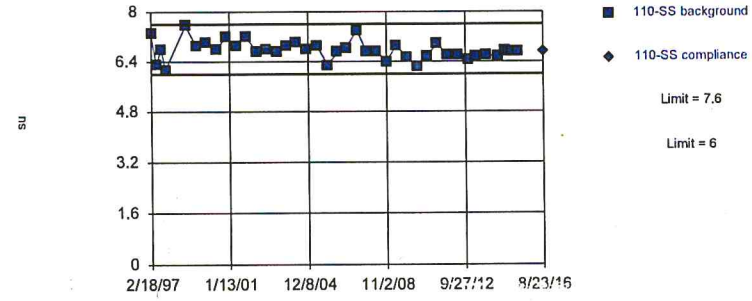
Within Limits

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.911, Std. Dev.=0.04443, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9747, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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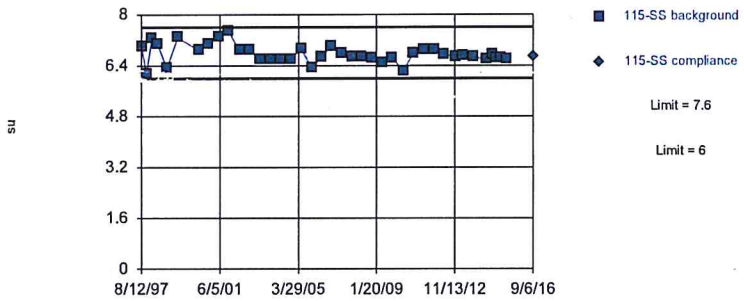
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.911, Std. Dev.=0.04272, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9607, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 7.9 (11/19/1999).

Constituent: pH [Field] Analysis Run 10/10/2016 12:03 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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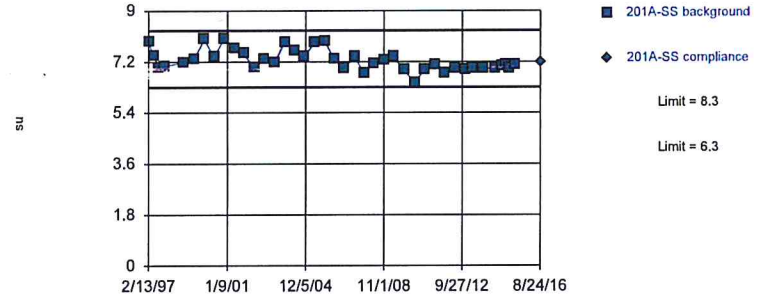
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.981, Std. Dev.=0.05083, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9294, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 12:04 PM

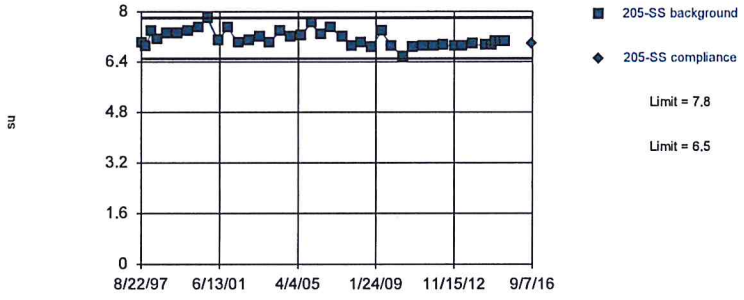
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.964, Std. Dev.=0.03507, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9487, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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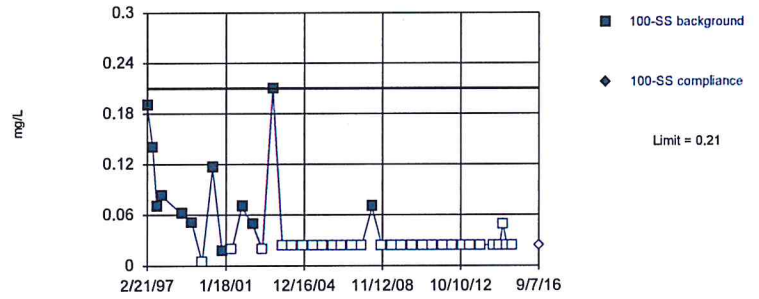
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 70% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM

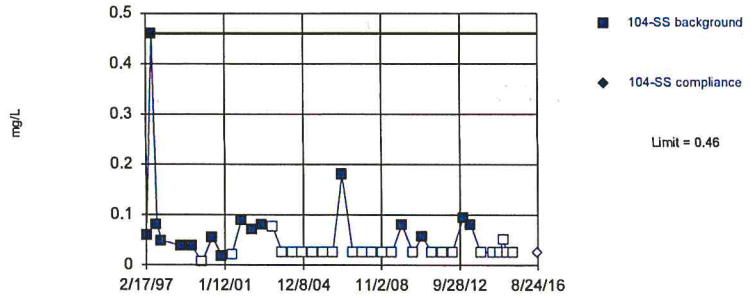
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 60% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

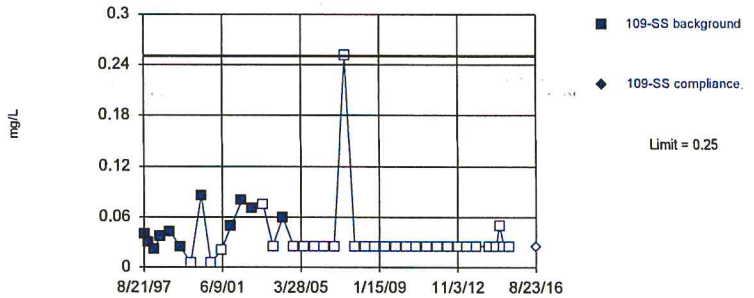
Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 72.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

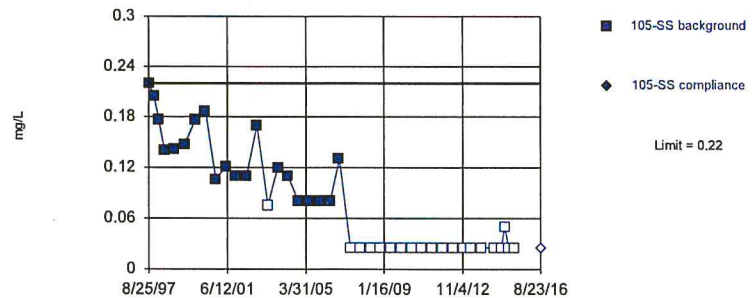
Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 50% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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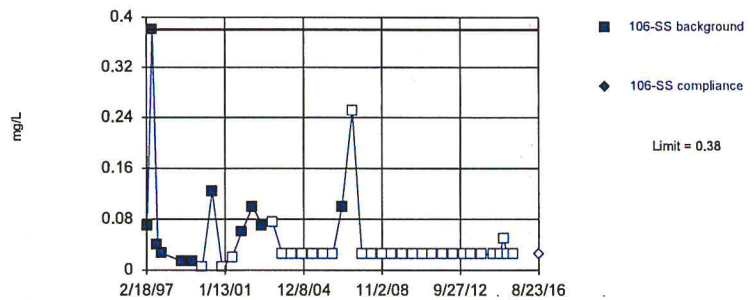
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 72.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

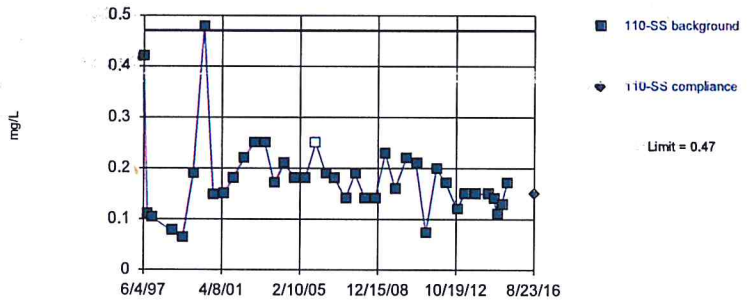
Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=-1.798, Std. Dev.=0.3985, n=39, 2.564% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 1.4 (2/24/1997).

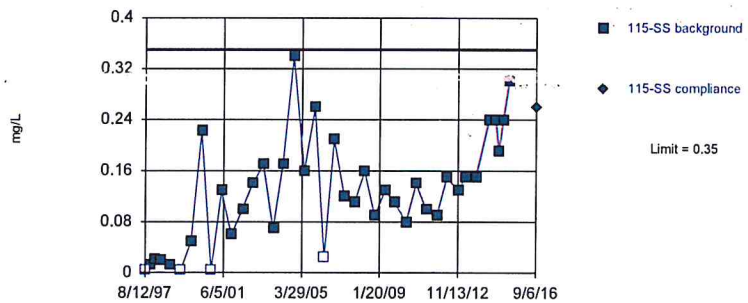
Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=0.1277, Std. Dev.=0.08528, n=40, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9539, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

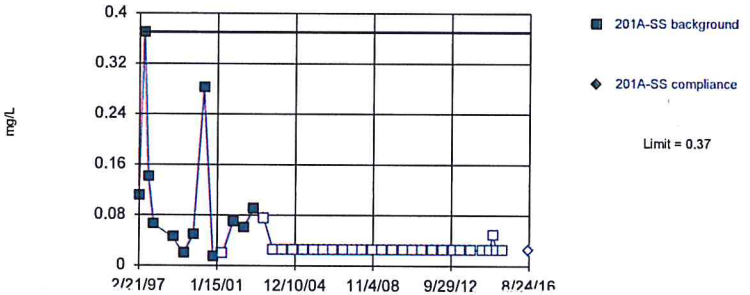
Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 70% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

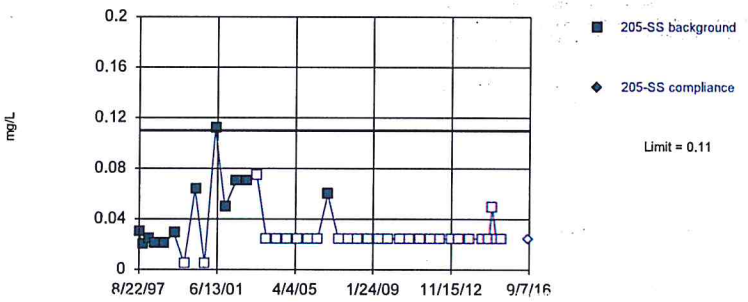
Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data; Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 70% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

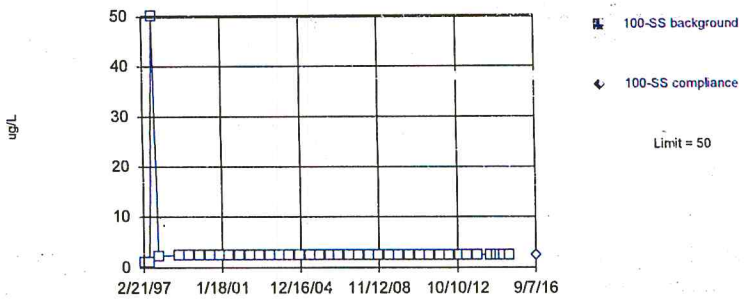
Constituent: Phosphorus Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

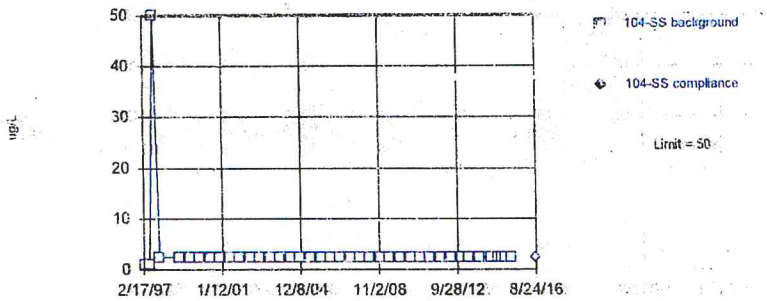
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.28 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

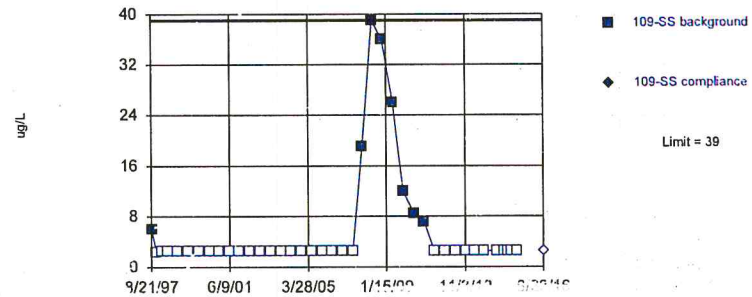
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 80% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

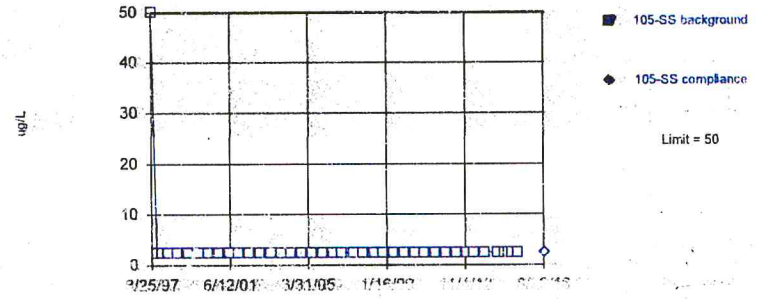
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

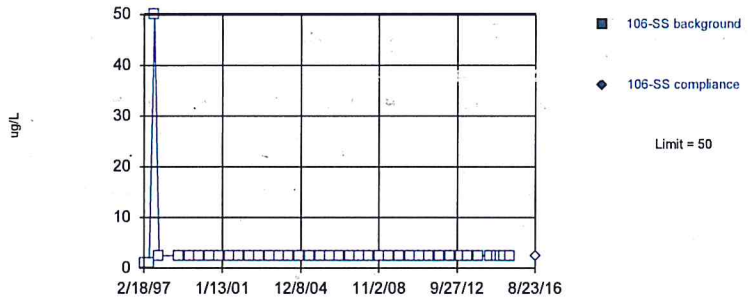
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

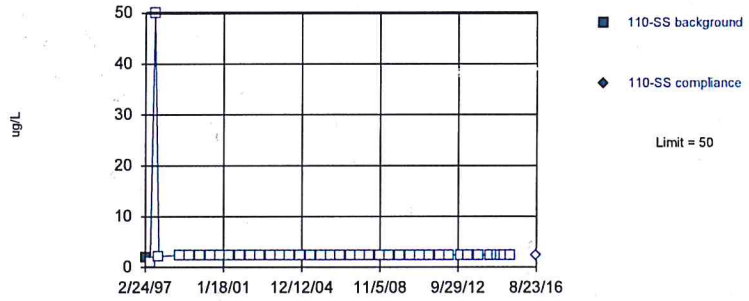
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

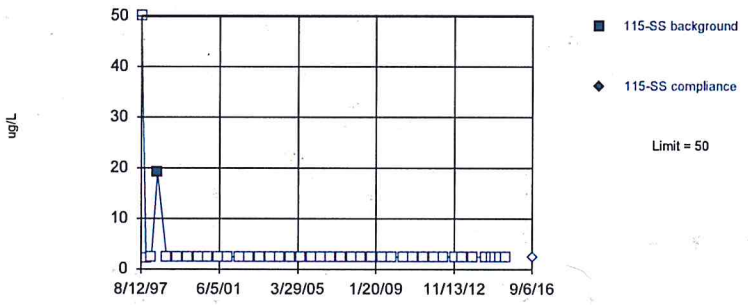
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

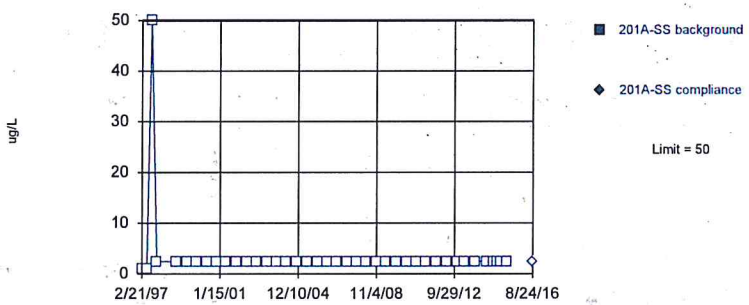
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

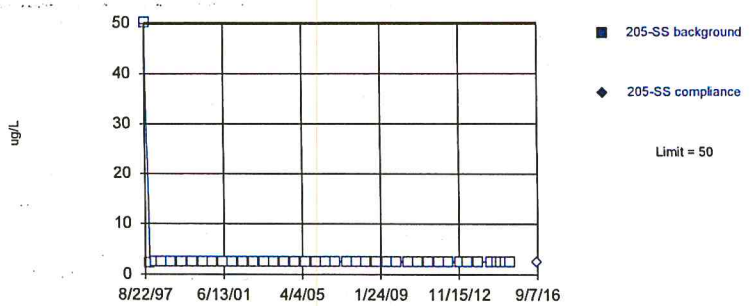
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 12:04 PM

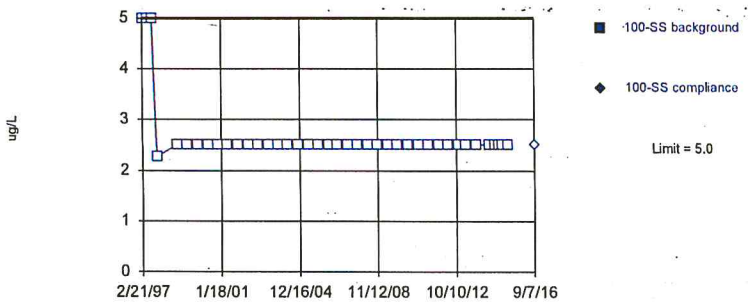
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM

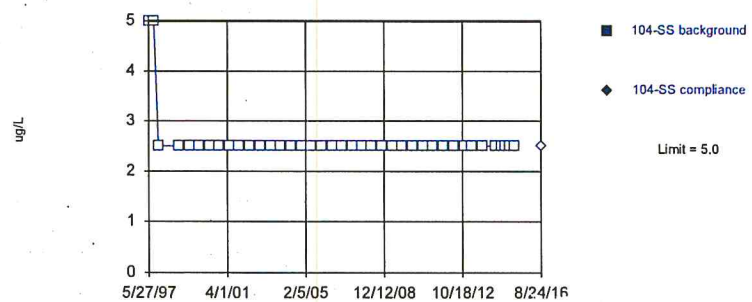
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 100% NDs. Well-constituent pair annual alpha = 0.004868. Individual comparison alpha = 0.001219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM

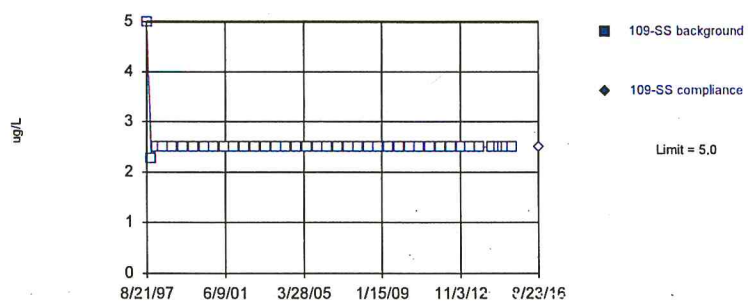
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM

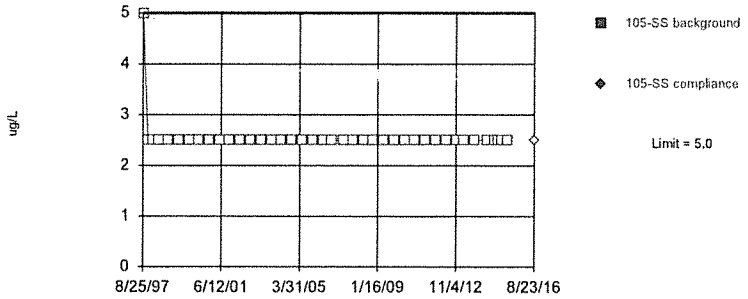
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

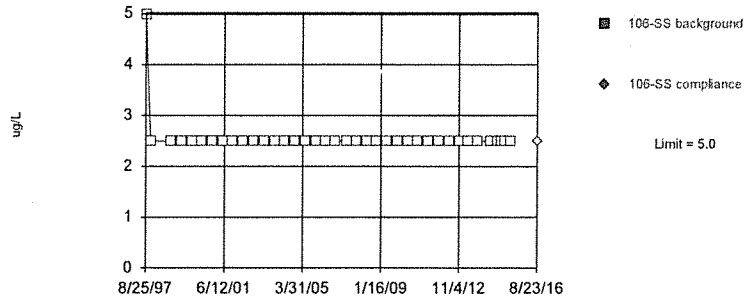
Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 100% NDs. Well-constituent pair annual alpha = 0.005135. Individual comparison alpha = 0.001286 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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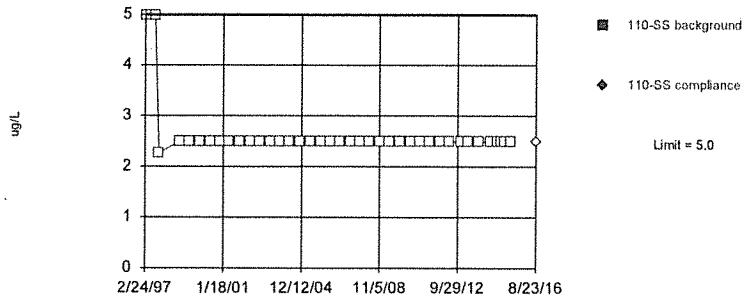
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

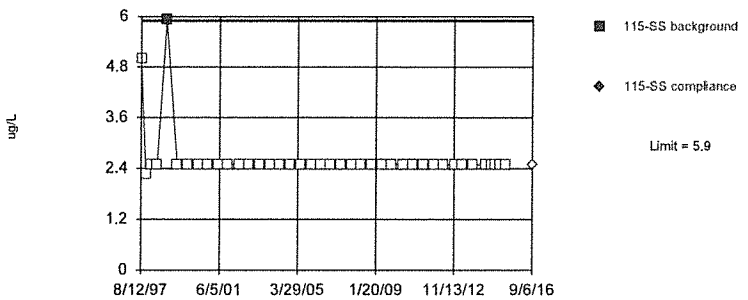
Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

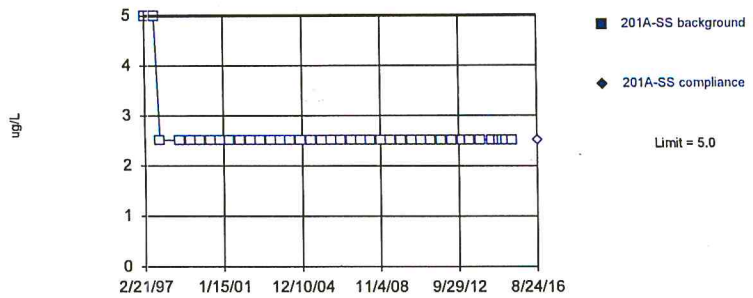
Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM

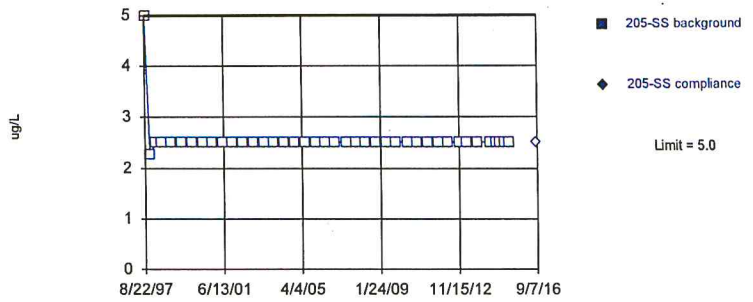
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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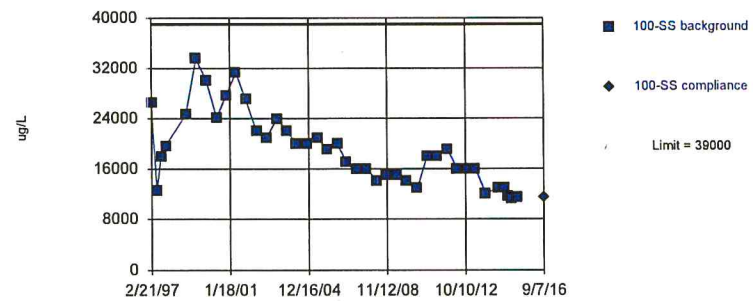
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=9.808, Std. Dev.=0.295, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9631, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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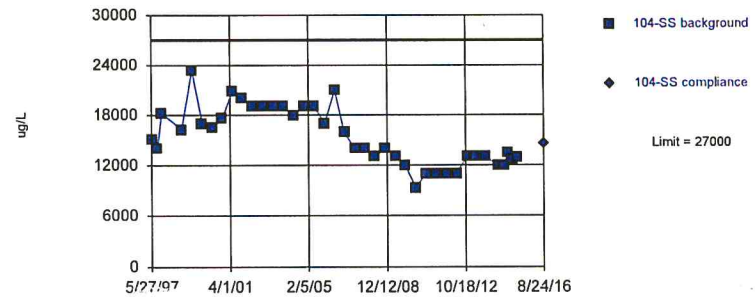
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=9.617, Std. Dev.=0.2257, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9551, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 34800 (2/17/1997).

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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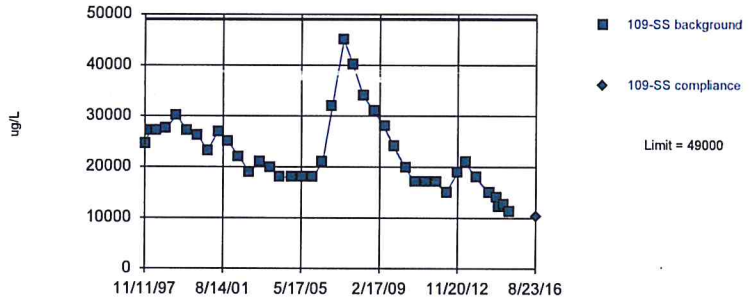
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=9.978, Std. Dev.=0.3165, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9835, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 68000 (8/21/1997).

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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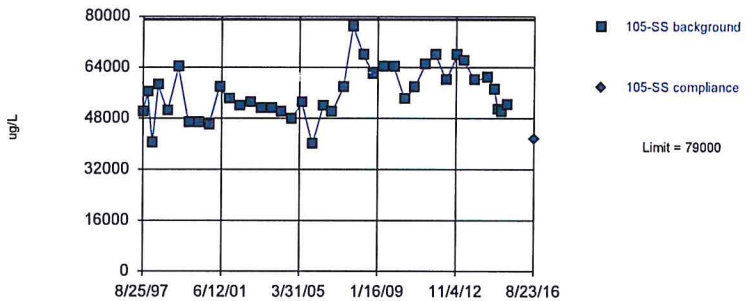
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=38.14, Std. Dev.=1.825, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9771, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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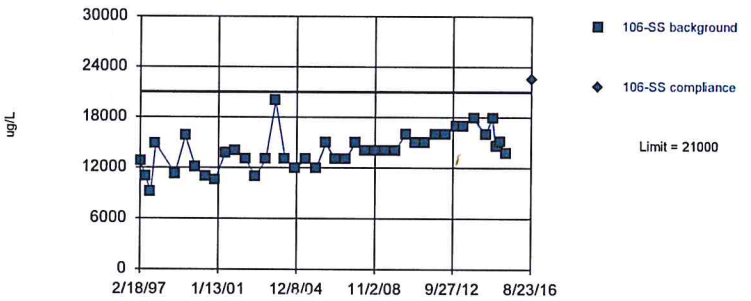
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=118.3, Std. Dev.=9.566, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9881, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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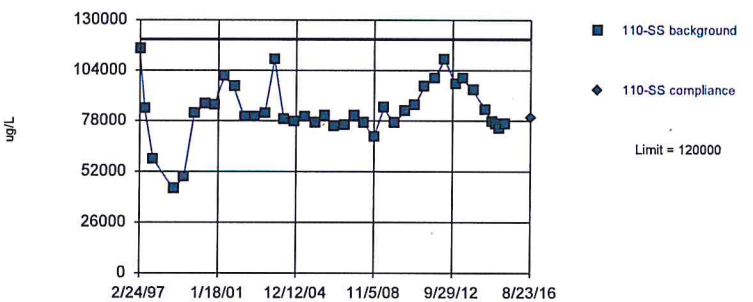
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=83210, Std. Dev.=14554, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9317, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 19000 (8/22/1997).

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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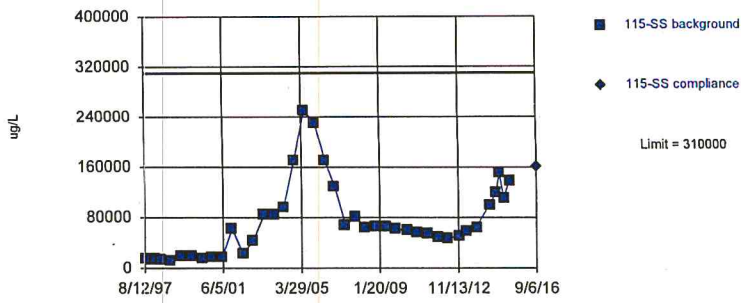
Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=39.3, Std. Dev.=10.78, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9386, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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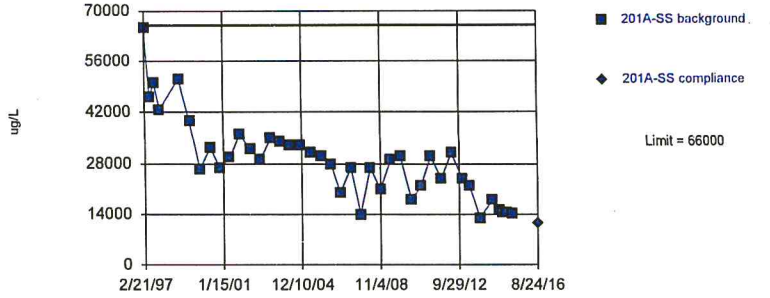
Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=30.24, Std. Dev.=3.85, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9625, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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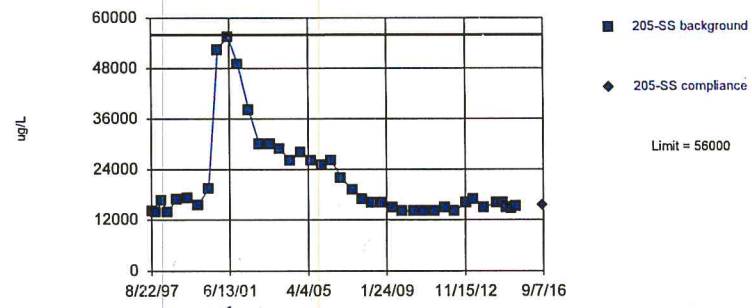
Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sodium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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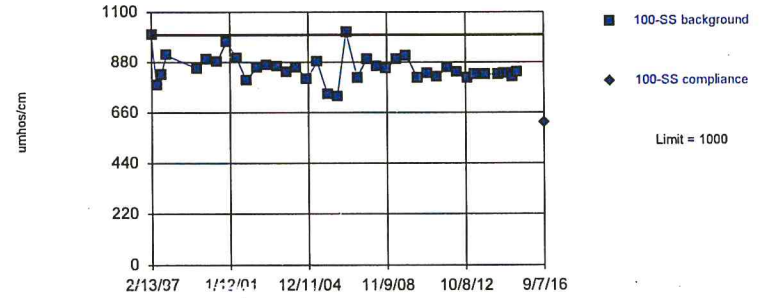
Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.746, Std. Dev.=0.06655, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9425, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 1080 (11/12/1998).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=4.6e8, Std. Dev.=1.3e8, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9748, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 468 (5/25/2006).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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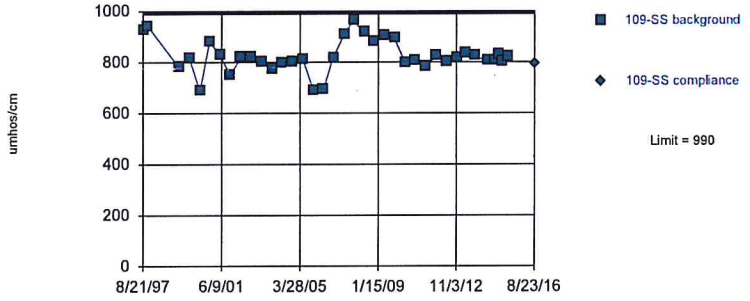
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=824, Std. Dev.=63.94, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.922, critical = 0.914. Kappa = 2.645 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Three background outliers were removed: 1270 (2/13/1998); 1260 (5/29/1998); 1190 (11/14/1998).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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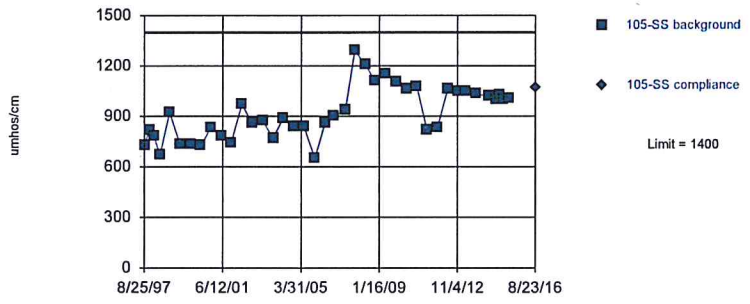
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.811, Std. Dev.=0.1679, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9706, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=4.6e11, Std. Dev.=1.3e11, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9572, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 595 (11/29/2005).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

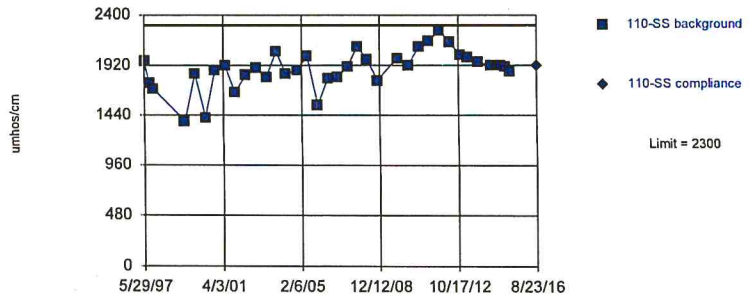
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=6.8e9, Std. Dev.=1.8e9, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9753, critical = 0.914. Kappa = 2.645 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Three background outliers were removed: 1010 (2/18/1997); 1240 (11/13/1998); 2930 (5/7/2009).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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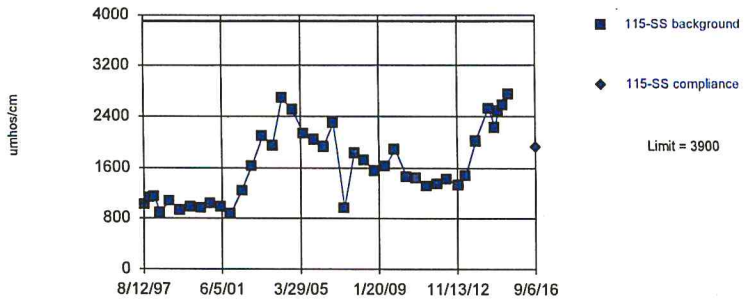
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=7.338, Std. Dev.=0.3579, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9301, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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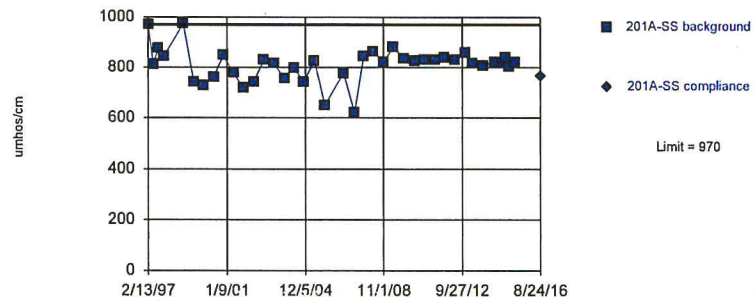
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=660296, Std. Dev.=108124, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9237, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 465 (5/25/2006).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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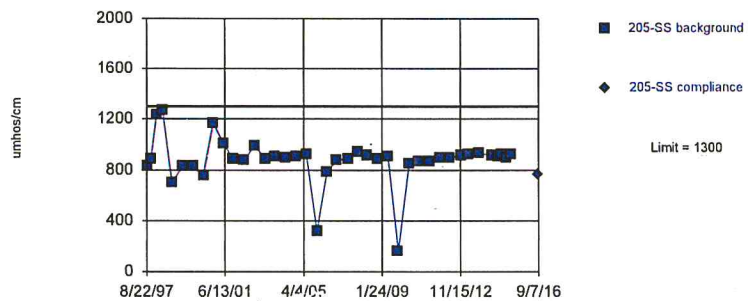
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 12:04 PM

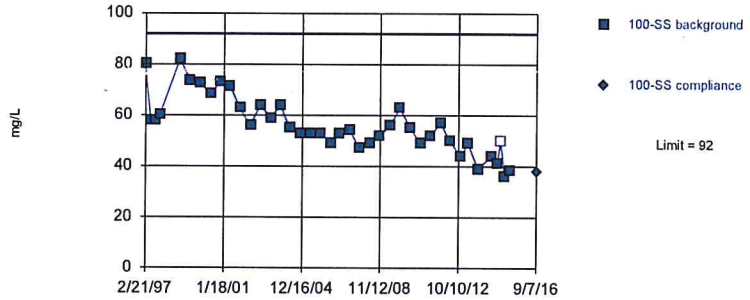
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=4.009, Std. Dev.=0.1952, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9761, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=21.19, Std. Dev.=9.203, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9462, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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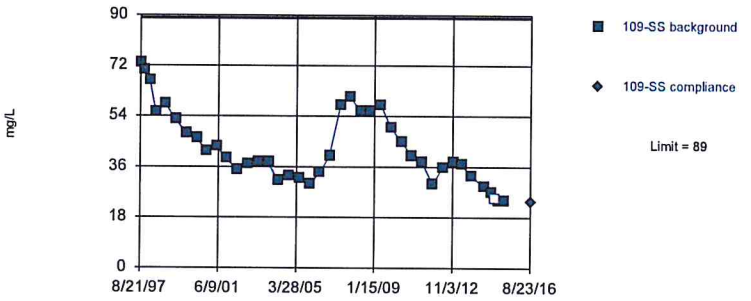
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=3.71, Std. Dev.=0.2988, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9625, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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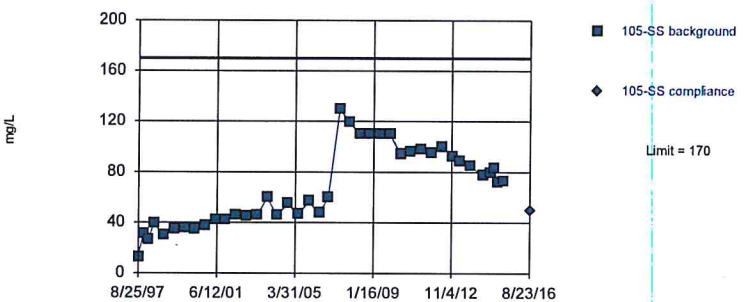
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=8, Std. Dev.=1.922, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9522, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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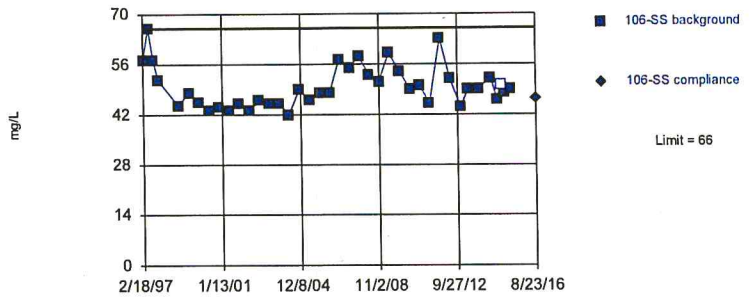
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=3.901, Std. Dev.=0.1104, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9379, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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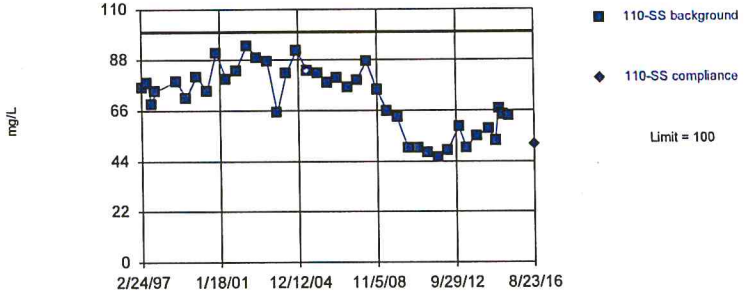
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=5251, Std. Dev.=1909, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9484, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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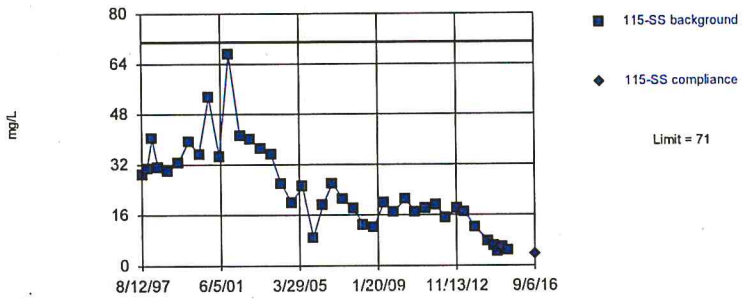
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=4.715, Std. Dev.=1.41, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.977, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

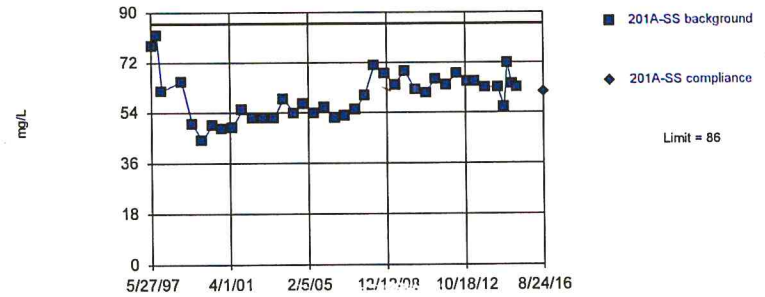
Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=4.087, Std. Dev.=0.1382, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9805, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 99 (2/21/1997).

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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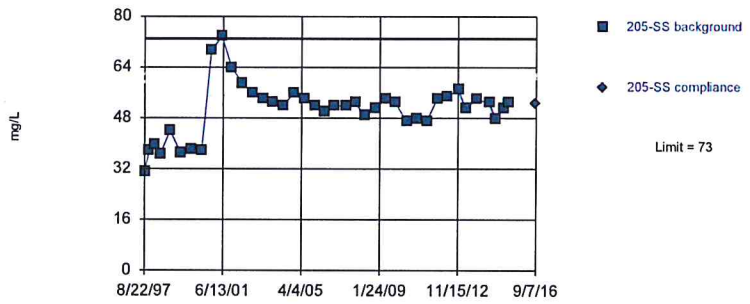
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=50.72, Std. Dev.=8.593, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9306, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 109 (11/20/2014).

Constituent: Sulfate Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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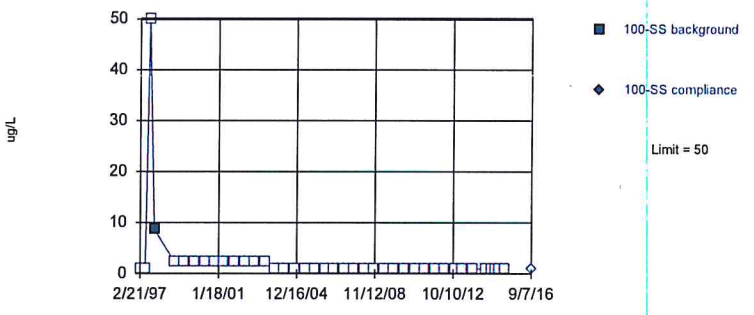
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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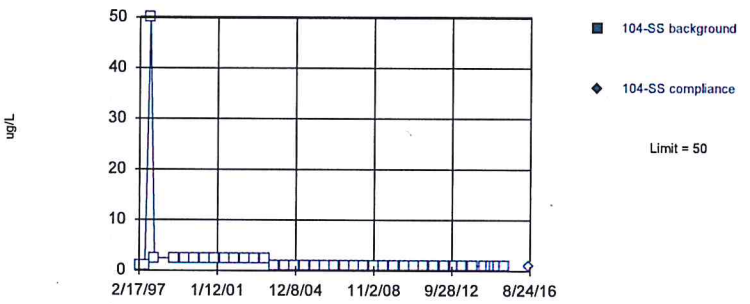
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

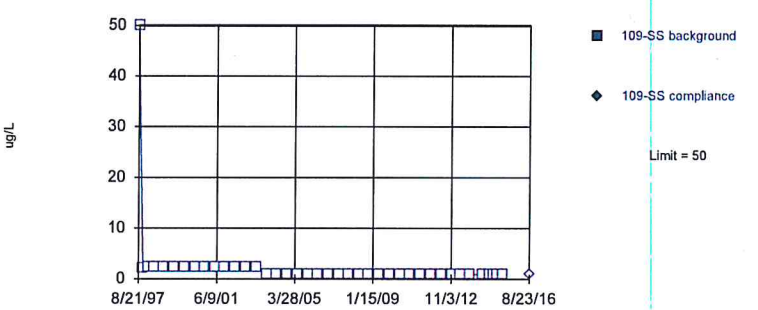
Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM

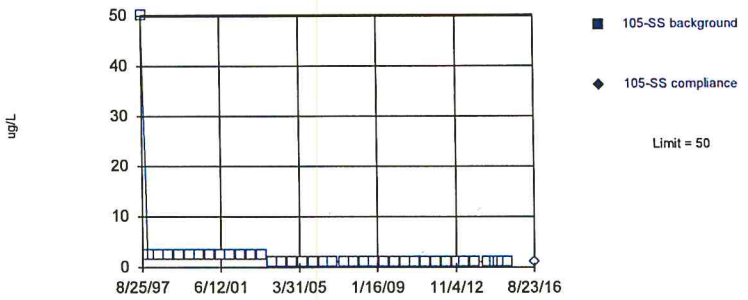
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM

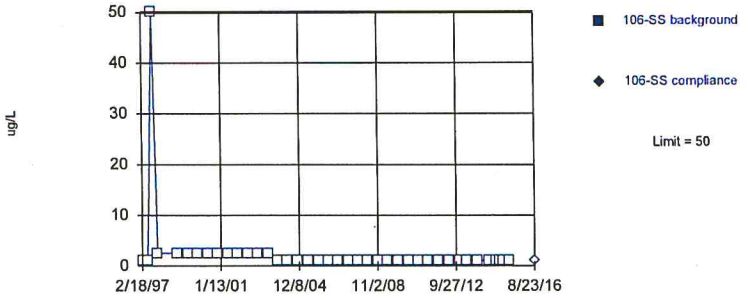
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM

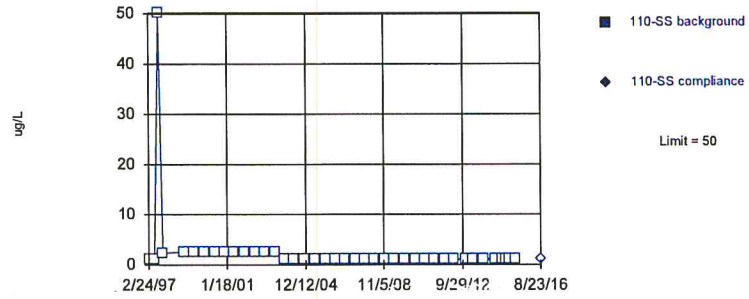
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM

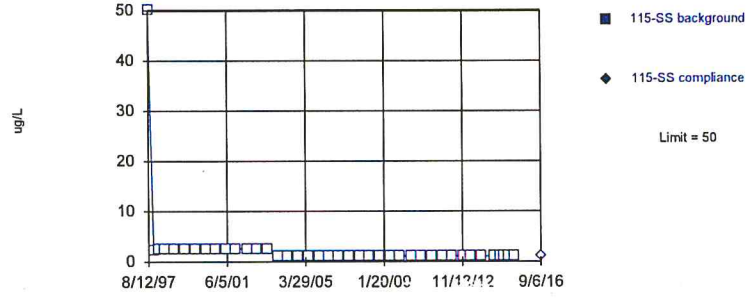
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM

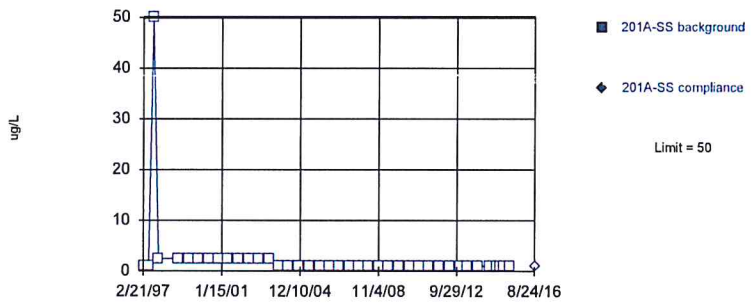
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

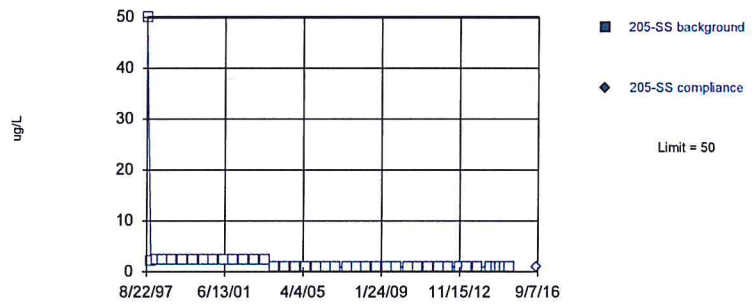
Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

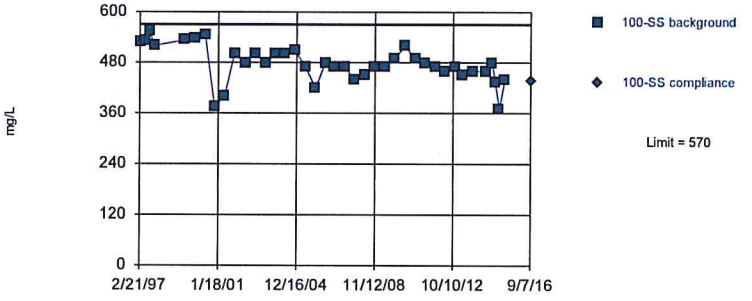
Constituent: Thallium Total Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.1e8, Std. Dev.=2.8e7, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9731, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 748 (11/12/1998).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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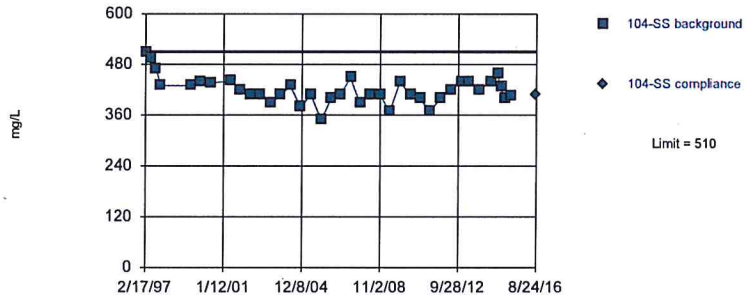
Within Limit

Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.039, Std. Dev.=0.07516, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9722, critical = 0.916. Kappa = 2.635 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 664 (11/11/1998); 257 (11/13/2000).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:04 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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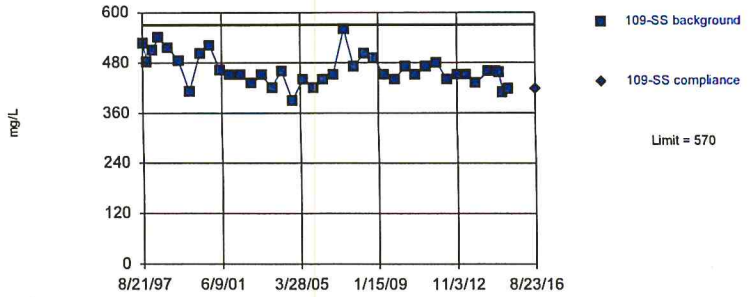
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.134, Std. Dev.=0.07956, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9735, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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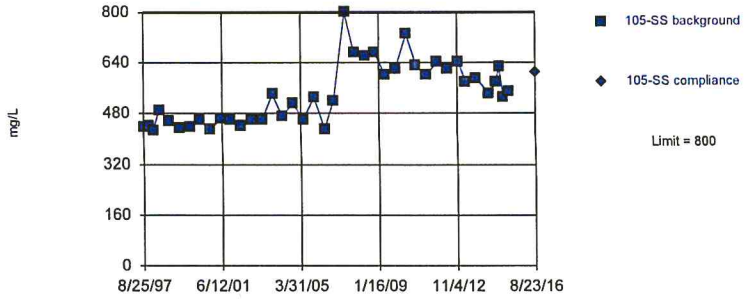
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:04 PM

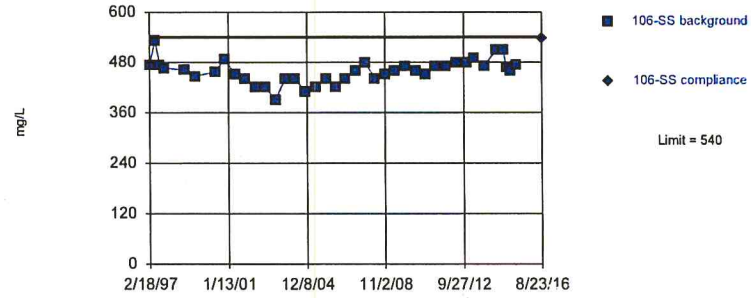
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=21.4, Std. Dev.=0.6626, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9799, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 244 (11/19/1999).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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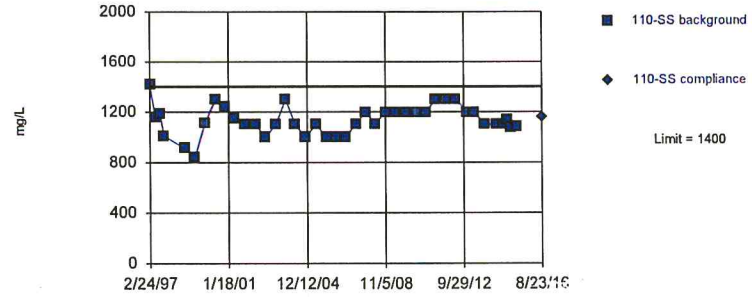
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=1135, Std. Dev.=116.3, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9659, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:04 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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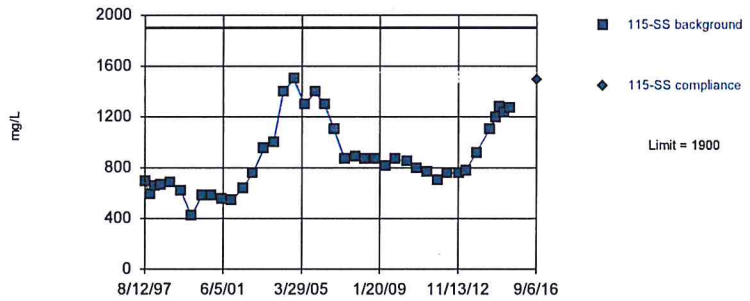
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.742, Std. Dev.=0.3108, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9657, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:05 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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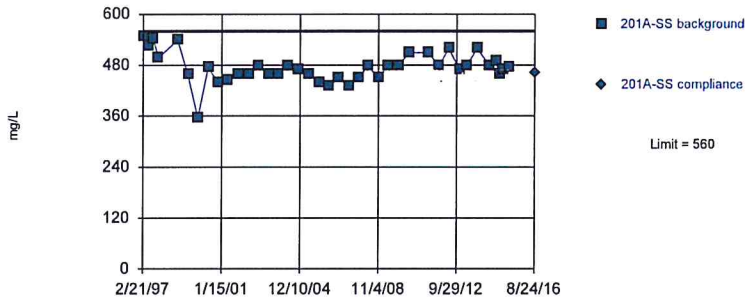
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=226671, Std. Dev.=33845, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9444, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 820 (11/10/2010).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:05 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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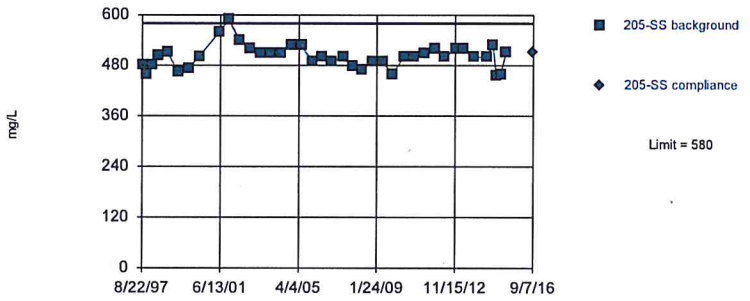
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.217, Std. Dev.=0.05445, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9584, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 611 (11/14/2000).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 12:05 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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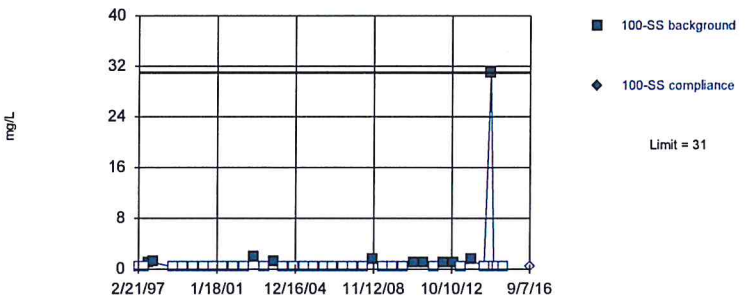
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 72.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM

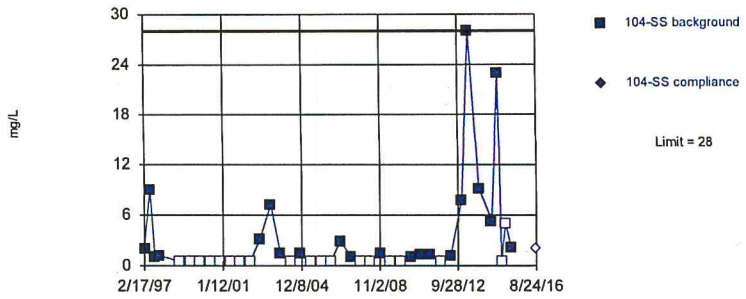
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 47.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

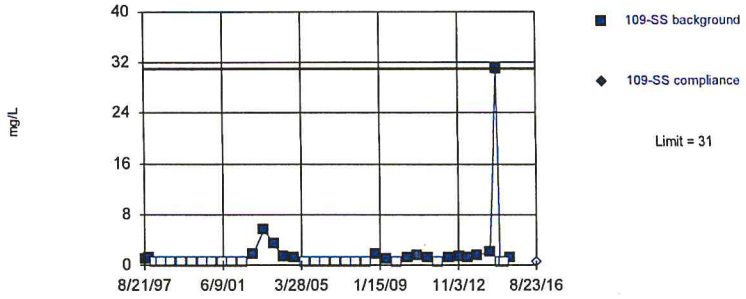
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 52.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

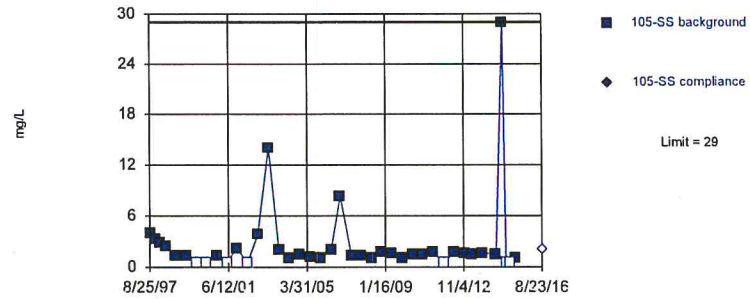
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 17.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

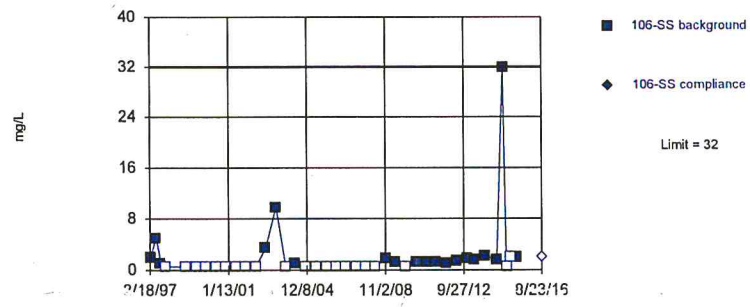
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 52.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

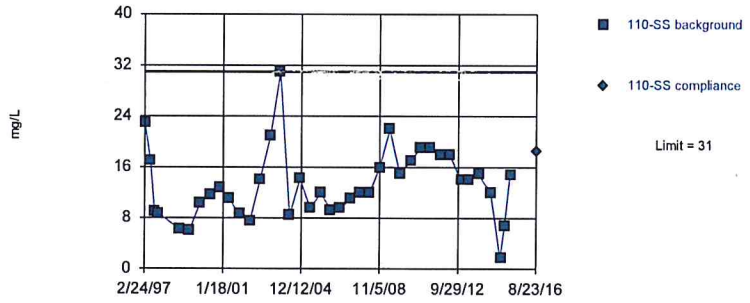
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=3.564, Std. Dev.=0.7759, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9871, critical = 0.917. Kappa = 2.626 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 66 (9/23/2014).

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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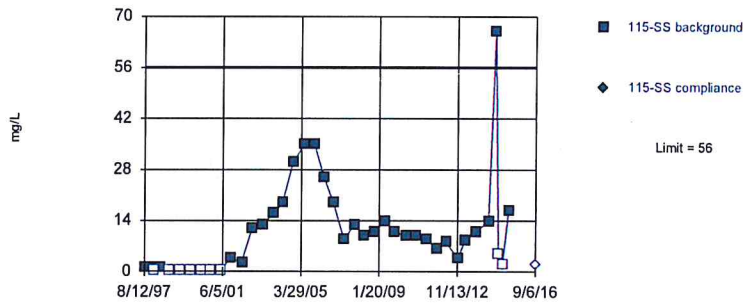
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=1.813, Std. Dev.=0.7701, n=40, 22.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.919. Kappa = 2.616 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

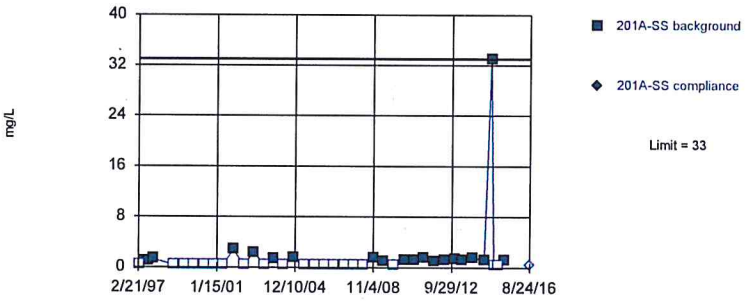
Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 50% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

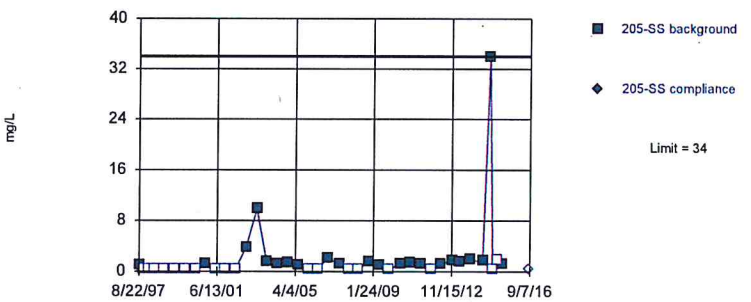
Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 45% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 12:05 PM

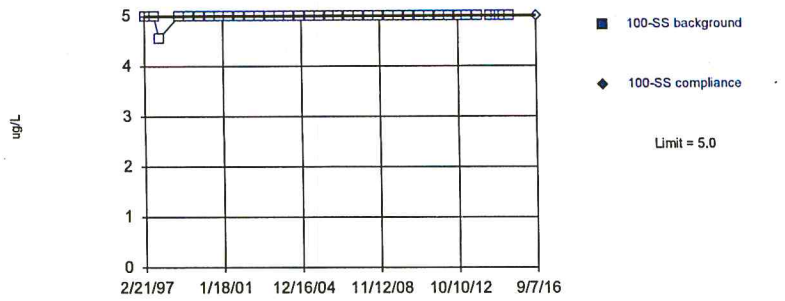
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM

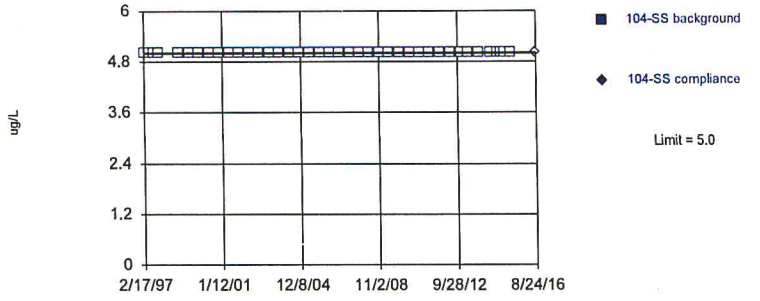
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM

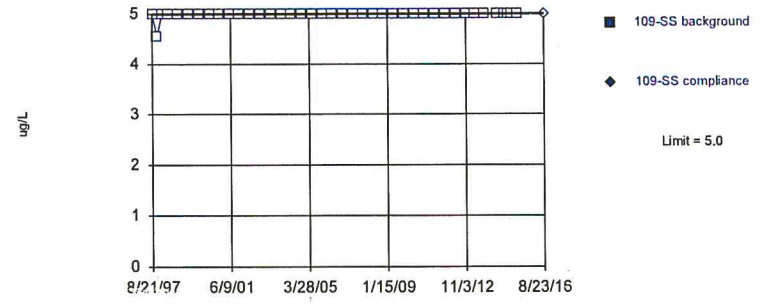
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM

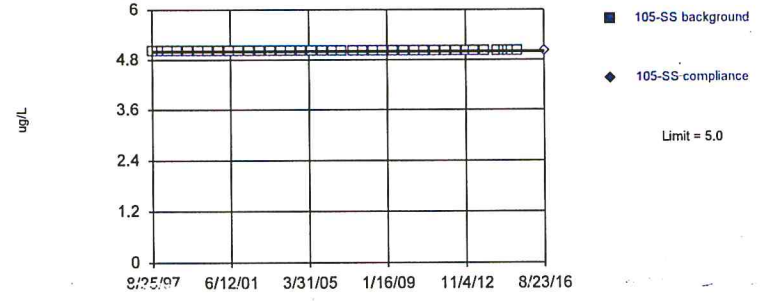
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM

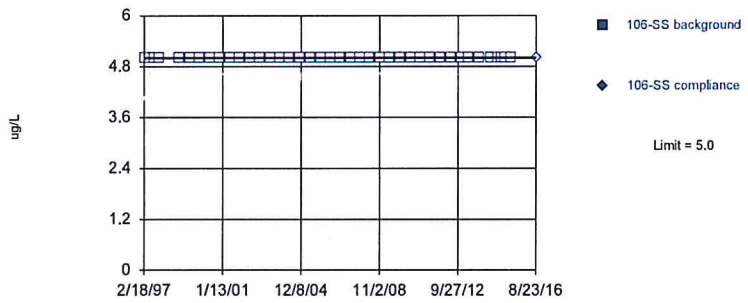
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

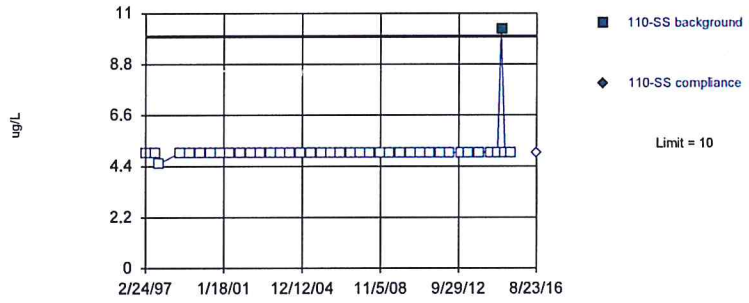
Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

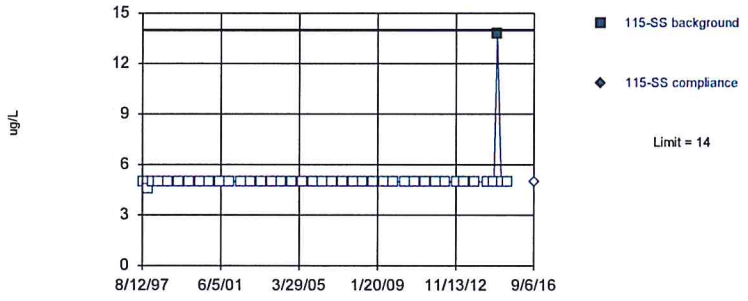
Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

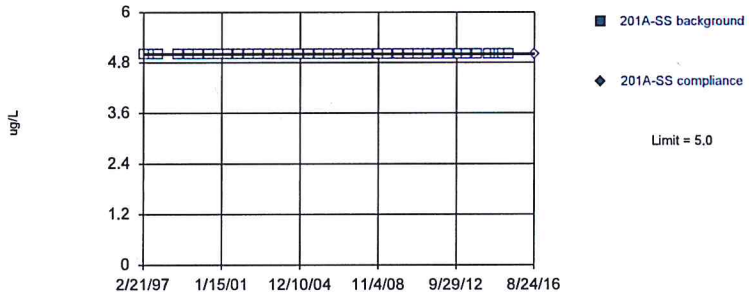
Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

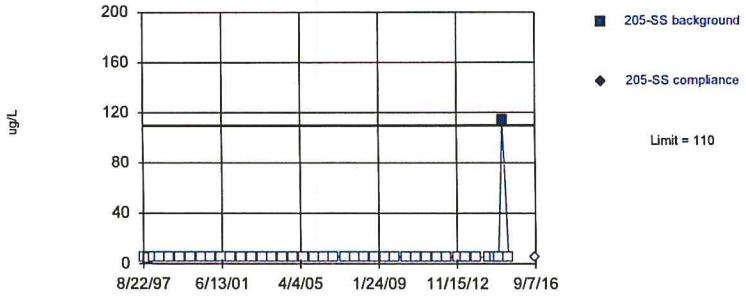
Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric



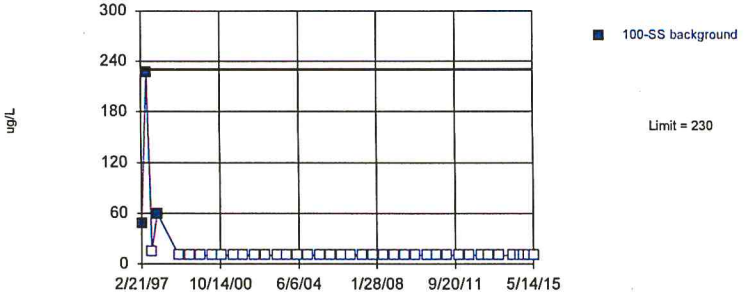

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Prediction Limit

Intrawell Non-parametric, 100-SS



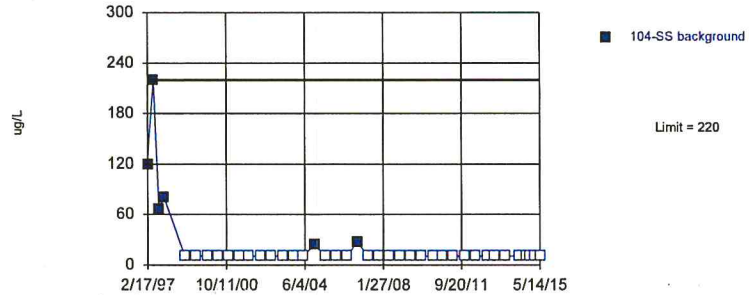

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Prediction Limit

Intrawell Non-parametric, 104-SS



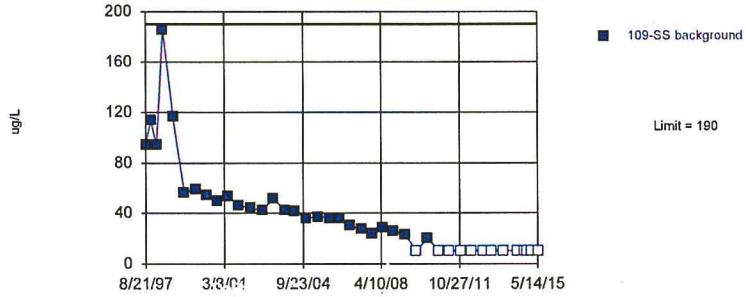

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Prediction Limit

Intrawell Non-parametric, 109-SS



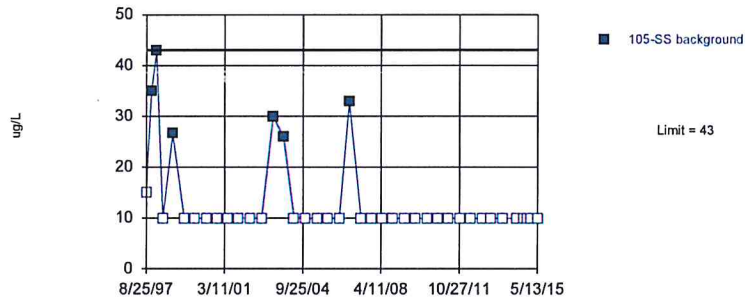

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 32.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, 105-SS




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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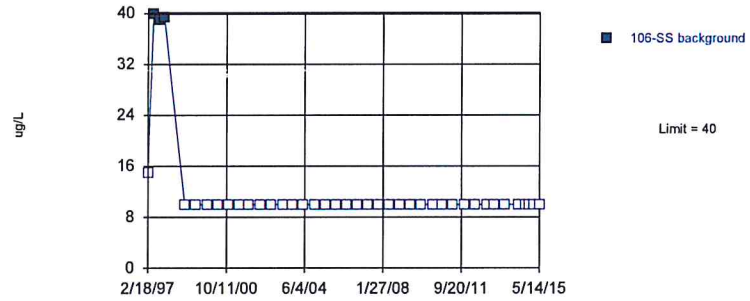
Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, 106-SS




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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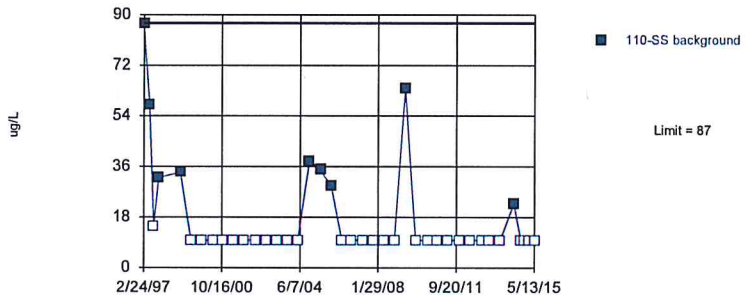
Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, 110-SS




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 77.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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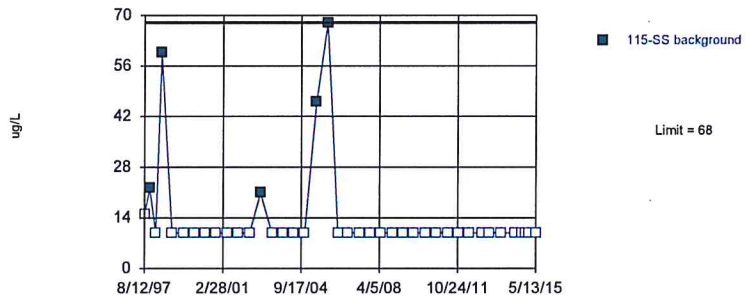
Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, 115-SS




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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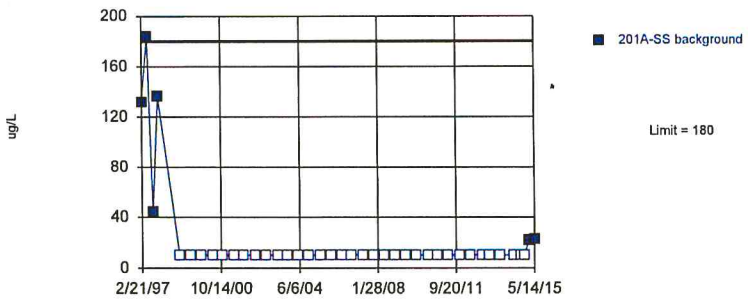
Hollow symbols indicate censored values.

## Prediction Limit

### Intrawell Non-parametric, 201A-SS




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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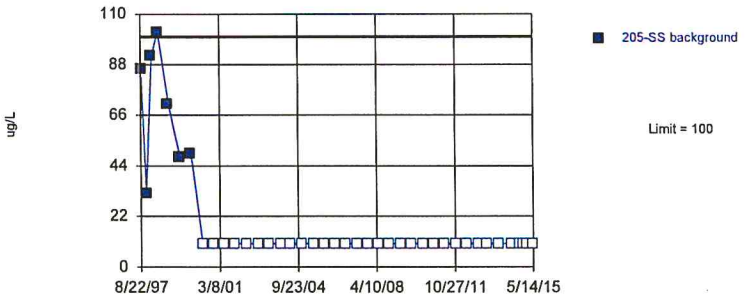
Hollow symbols indicate censored values.

## Prediction Limit

### Intrawell Non-parametric, 205-SS




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 12:05 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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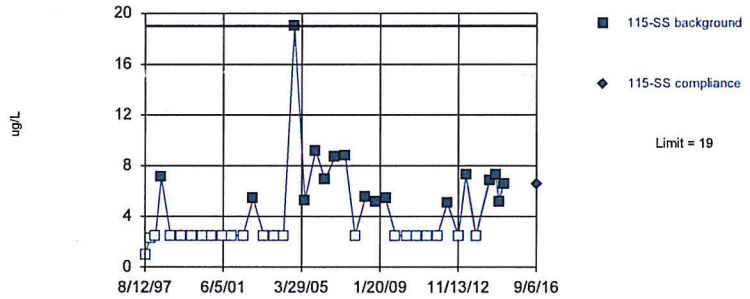
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 56.41% NDs. Well-constituent pair annual alpha = 0.004868. Individual comparison alpha = 0.001219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 1:06 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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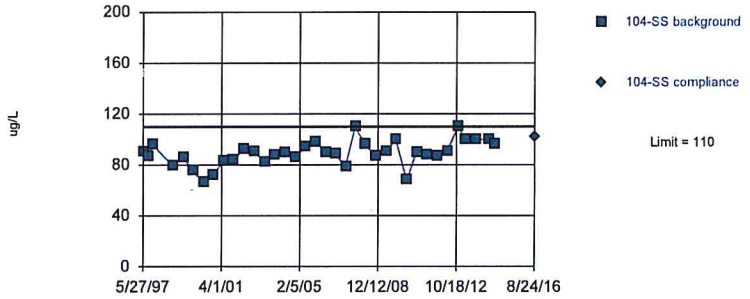
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=8075, Std. Dev.=1743, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9677, critical = 0.912. Kappa = 2.654 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 214 (2/17/1997).

Constituent: Barium Total Analysis Run 10/10/2016 1:06 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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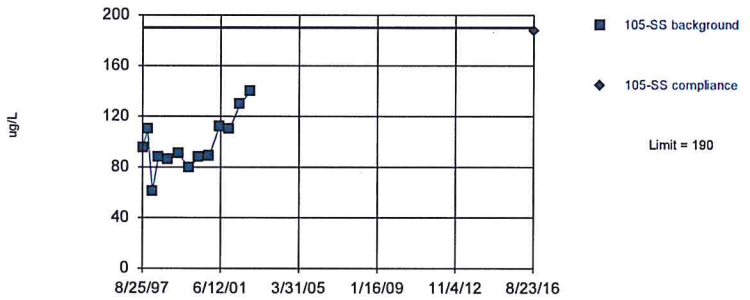
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=4.594, Std. Dev.=0.3338, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9537, critical = 0.866. Kappa = 3.446 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 1:07 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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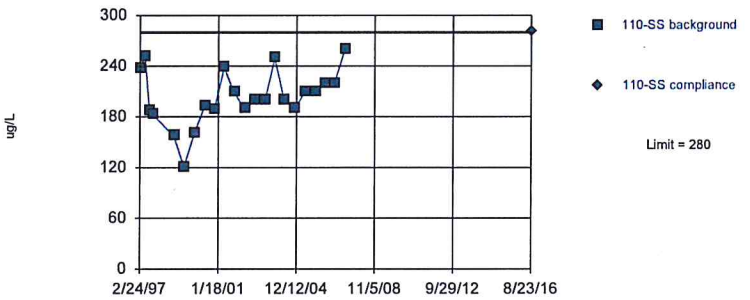
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=42528, Std. Dev.=13153, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9665, critical = 0.878. Kappa = 2.899 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 1:07 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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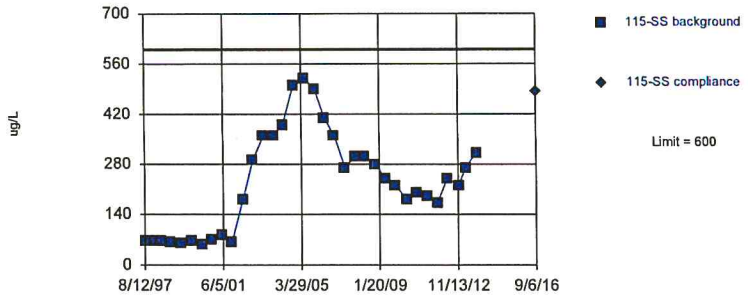
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=228, Std. Dev.=139.9, n=35. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9107, critical = 0.91. Kappa = 2.664 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 1:08 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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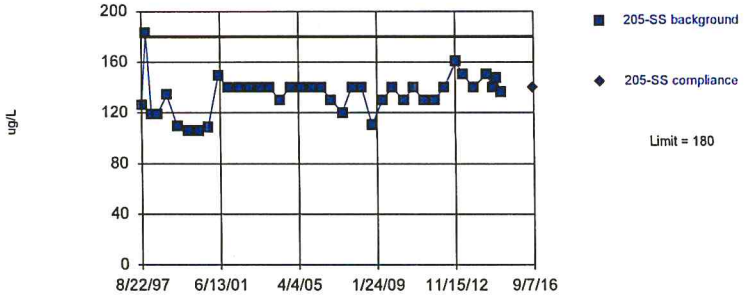
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. Well-constituent pair annual alpha = 0.004868. Individual comparison alpha = 0.001219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Barium Total Analysis Run 10/10/2016 1:09 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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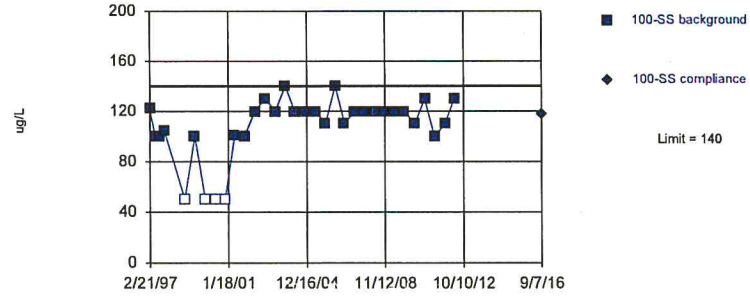
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=1.7e8, Std. Dev.=9.7e7, n=32, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9258, critical = 0.904. Kappa = 2.7 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 1:09 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

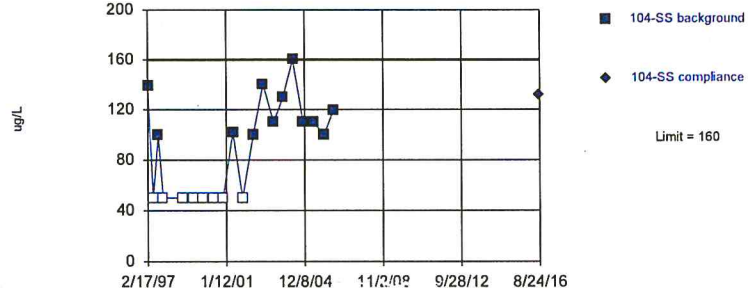
Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.01677. Individual comparison alpha = 0.004219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 1:09 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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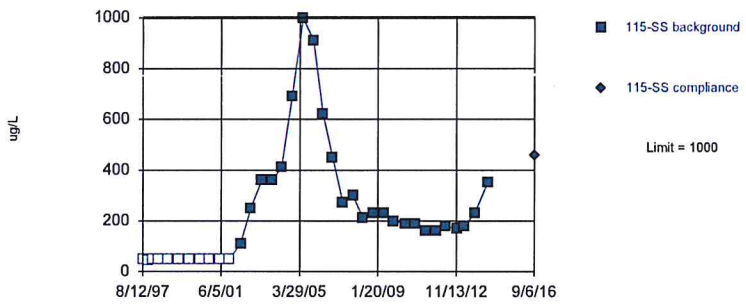
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 30.56% NDs. Well-constituent pair annual alpha = 0.005668. Individual comparison alpha = 0.00142 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 1:10 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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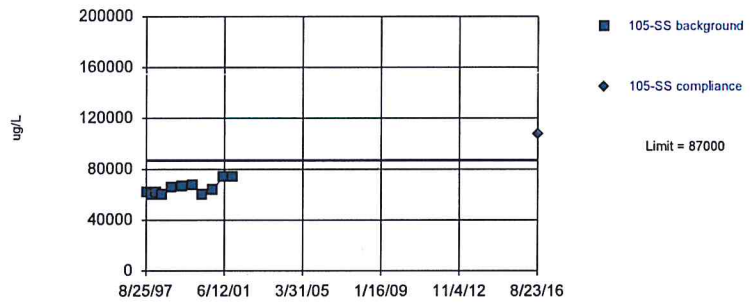
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.08, Std. Dev.=0.07786, n=11. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8783, critical = 0.85. Kappa = 3.728 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 1:11 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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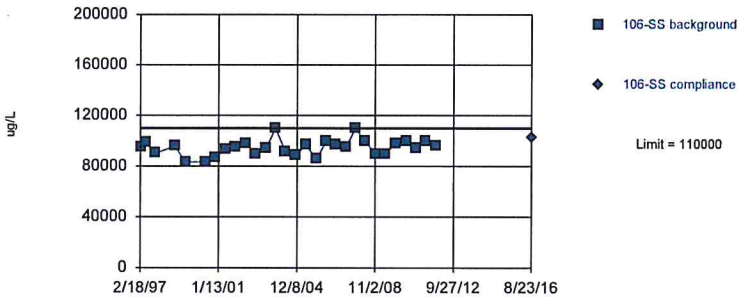
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.46, Std. Dev.=0.06699, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9547, critical = 0.898. Kappa = 2.741 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 60000 (8/25/1997); 9000 (11/19/1999).

Constituent: Calcium Total Analysis Run 10/10/2016 1:11 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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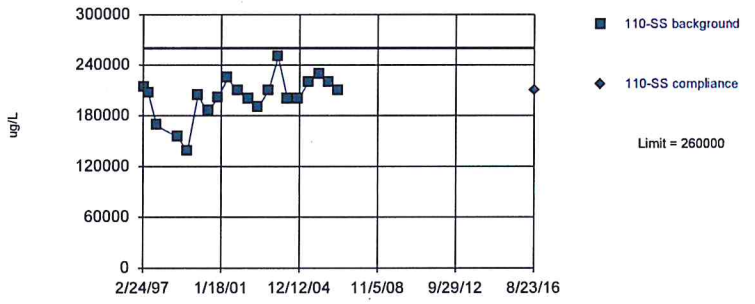
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=8.6e15, Std. Dev.=2.9e15, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.966, critical = 0.868. Kappa = 2.957 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. One background outlier was removed: 91000 (8/22/1997).

Constituent: Calcium Total Analysis Run 10/10/2016 1:11 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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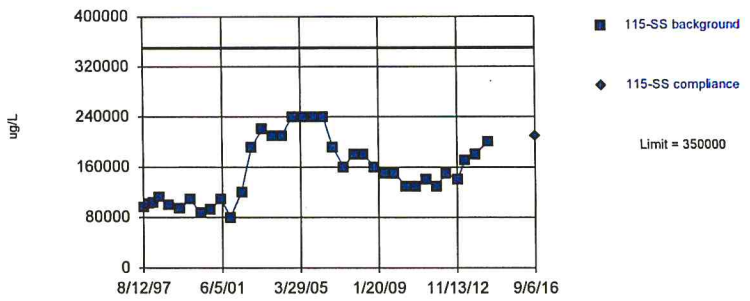
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.89, Std. Dev.=0.3286, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9447, critical = 0.912. Kappa = 2.654 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 1:12 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=85186, Std. Dev.=6232, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9801, critical = 0.878. Kappa = 2.899 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 1:12 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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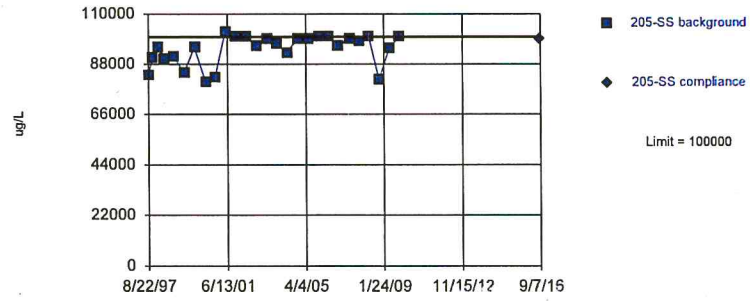
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. Well-constituent pair annual alpha = 0.009865. Individual comparison alpha = 0.002475 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Calcium Total Analysis Run 10/10/2016 1:12 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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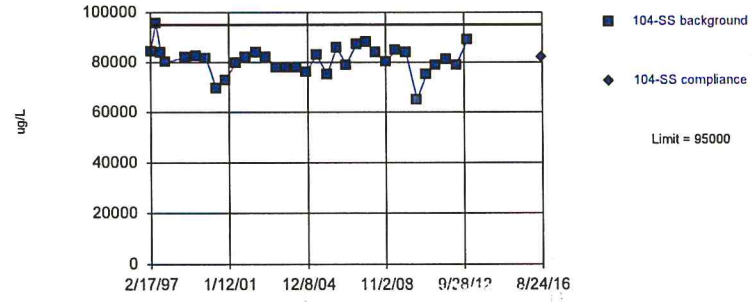
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=6.6e9, Std. Dev.=9.2e8, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9749, critical = 0.906. Kappa = 2.688 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 1:13 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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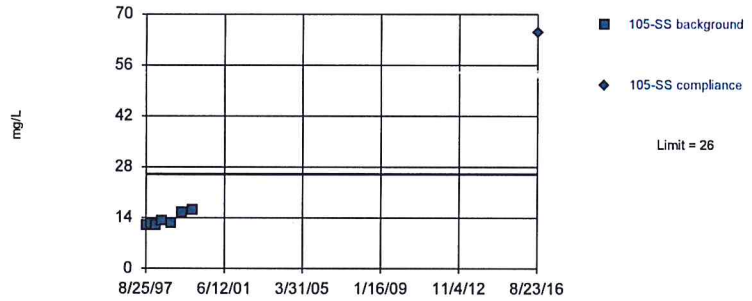
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=2.586, Std. Dev.=0.1213, n=7. Normality test: Shapiro Wilk @alpha = 0.1, calculated = 0.8516, critical = 0.838. Kappa = 5.42 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 10/10/2016 1:13 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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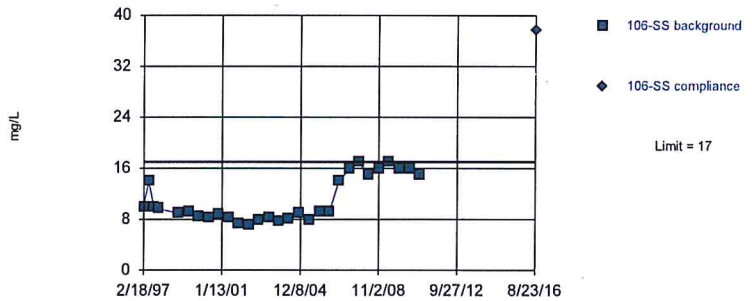
Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. Well-constituent pair annual alpha = 0.00858. Individual comparison alpha = 0.002152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 1:14 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=176, Std. Dev.=36.15, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9609, critical = 0.896. Kappa = 2.759 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: <3 (5/21/2002).

Constituent: Chloride Analysis Run 10/10/2016 1:14 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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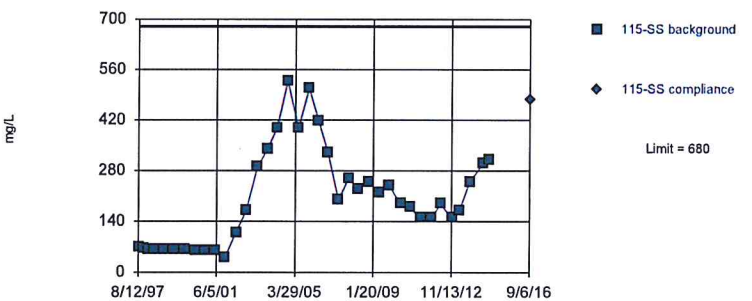
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=13.59, Std. Dev.=4.687, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9332, critical = 0.914. Kappa = 2.645 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 10/10/2016 1:14 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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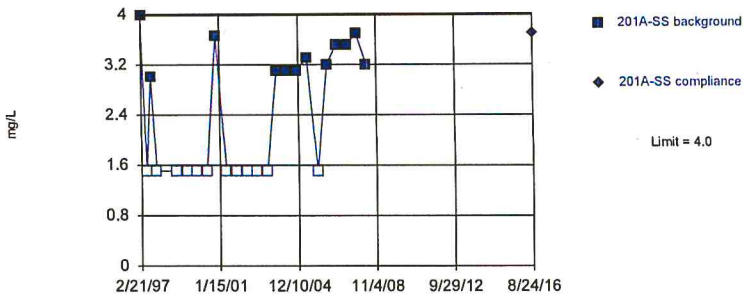
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. 50% NDs. Well-constituent pair annual alpha = 0.01227. Individual comparison alpha = 0.003083 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 1:17 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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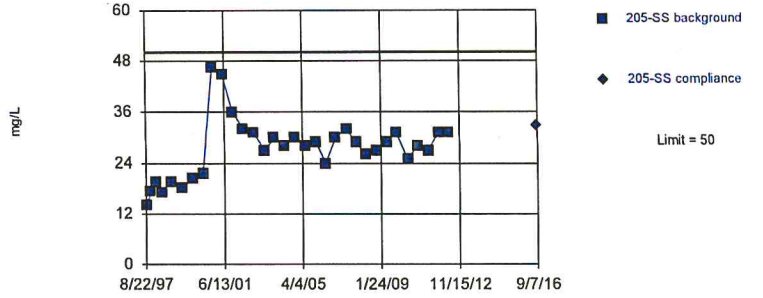
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=2.998, Std. Dev.=0.2584, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9458, critical = 0.904. Kappa = 2.7 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 10/10/2016 1:17 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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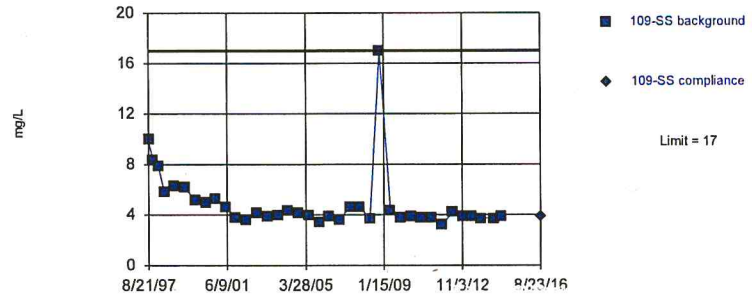
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 37 background values. Well-constituent pair annual alpha = 0.005401. Individual comparison alpha = 0.001353 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 1:18 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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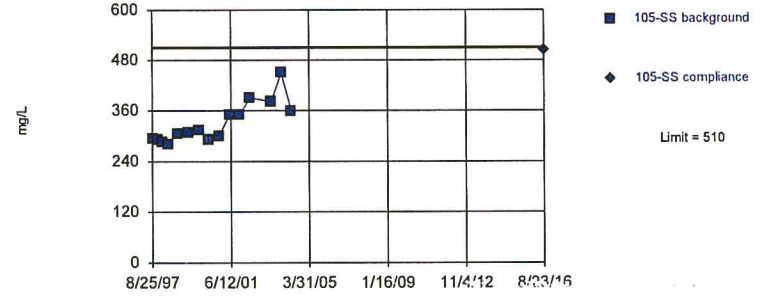
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.79, Std. Dev.=0.1385, n=15. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8889, critical = 0.881. Kappa = 3.25 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. One background outlier was removed: 130 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 1:18 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=20.59, Std. Dev.=0.6924, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.898. Kappa = 2.741 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. Two background outliers were removed: 265 (8/25/1997); 130 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 1:19 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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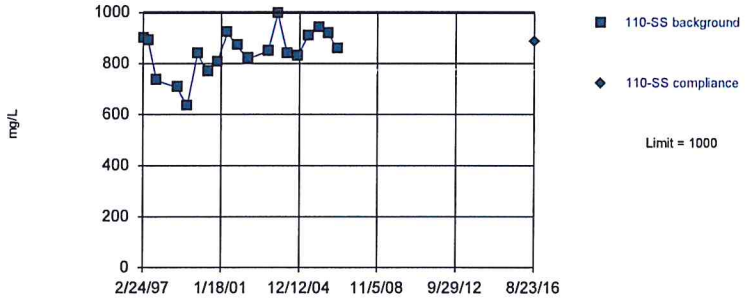
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=6.2e8, Std. Dev.=1.8e8, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9879, critical = 0.901. Kappa = 3.006 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. Two background outliers were removed: 437 (8/22/1997); 270 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 1:19 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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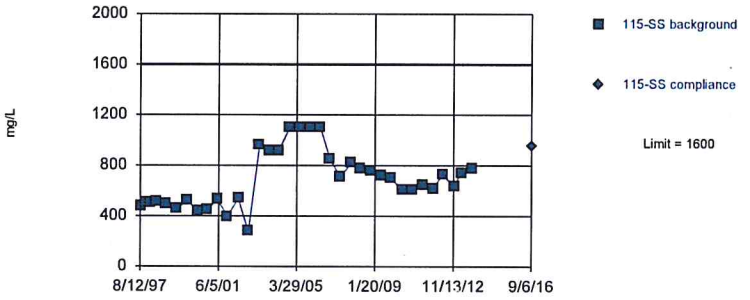
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.483, Std. Dev.=0.3251, n=35. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9662, critical = 0.91. Kappa = 2.664 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Hardness Total Analysis Run 10/10/2016 1:19 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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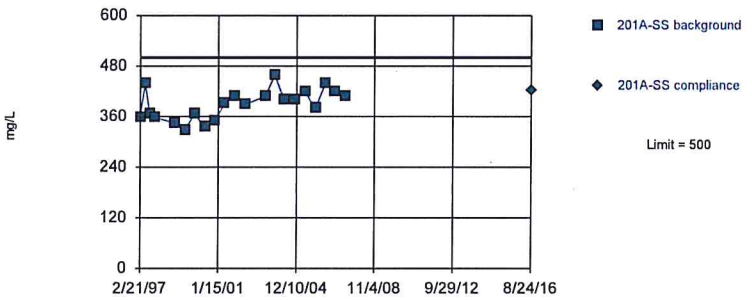
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=19.72, Std. Dev.=0.9201, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9763, critical = 0.873. Kappa = 2.928 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. One background outlier was removed: 120 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 1:20 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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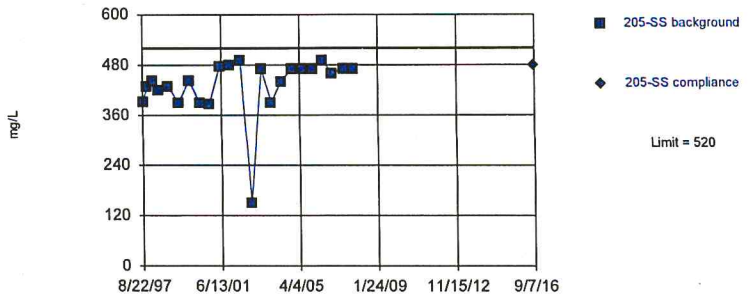
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^6 transformation): Mean=8.0e15, Std. Dev.=3.9e15, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.936, critical = 0.881. Kappa = 2.87 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Hardness Total Analysis Run 10/10/2016 1:21 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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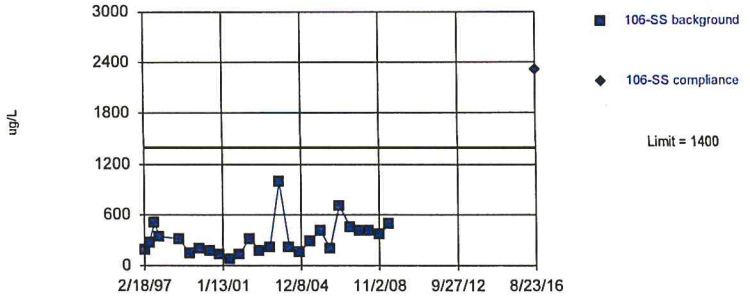
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.605, Std. Dev.=0.5835, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9865, critical = 0.891. Kappa = 2.795 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 1:21 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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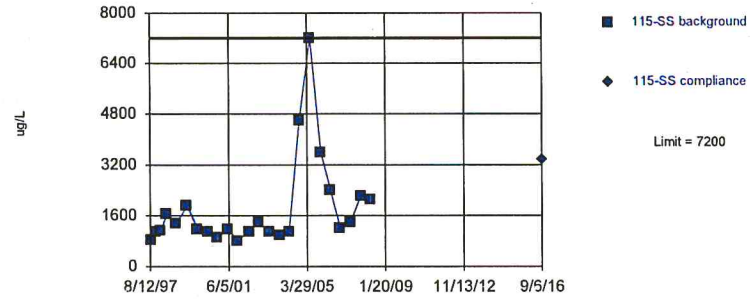
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. Well-constituent pair annual alpha = 0.01227. Individual comparison alpha = 0.003083 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Iron Total Analysis Run 10/10/2016 1:22 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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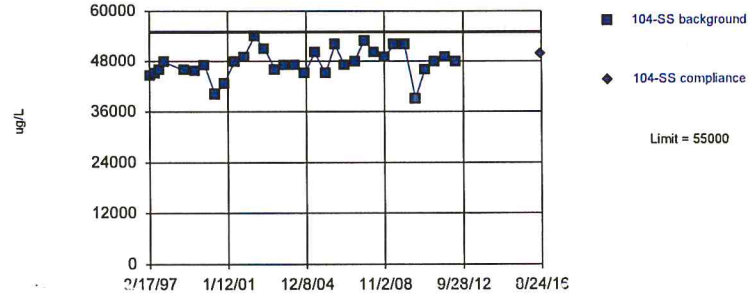
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.1e14, Std. Dev.=2.3e13, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.973, critical = 0.904. Kappa = 2.7 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 1:22 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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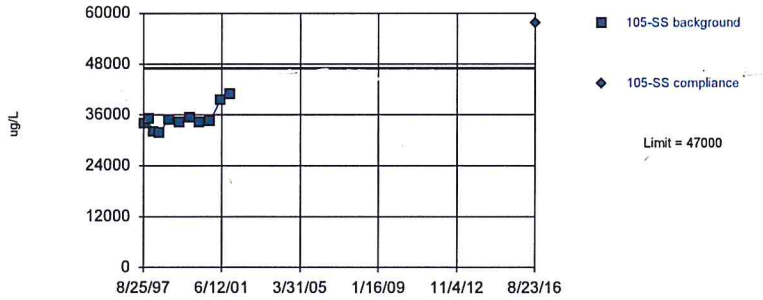
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.46, Std. Dev.=0.07764, n=11. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8517, critical = 0.85. Kappa = 3.728 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 1:24 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.69, Std. Dev.=0.07281, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9844, critical = 0.888. Kappa = 2.812 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 28000 (8/25/1997).

Constituent: Magnesium Total Analysis Run 10/10/2016 1:24 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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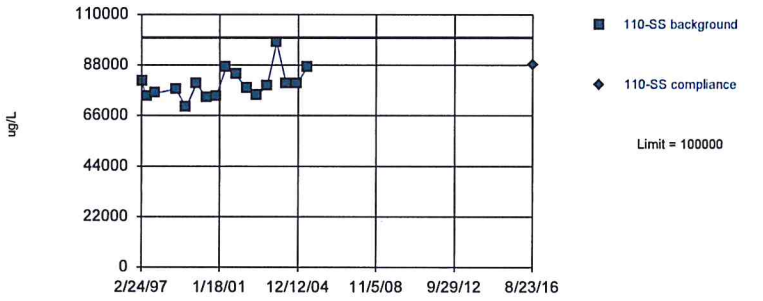
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.28, Std. Dev.=0.07957, n=17. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9293, critical = 0.892. Kappa = 3.104 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. One background outlier was removed: 51000 (8/22/1997).

Constituent: Magnesium Total Analysis Run 10/10/2016 1:24 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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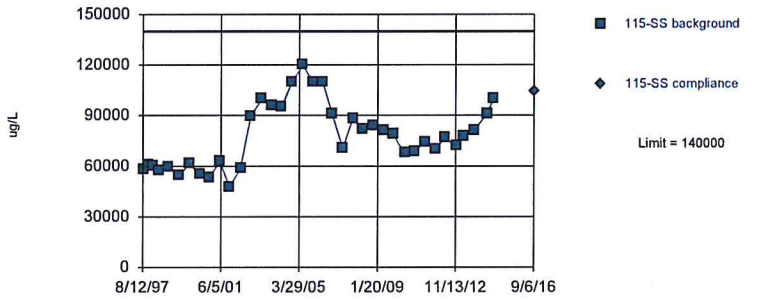
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.23, Std. Dev.=0.2383, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9667, critical = 0.914. Kappa = 2.645 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 1:25 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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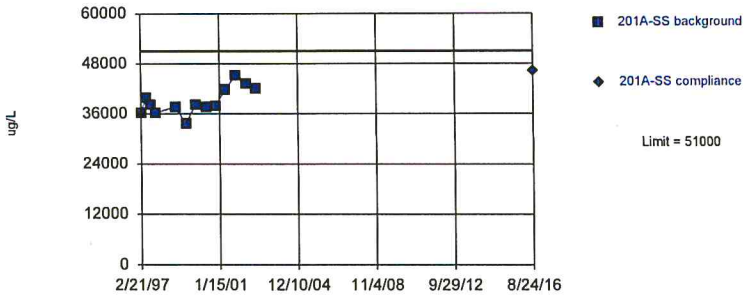
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.57, Std. Dev.=0.08112, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9611, critical = 0.866. Kappa = 3.446 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 1:27 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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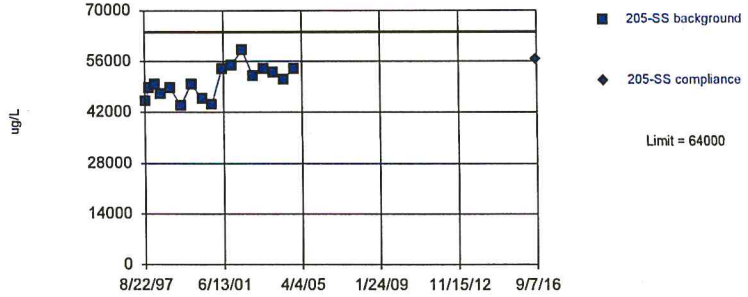
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=224, Std. Dev.=9.563, n=17. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9653, critical = 0.892. Kappa = 3.104 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 1:28 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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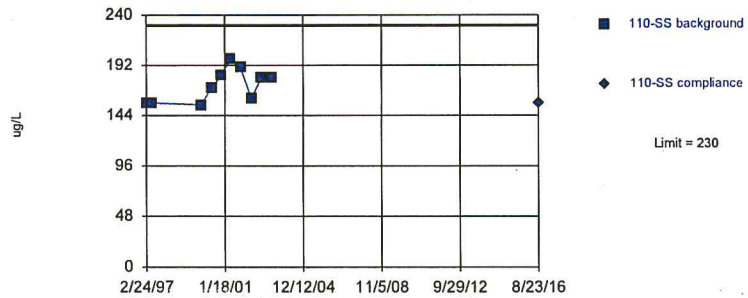
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=30012, Std. Dev.=5451, n=10. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9116, critical = 0.842. Kappa = 3.913 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. Four background outliers were removed: 20 (8/22/1997); 101 (11/8/1997); 70.8 (11/13/1998); 54.5 (5/18/1999).

Constituent: Manganese Total Analysis Run 10/10/2016 1:28 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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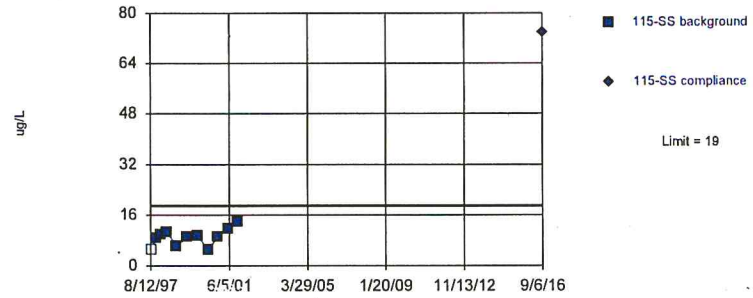
Hollow symbols indicate censored values.

Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=8.983, Std. Dev.=2.739, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9428, critical = 0.85. Kappa = 3.728 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. One background outlier was removed: 47 (5/21/2002).

Constituent: Manganese Total Analysis Run 10/10/2016 1:28 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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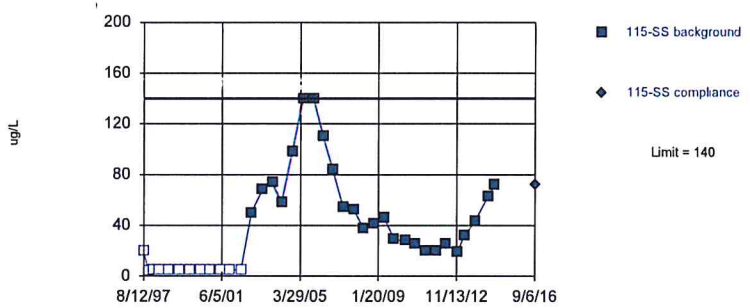
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 37 background values. 32.43% NDs. Well-constituent pair annual alpha = 0.005401. Individual comparison alpha = 0.001353 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 10/10/2016 1:29 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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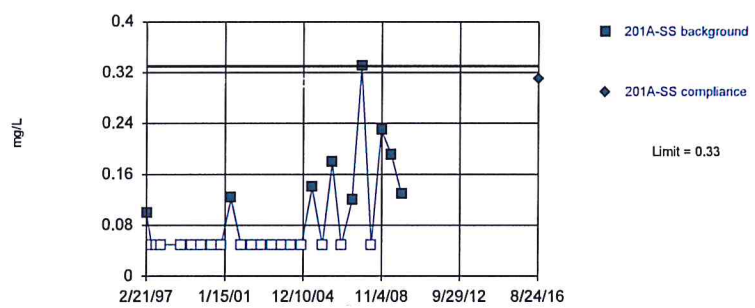
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.009865. Individual comparison alpha = 0.002475 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 1:29 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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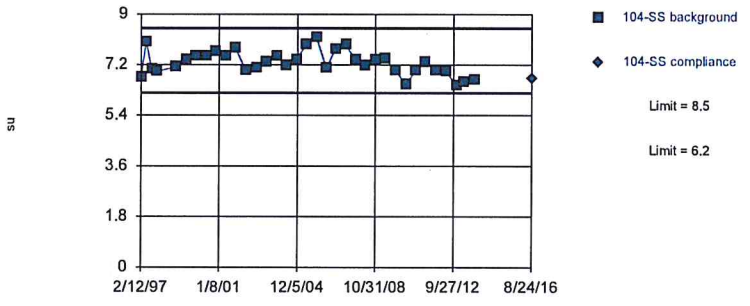
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.983, Std. Dev.=0.05825, n=35. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9752, critical = 0.91. Kappa = 2.664 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 1:30 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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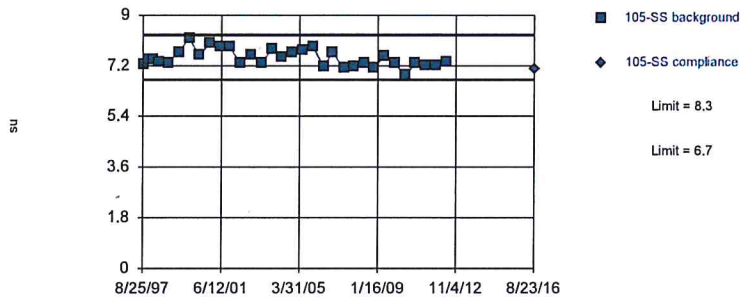
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=2.012, Std. Dev.=0.04035, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.904. Kappa = 2.7 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 1:30 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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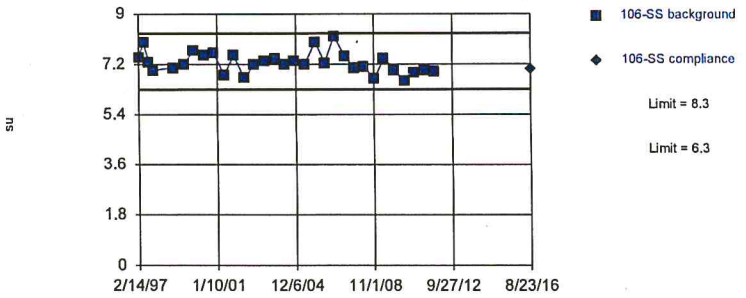
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.98, Std. Dev.=0.05226, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9745, critical = 0.902. Kappa = 2.712 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 1:31 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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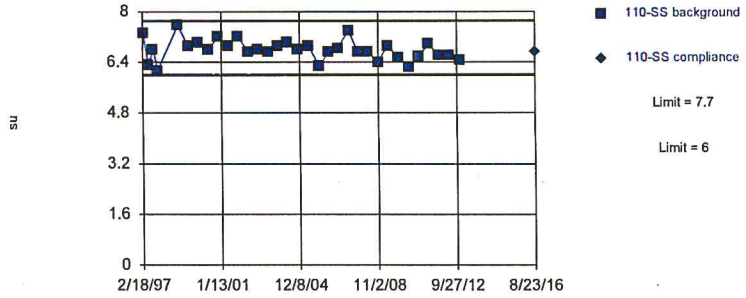
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.914, Std. Dev.=0.04822, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9795, critical = 0.906. Kappa = 2.688 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 1:31 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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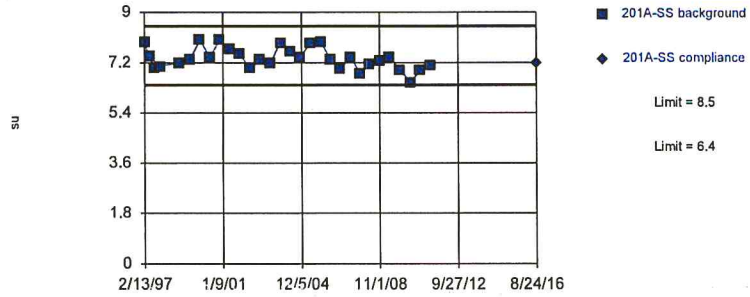
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.993, Std. Dev.=0.05282, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9571, critical = 0.9. Kappa = 2.724 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 1:31 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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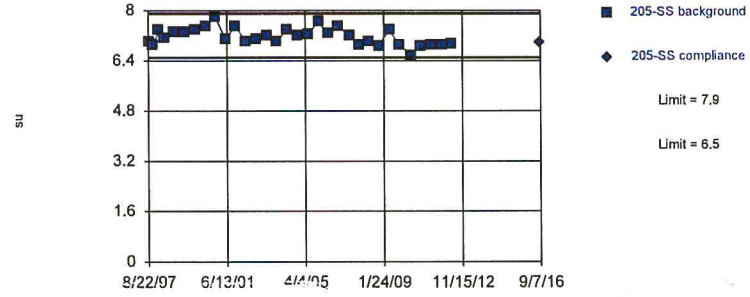
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.969, Std. Dev.=0.03712, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9742, critical = 0.904. Kappa = 2.7 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 1:32 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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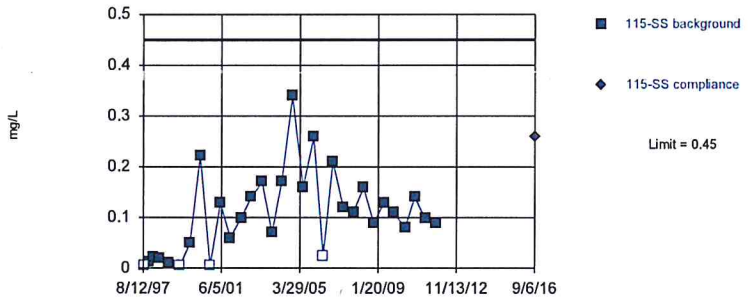
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=0.2985, Std. Dev.=0.1361, n=31, 12.9% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9546, critical = 0.902. Kappa = 2.712 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Phosphorus Total Analysis Run 10/10/2016 1:32 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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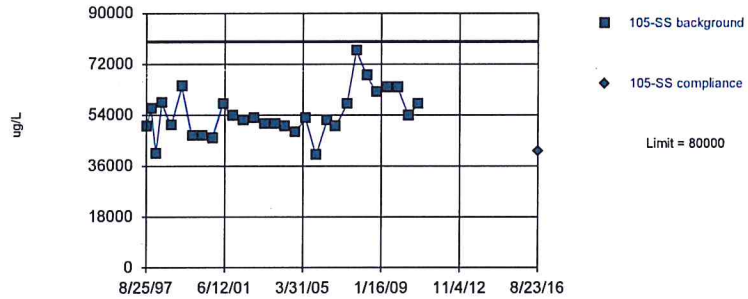
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.89, Std. Dev.=0.1457, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9758, critical = 0.898. Kappa = 2.741 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 1:33 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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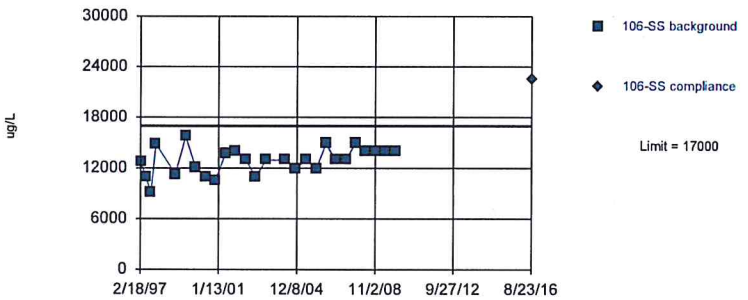
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=1.7e8, Std. Dev.=4.0e7, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9718, critical = 0.891. Kappa = 2.795 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 20000 (11/20/2003).

Constituent: Sodium Total Analysis Run 10/10/2016 1:33 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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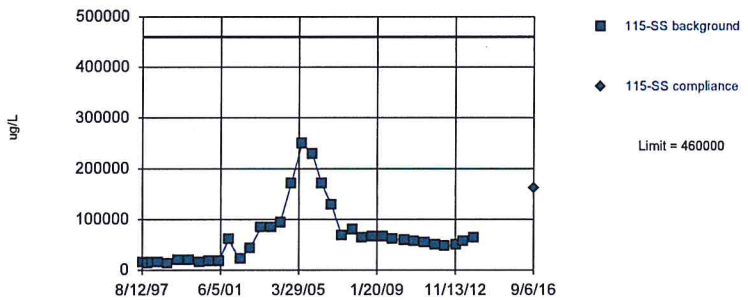
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.78, Std. Dev.=0.8461, n=35. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9195, critical = 0.91. Kappa = 2.664 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 1:33 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=813.5, Std. Dev.=87.59, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9753, critical = 0.878. Kappa = 2.899 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 1:34 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^5 transformation): Mean=1.9e16, Std. Dev.=1.0e16, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9728, critical = 0.881. Kappa = 2.87 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 1:34 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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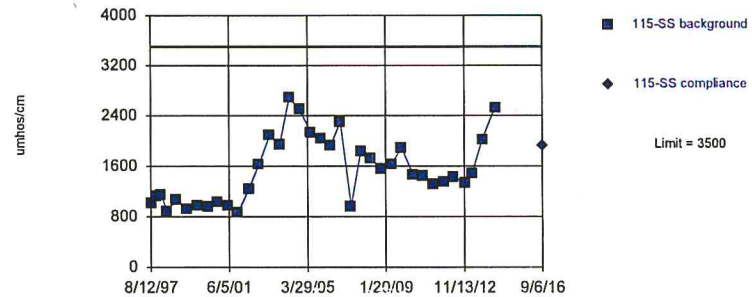
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=7.284, Std. Dev.=0.335, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9415, critical = 0.912. Kappa = 2.654 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 1:34 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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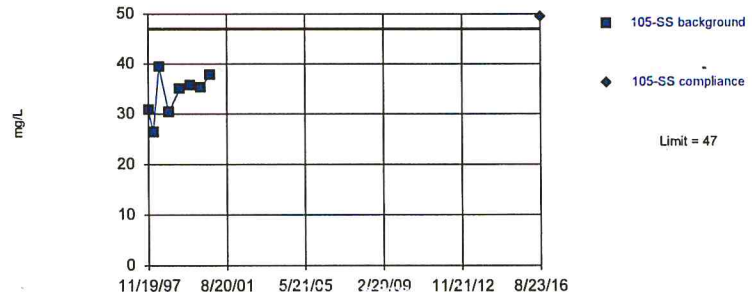
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=40346, Std. Dev.=14371, n=8. Normality test: Shapiro Wilk @alpha = 0.1, calculated = 0.9665, critical = 0.851. Kappa = 4.597 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Dixon's outlier test was performed on the background data. One background outlier was removed: 13 (8/25/1997).

Constituent: Sulfate Analysis Run 10/10/2016 1:35 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=4.083, Std. Dev.=0.141, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9812, critical = 0.914. Kappa = 2.645 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. Rosner's outlier test was performed on the background data. One background outlier was removed: 99 (2/21/1997).

Constituent: Sulfate Analysis Run 10/10/2016 1:35 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.01677. Individual comparison alpha = 0.004219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 1:36 PM

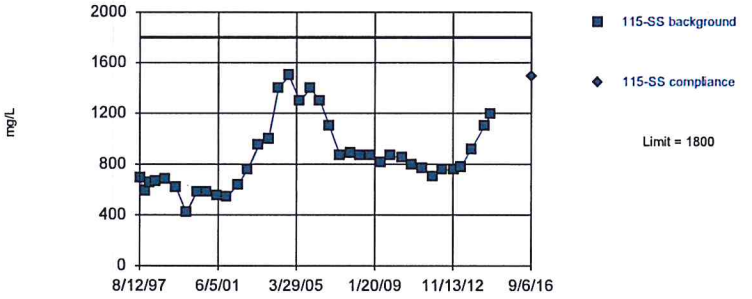
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.71, Std. Dev.=0.3007, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9719, critical = 0.914. Kappa = 2.645 (c=34, w=9, 1 of 2, event alpha = 0.026). Report alpha = 0.00008608. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 1:36 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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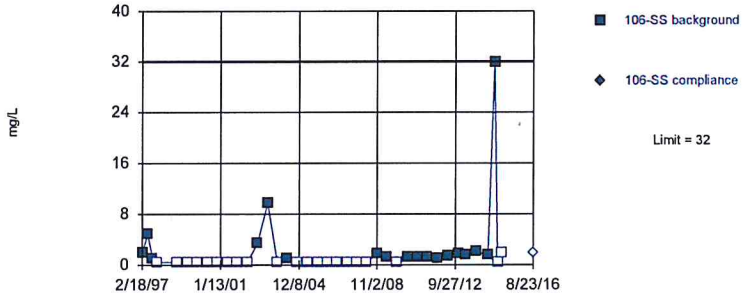
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.004868. Individual comparison alpha = 0.001219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 1:36 PM

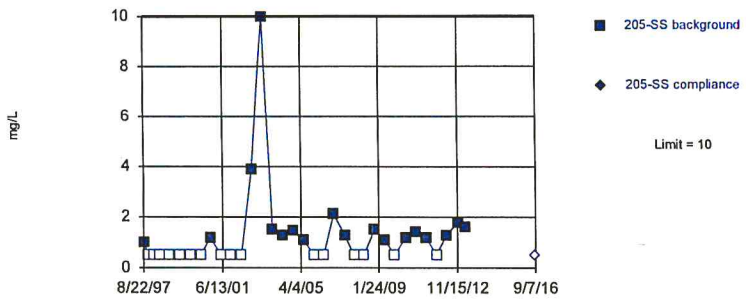
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 47.06% NDs. Well-constituent pair annual alpha = 0.006335. Individual comparison alpha = 0.001587 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 1:37 PM

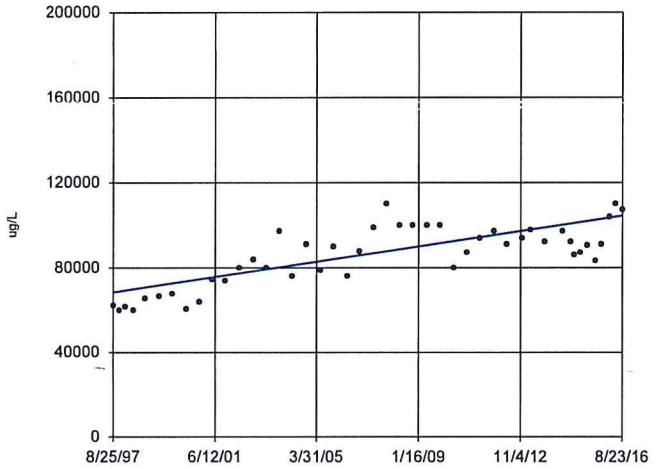
Bridgeton LF Client: RSI Data: Bridgeton LF

# TREND EVALUATION OF EXCEEDING CONSTITUENTS

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

105-SS




n = 45

Slope = 1889 units per year.

Mann-Kendall normal approx. = 5.161 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

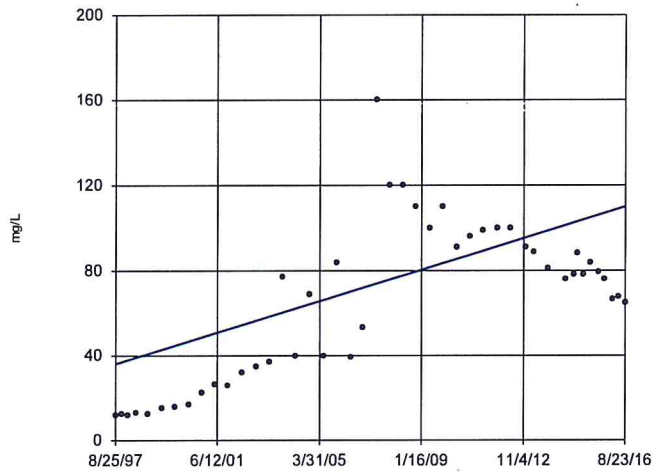
Constituent: Calcium Total Analysis Run 10/11/2016 9:18 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

105-SS




n = 45

Slope = 3.884 units per year.

Mann-Kendall normal approx. = 4.13 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

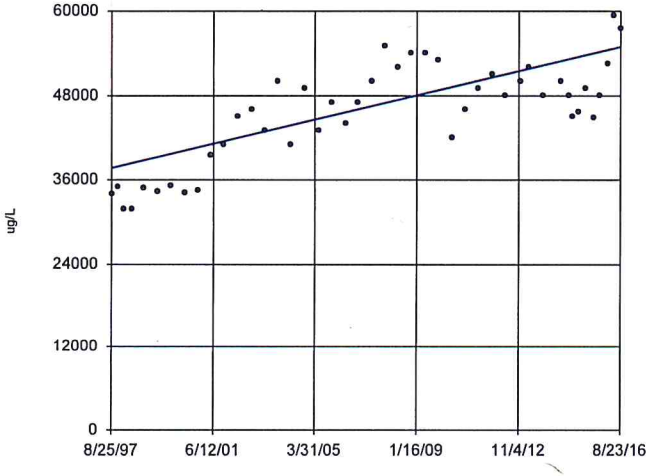
Constituent: Chloride Analysis Run 10/11/2016 9:18 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

105-SS




n = 45

Slope = 907.6 units per year.

Mann-Kendall normal approx. = 5.084 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 10/11/2016 9:18 AM

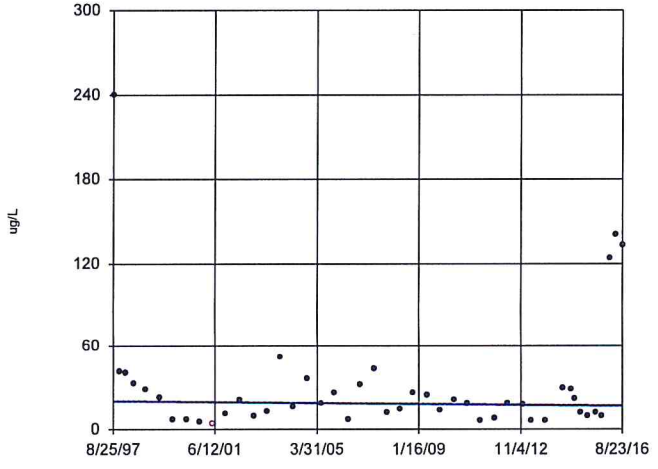
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS




n = 45

Slope = -0.1809 units per year.

Mann-Kendall normal approx. = -0.4208 critical = -2.33

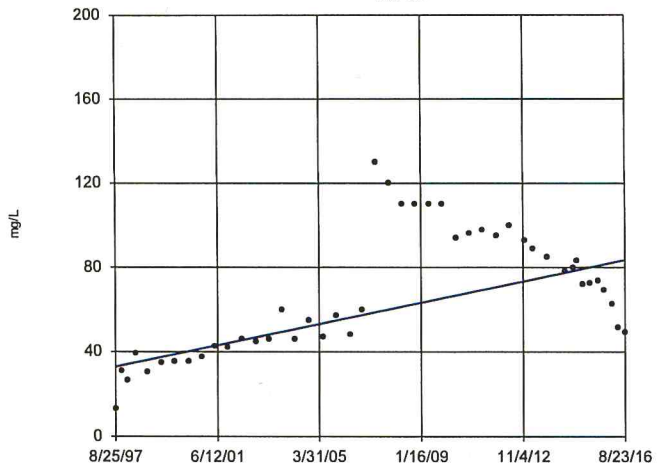
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 10/11/2016 9:19 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sen's Slope Estimator

105-SS




n = 45

Slope = 2.668 units per year.

Mann-Kendall normal approx. = 4.062
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 10/11/2016 9:19 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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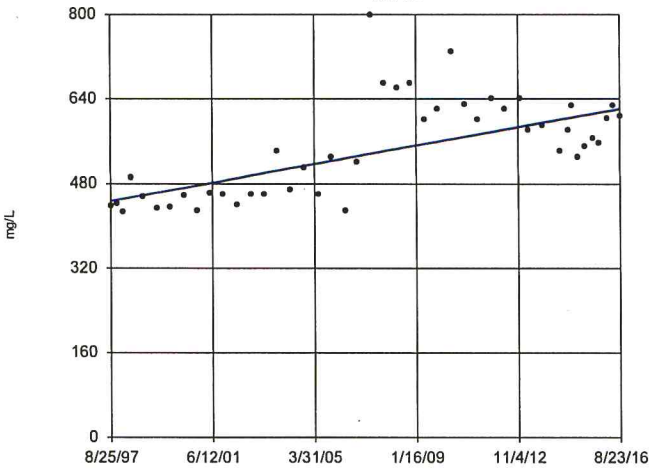
Sen's Slope Estimator

105-SS




n = 45

Slope = 9.126 units per year.

Mann-Kendall normal approx. = 4.484
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/11/2016 9:19 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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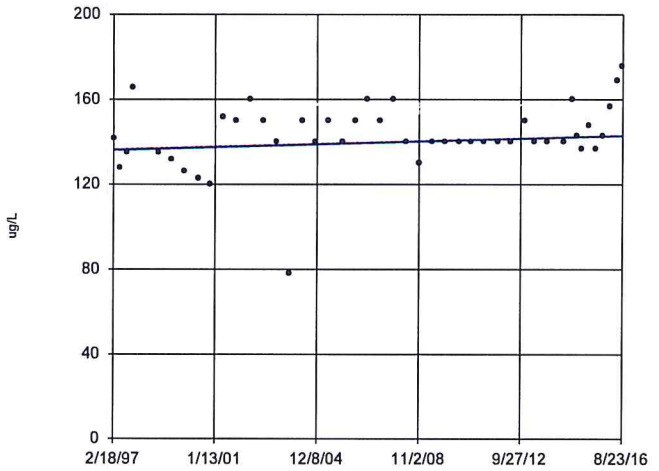
Sen's Slope Estimator

106-SS




n = 45

Slope = 0.3432 units per year.

Mann-Kendall normal approx. = 1.675
critical = 2.33

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 10/11/2016 9:19 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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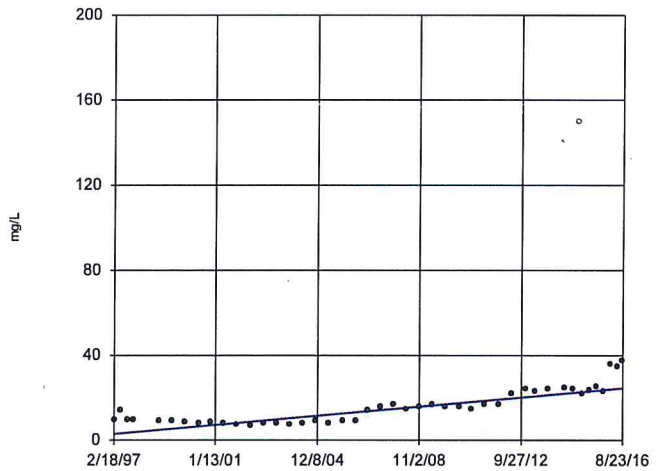
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS




n = 45

Slope = 1.107 units per year.

Mann-Kendall normal approx. = 6.239
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

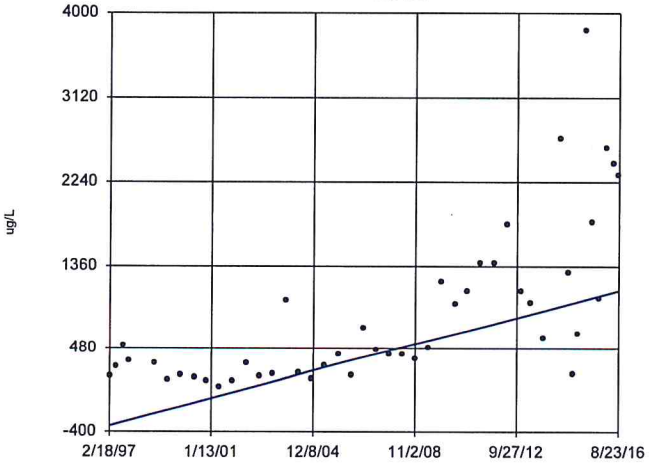
Constituent: Chloride Analysis Run 10/11/2016 9:19 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

106-SS




n = 45

Slope = 73.98 units per year.

Mann-Kendall normal approx. = 5.685
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

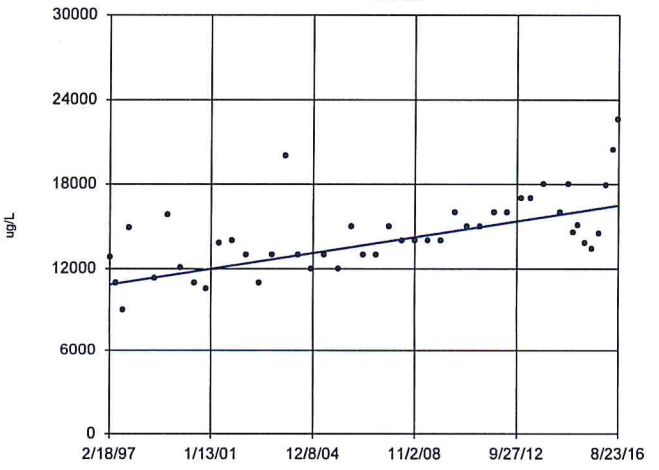
Constituent: Iron Total Analysis Run 10/11/2016 9:19 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

106-SS




n = 45

Slope = 288.1 units per year.

Mann-Kendall normal approx. = 5.055
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 10/11/2016 9:19 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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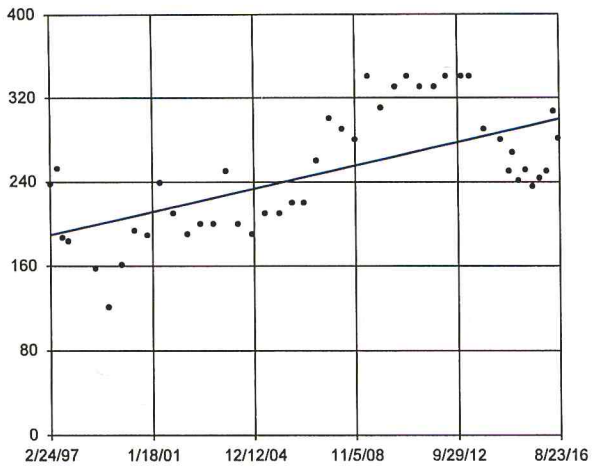
## Sen's Slope Estimator

110-SS




n = 45

Slope = 5.662 units per year.

Mann-Kendall normal approx. = 4.517
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 10/11/2016 9:20 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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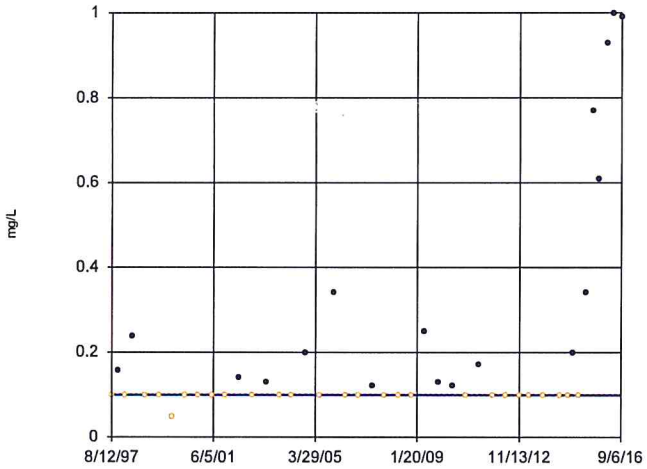
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS




n = 45

Slope = 0
units per year.

Mann-Kendall
normal approx. =
2.774
critical = 2.33

Increasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Ammonia as N Analysis Run 10/11/2016 12:45 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

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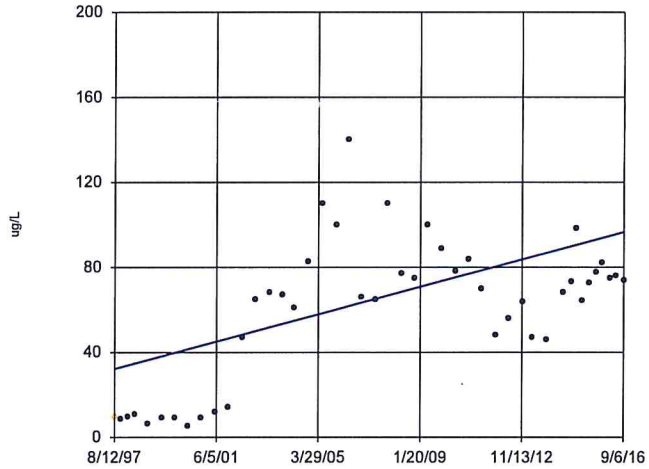
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS




n = 45

Slope = 3.374
units per year.

Mann-Kendall
normal approx. =
3.64
critical = 2.33

Increasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Manganese Total Analysis Run 10/11/2016 12:45 PM
Bridgeton LF Client: RSI Data: Bridgeton LF

# TIME SERIES GRAPHS

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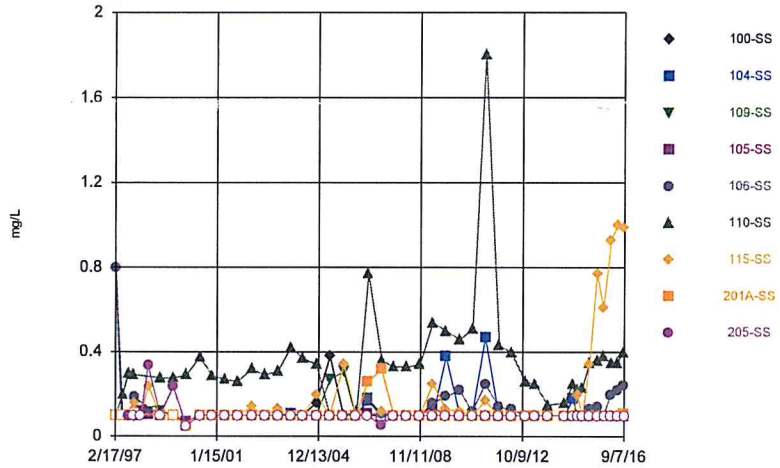
Hollow symbols indicate censored values.

## Time Series




Constituent: Ammonia as N Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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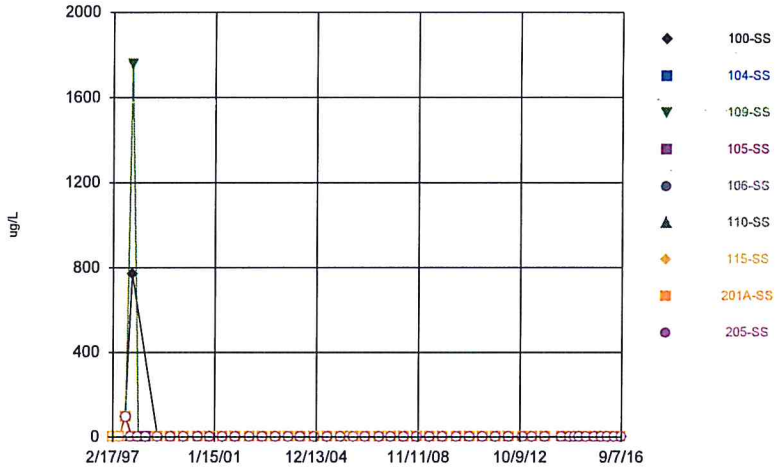
Hollow symbols indicate censored values.

## Time Series




Constituent: Antimony Total Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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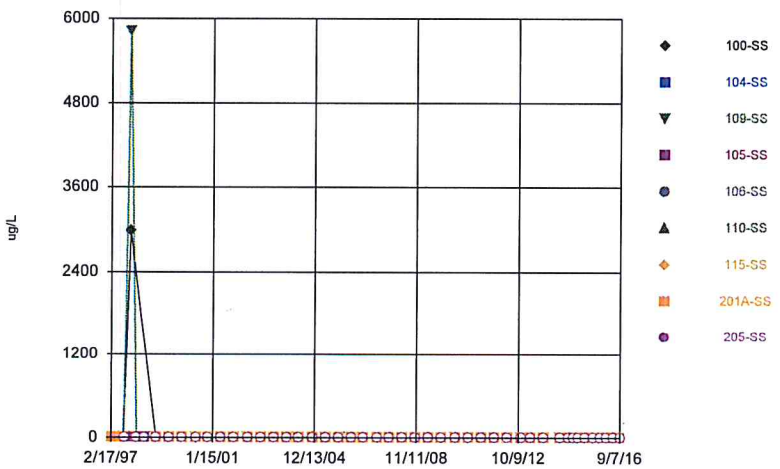
Hollow symbols indicate censored values.

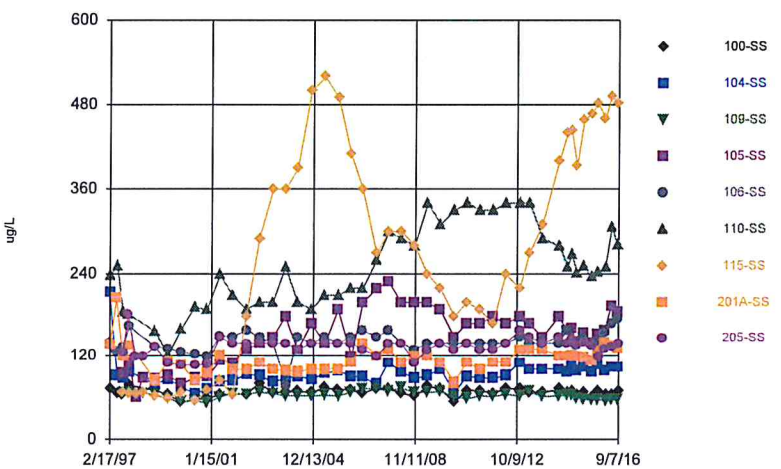
## Time Series




Constituent: Arsenic Total Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

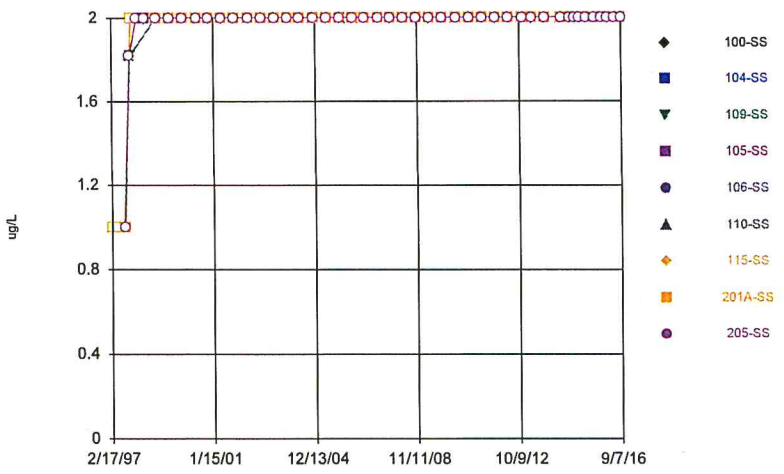
## Time Series




Constituent: Barium Total Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

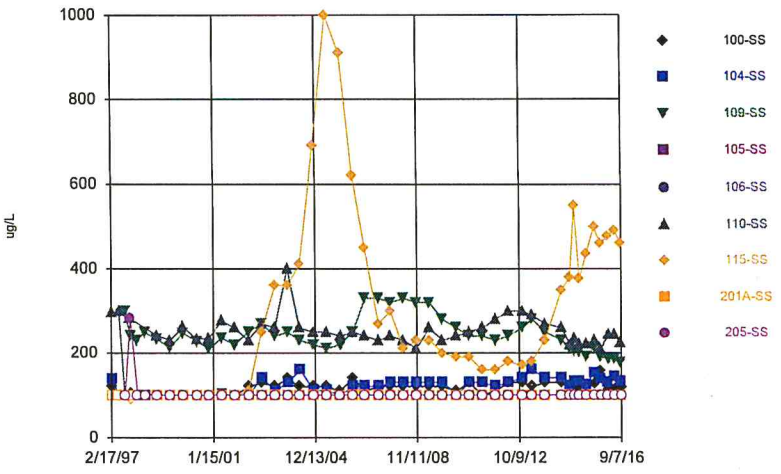
## Time Series




Constituent: Beryllium Total Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

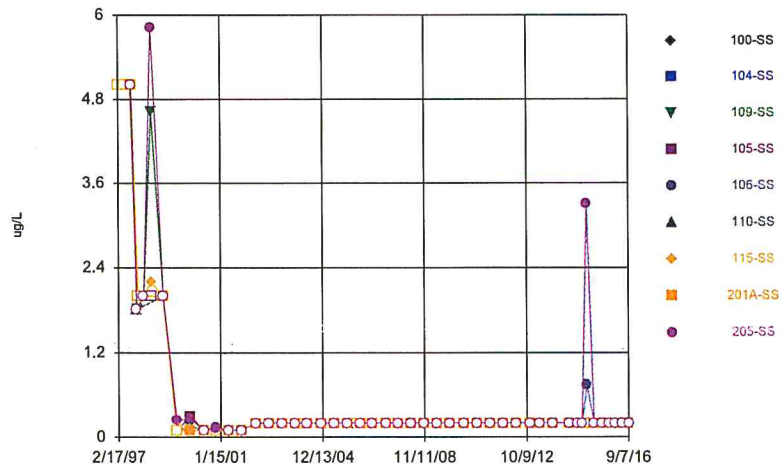
## Time Series




Constituent: Boron Total Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

## Time Series




Constituent: Cadmium Total Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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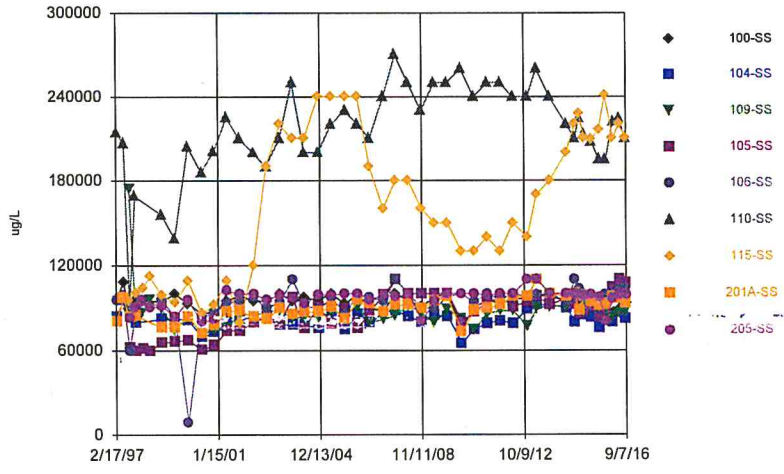
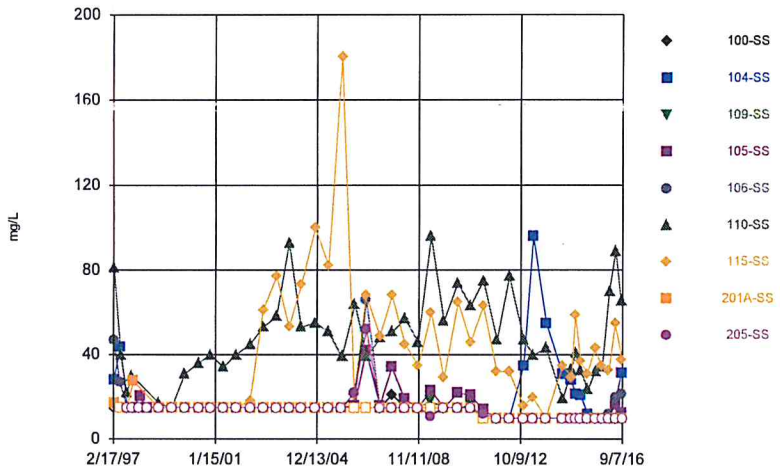
## Time Series




Constituent: Calcium Total Analysis Run 10/11/2016 6:31 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

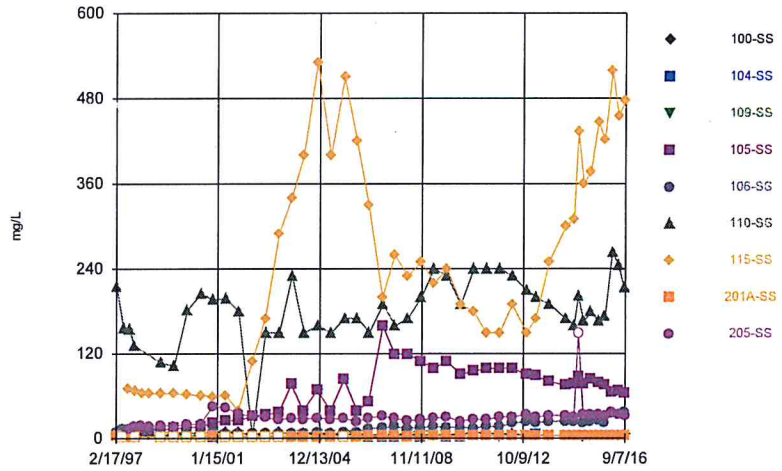
Time Series




Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

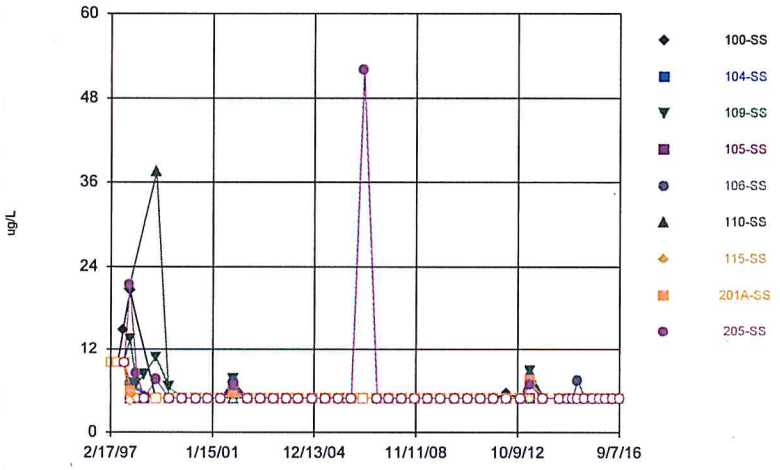
Time Series




Constituent: Chloride Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

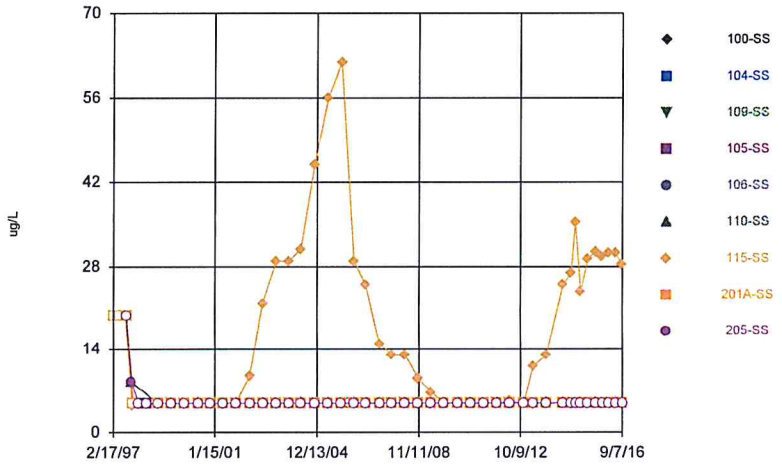
Time Series




Constituent: Chromium Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

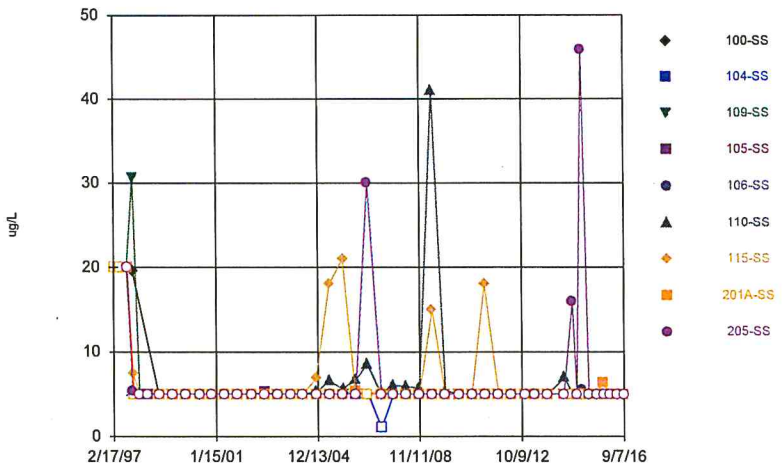
Time Series




Constituent: Cobalt Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

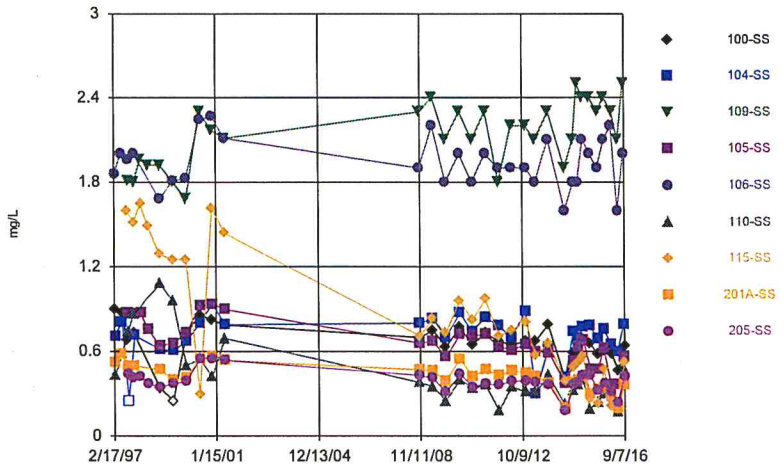
## Time Series




Constituent: Copper Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

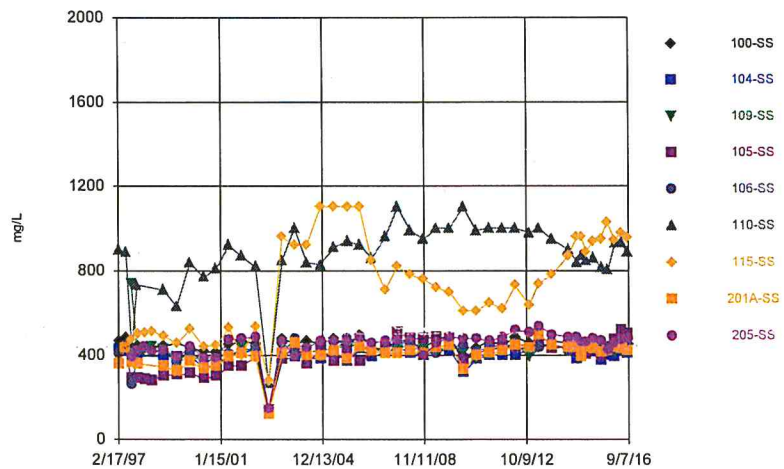
## Time Series




Constituent: Fluoride Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

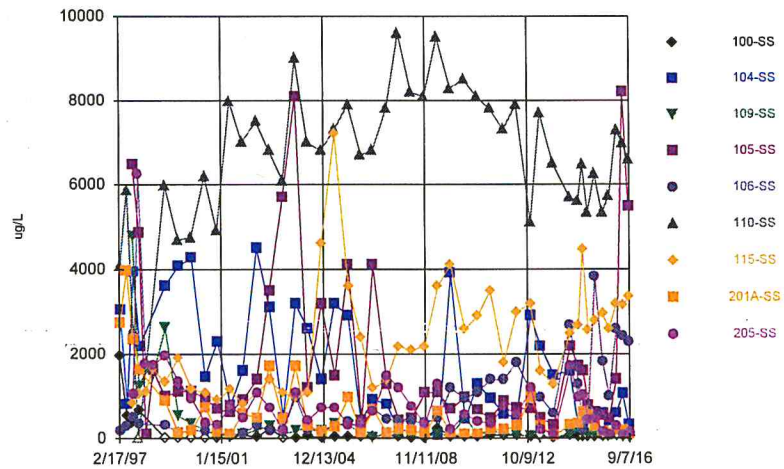
## Time Series




Constituent: Hardness Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

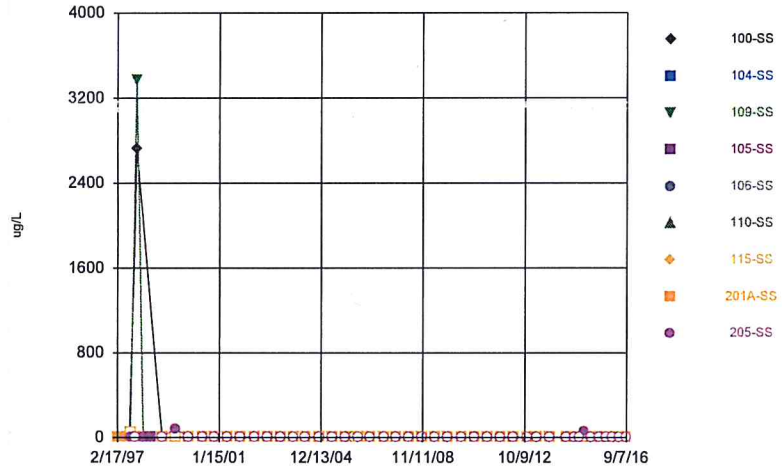
## Time Series




Constituent: Iron Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

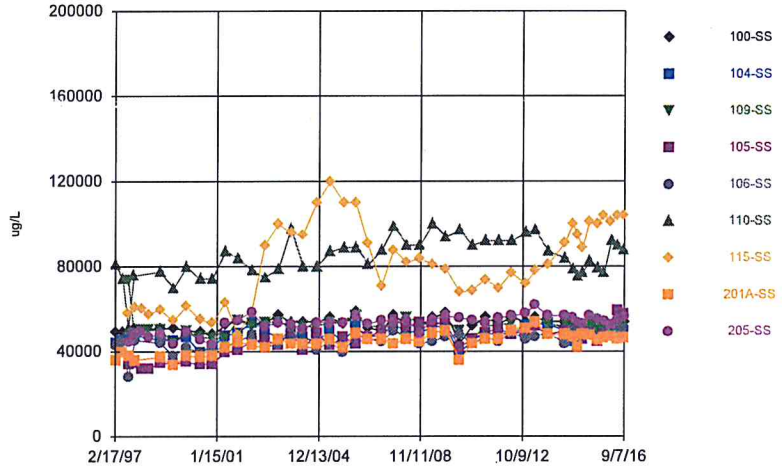
## Time Series




Constituent: Lead Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

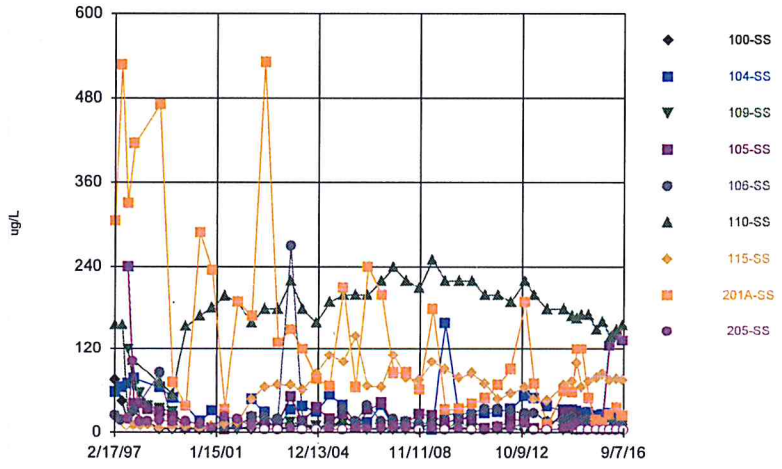
## Time Series




Constituent: Magnesium Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

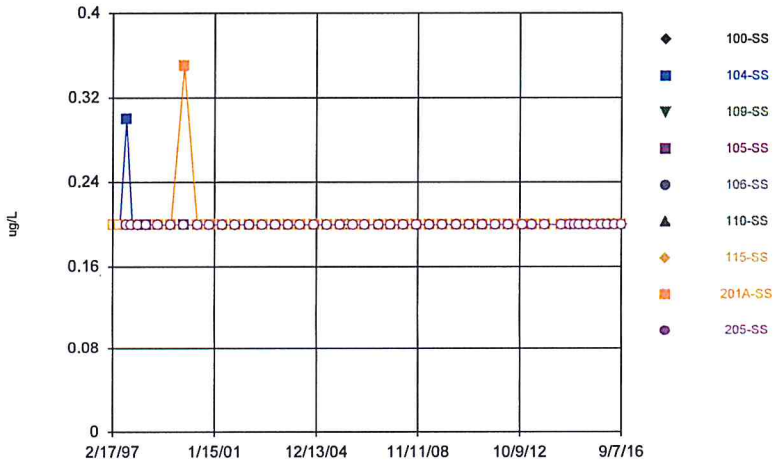
## Time Series




Constituent: Manganese Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

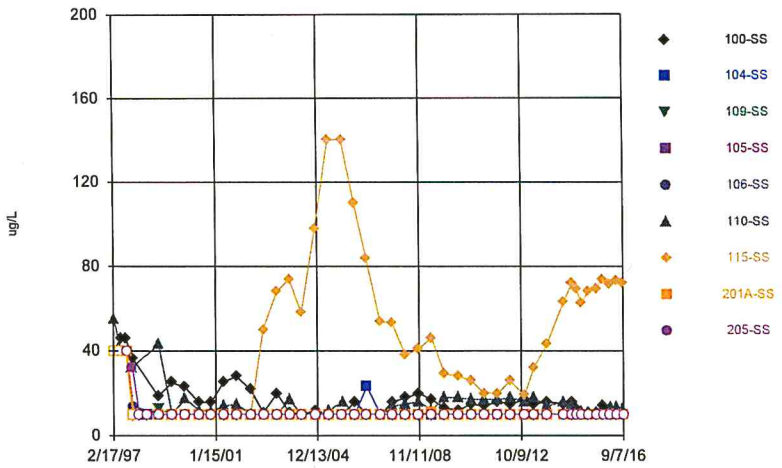
## Time Series




Constituent: Mercury Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

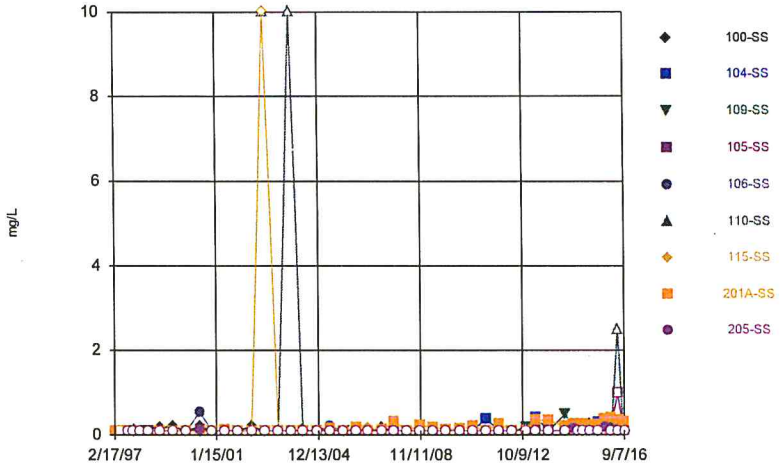
Time Series




Constituent: Nickel Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

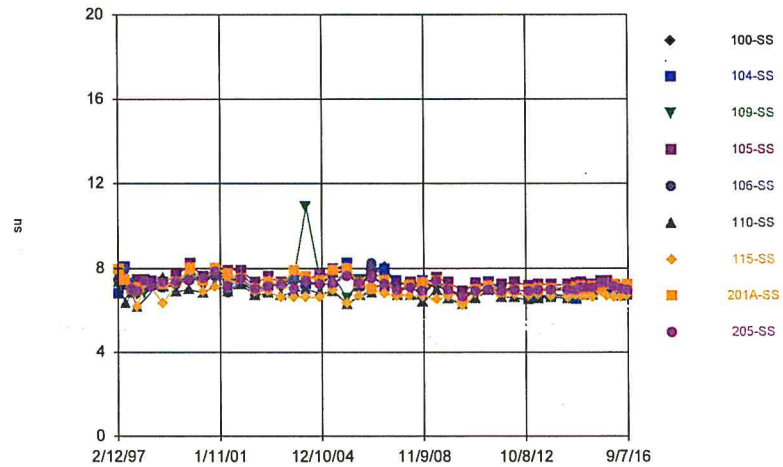
Time Series




Constituent: Nitrate/Nitrite Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

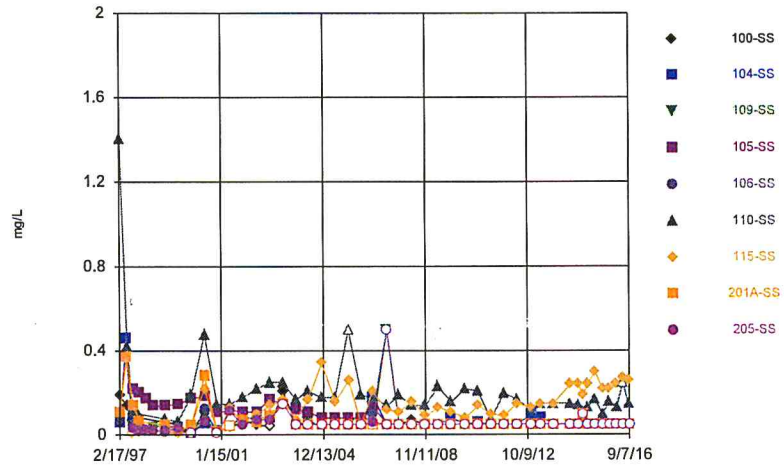
Time Series




Constituent: pH [Field] Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

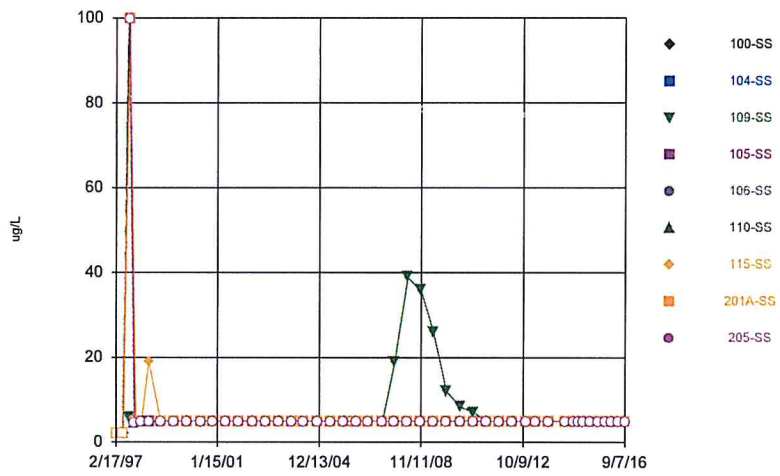
Time Series




Constituent: Phosphorus Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Time Series




Constituent: Selenium Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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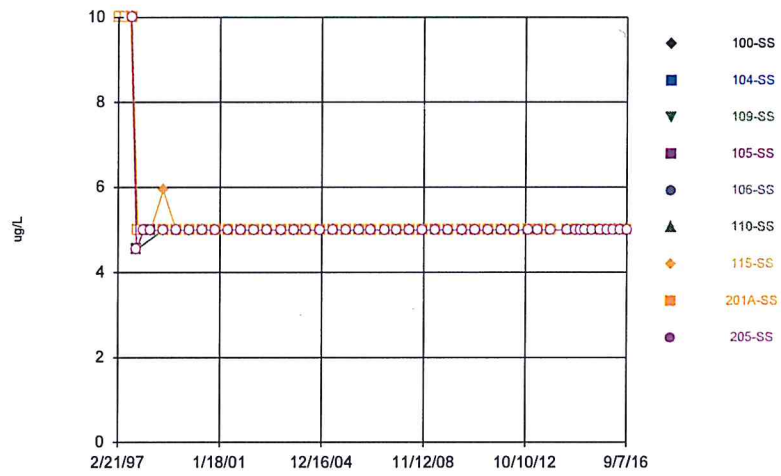
Hollow symbols indicate censored values.

Time Series




Constituent: Silver Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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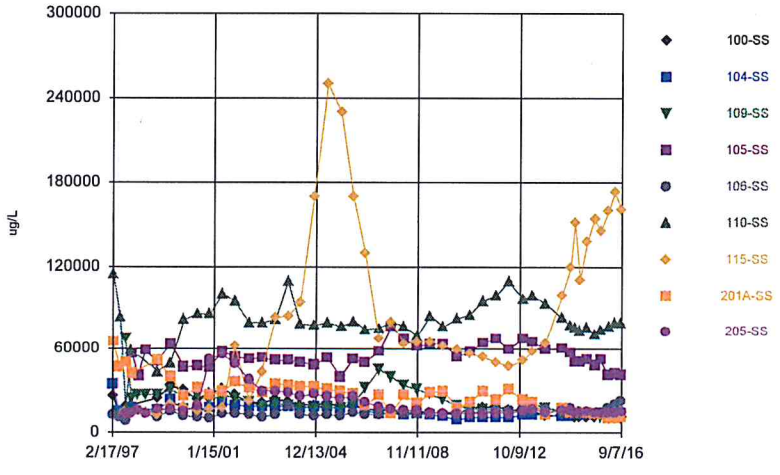
Time Series




Constituent: Sodium Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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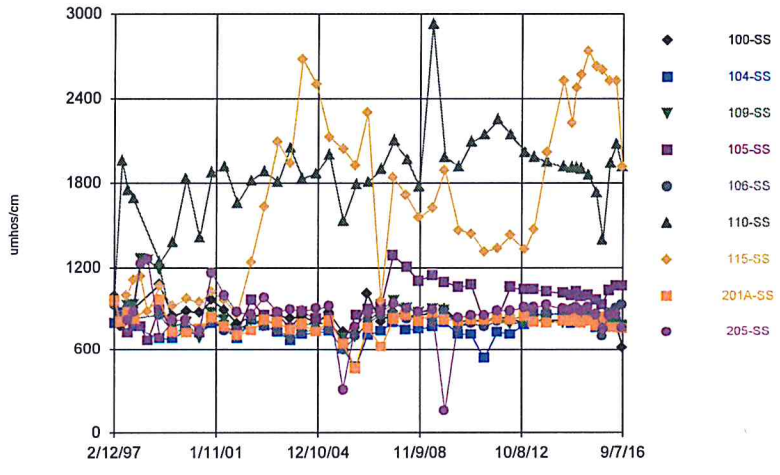
Time Series




Constituent: Specific Conductance [Field] Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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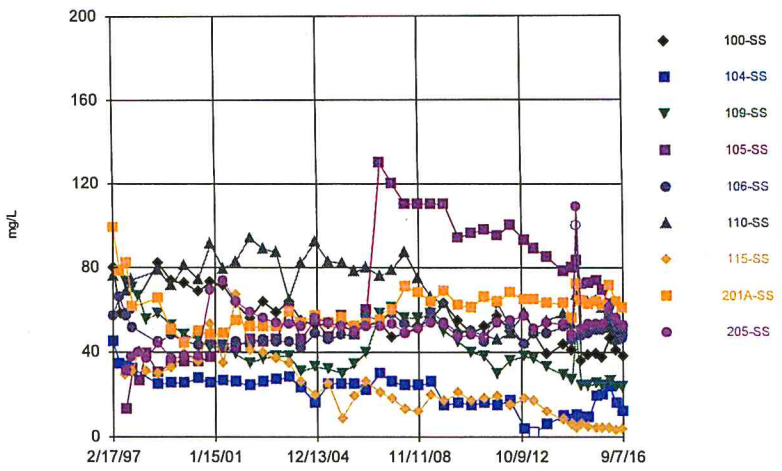
Hollow symbols indicate censored values.

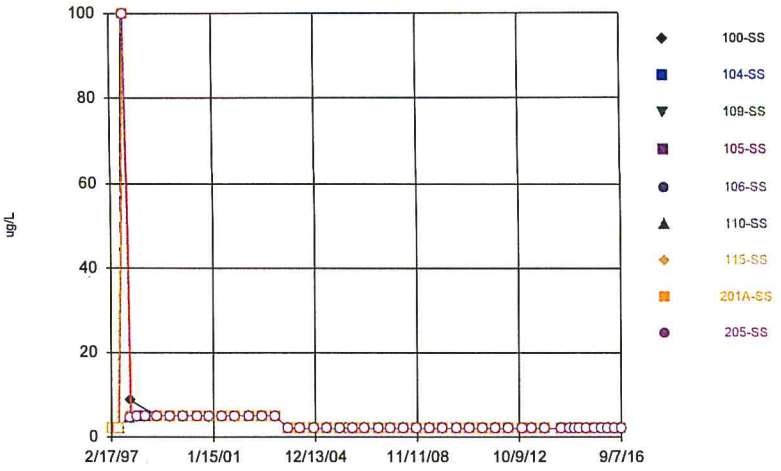
Time Series




Constituent: Sulfate Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

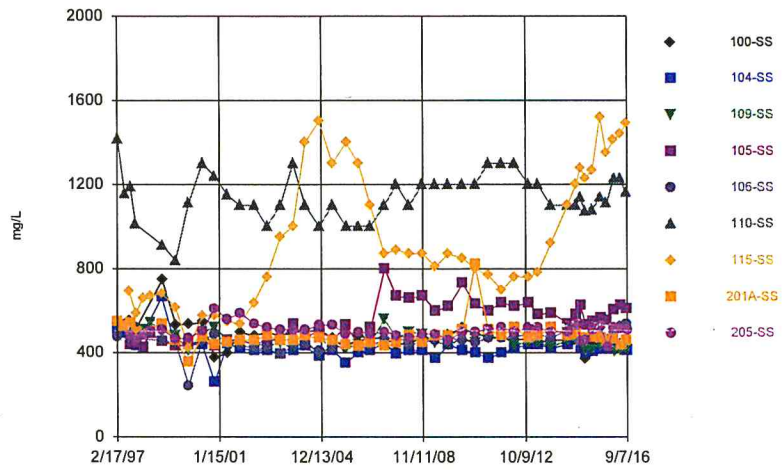
Time Series




Constituent: Thallium Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

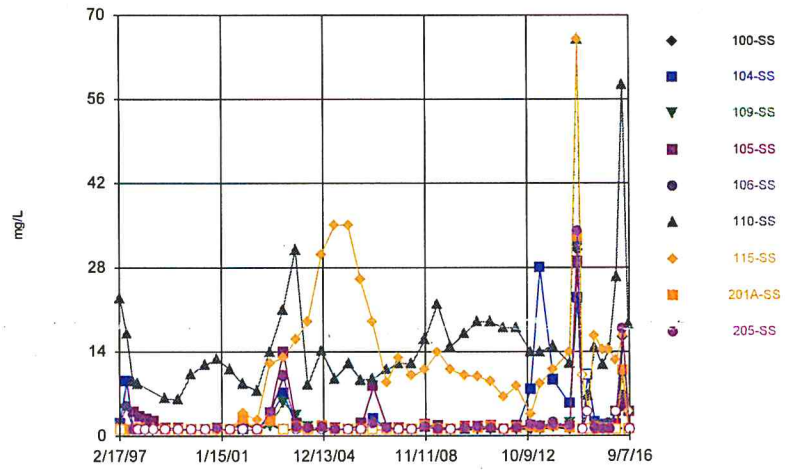
Time Series




Constituent: Total Dissolved Solids [TDS] Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

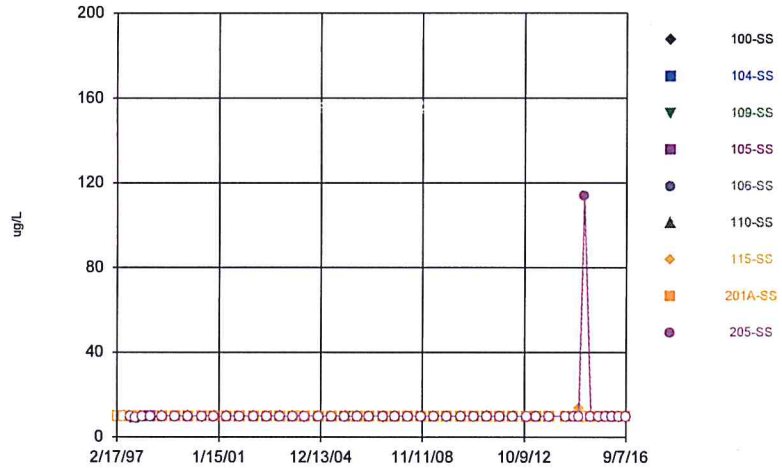
Time Series




Constituent: Total Organic Carbon [TOC] Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

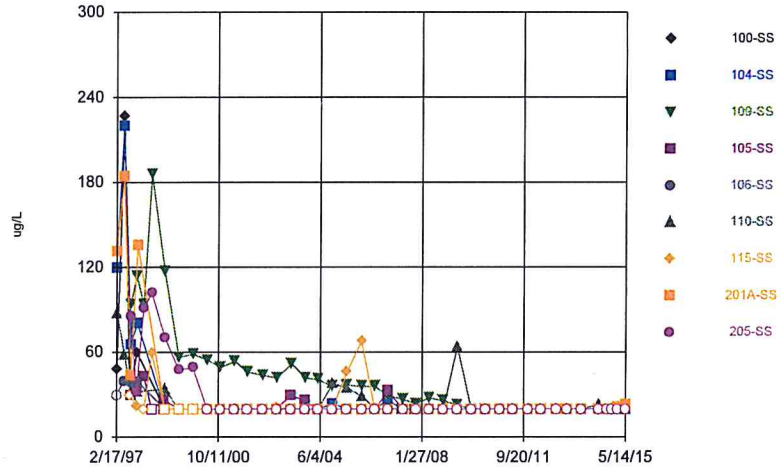
Time Series




Constituent: Vanadium Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Time Series




Constituent: Zinc Total Analysis Run 10/11/2016 6:32 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

# APPENDIX E
# STATISTICAL EVALUATIONS
# SALEM FORMATION

# TREND EVALUATION OF BACKGROUND DATA

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:20 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N (mg/L) | 100-SD (bg) | -0.00... | -131 | -201 | No | 40 | 2.5 | n/a | n/a | 0.02 | NP |
| Ammonia as N (mg/L) | 104-SD (bg) | 0.01592 | 150 | 201 | No | 40 | 32.5 | n/a | n/a | 0.02 | NP |
| **Ammonia as N (mg/L)** | **106-SD (bg)** | **0.02107** | **403** | **201** | **Yes** | **40** | **40** | **n/a** | **n/a** | **0.02** | **NP** |
| Ammonia as N (mg/L) | 111-SD (bg) | 0 | -65 | -201 | No | 40 | 82.5 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 100-SD (bg) | 0 | 47 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 104-SD (bg) | 0 | 42 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 106-SD (bg) | 0 | 42 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Antimony Total (ug/L) | 111-SD (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 100-SD (bg) | 0 | -12 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| **Arsenic Total (ug/L)** | **104-SD (bg)** | **0** | **341** | **201** | **Yes** | **40** | **82.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Arsenic Total (ug/L) | 106-SD (bg) | 0 | 31 | 201 | No | 40 | 77.5 | n/a | n/a | 0.02 | NP |
| Arsenic Total (ug/L) | 111-SD (bg) | 0 | 114 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Barium Total (ug/L) | 100-SD (bg) | 0.9366 | 131 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Barium Total (ug/L)** | **104-SD (bg)** | **9.667** | **437** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Barium Total (ug/L)** | **106-SD (bg)** | **4.028** | **455** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Barium Total (ug/L)** | **111-SD (bg)** | **0.5406** | **269** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Beryllium Total (ug/L) | 100-SD (bg) | 0 | 17 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 104-SD (bg) | 0 | 112 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 106-SD (bg) | 0 | 112 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Beryllium Total (ug/L) | 111-SD (bg) | 0 | 81 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Boron Total (ug/L) | 100-SD (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| **Boron Total (ug/L)** | **104-SD (bg)** | **0** | **283** | **201** | **Yes** | **40** | **75** | **n/a** | **n/a** | **0.02** | **NP** |
| Boron Total (ug/L) | 106-SD (bg) | 0 | 154 | 201 | No | 40 | 85 | n/a | n/a | 0.02 | NP |
| Boron Total (ug/L) | 111-SD (bg) | 0 | -61 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 100-SD (bg) | 0 | -66 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 104-SD (bg) | 0 | -12 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 106-SD (bg) | 0 | 34 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cadmium Total (ug/L) | 111-SD (bg) | 0 | -35 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Calcium Total (ug/L) | 100-SD (bg) | -199.7 | -173 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Calcium Total (ug/L) | 104-SD (bg) | 275 | 179 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Calcium Total (ug/L)** | **106-SD (bg)** | **963.8** | **234** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Calcium Total (ug/L) | 111-SD (bg) | 0 | -1 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Chemical Oxygen Demand [COD] (m...** | **100-SD (bg)** | **0** | **-356** | **-201** | **Yes** | **40** | **92.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chemical Oxygen Demand [COD] (m...** | **104-SD (bg)** | **1.603** | **366** | **201** | **Yes** | **40** | **62.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Chemical Oxygen Demand [COD] (m... | 106-SD (bg) | 0 | 123 | 201 | No | 40 | 75 | n/a | n/a | 0.02 | NP |
| **Chemical Oxygen Demand [COD] (m...** | **111-SD (bg)** | **0** | **-366** | **-201** | **Yes** | **40** | **95** | **n/a** | **n/a** | **0.02** | **NP** |
| Chloride (mg/L) | 100-SD (bg) | 0 | 31 | 201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| **Chloride (mg/L)** | **104-SD (bg)** | **7.593** | **494** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **106-SD (bg)** | **-0.5238** | **-243** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Chloride (mg/L)** | **111-SD (bg)** | **-0.3646** | **-583** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Chromium Total (ug/L) | 100-SD (bg) | 0 | -201 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 104-SD (bg) | 0 | 126 | 201 | No | 40 | 82.5 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 106-SD (bg) | 0 | 24 | 201 | No | 40 | 82.5 | n/a | n/a | 0.02 | NP |
| Chromium Total (ug/L) | 111-SD (bg) | 0 | -113 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 100-SD (bg) | 0 | -101 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 104-SD (bg) | 0 | -87 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 106-SD (bg) | 0 | -5 | -201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Cobalt Total (ug/L) | 111-SD (bg) | 0 | -135 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 100-SD (bg) | 0 | -101 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 104-SD (bg) | 0 | -37 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:20 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper Total (ug/L) | 106-SD (bg) | 0 | -59 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Copper Total (ug/L) | 111-SD (bg) | 0 | -170 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Fluoride (mg/L) | 100-SD (bg) | 0 | -24 | -186 | No | 38 | 0 | n/a | n/a | 0.02 | NP |
| Fluoride (mg/L) | 104-SD (bg) | -0.00... | -133 | -186 | No | 38 | 5.263 | n/a | n/a | 0.02 | NP |
| Fluoride (mg/L) | 106-SD (bg) | 0.009986 | 129 | 186 | No | 38 | 2.632 | n/a | n/a | 0.02 | NP |
| Fluoride (mg/L) | 111-SD (bg) | 0.000... | 76 | 186 | No | 38 | 0 | n/a | n/a | 0.02 | NP |
| Hardness Total (mg/L) | 100-SD (bg) | 0 | -54 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Hardness Total (mg/L)** | **104-SD (bg)** | **3.617** | **289** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Hardness Total (mg/L)** | **106-SD (bg)** | **5.378** | **273** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Hardness Total (mg/L) | 111-SD (bg) | 0 | 5 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Iron Total (ug/L)** | **100-SD (bg)** | **-43.81** | **-299** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Iron Total (ug/L) | 104-SD (bg) | 96.79 | 157 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Iron Total (ug/L)** | **106-SD (bg)** | **133.3** | **256** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Iron Total (ug/L) | 111-SD (bg) | -44.22 | -199 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 100-SD (bg) | 0 | 47 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 104-SD (bg) | 0 | 42 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 106-SD (bg) | 0 | 96 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Lead Total (ug/L) | 111-SD (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Magnesium Total (ug/L) | 100-SD (bg) | 3.08 | 70 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Magnesium Total (ug/L)** | **104-SD (bg)** | **595.7** | **376** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Magnesium Total (ug/L)** | **106-SD (bg)** | **446.9** | **249** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Magnesium Total (ug/L) | 111-SD (bg) | -31.99 | -67 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Manganese Total (ug/L)** | **100-SD (bg)** | **-6.669** | **-667** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Manganese Total (ug/L) | 104-SD (bg) | 1.929 | 171 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Manganese Total (ug/L) | 106-SD (bg) | -2.705 | -60 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Manganese Total (ug/L)** | **111-SD (bg)** | **-0.7201** | **-457** | **-201** | **Yes** | **40** | **45** | **n/a** | **n/a** | **0.02** | **NP** |
| Mercury Total (ug/L) | 100-SD (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 104-SD (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 106-SD (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Mercury Total (ug/L) | 111-SD (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 100-SD (bg) | 0 | -101 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 104-SD (bg) | 0 | 198 | 201 | No | 40 | 75 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 106-SD (bg) | 0 | 15 | 201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Nickel Total (ug/L) | 111-SD (bg) | 0 | -135 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 100-SD (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 104-SD (bg) | 0 | -8 | -201 | No | 40 | 95 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 106-SD (bg) | 0 | -63 | -201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Nitrate/Nitrite (mg/L) | 111-SD (bg) | 0 | 15 | 201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| pH [Field] (su) | 100-SD (bg) | -0.01949 | -136 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **pH [Field] (su)** | **104-SD (bg)** | **-0.04514** | **-318** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **pH [Field] (su)** | **106-SD (bg)** | **-0.03461** | **-354** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| pH [Field] (su) | 111-SD (bg) | -0.01585 | -138 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Phosphorus Total (mg/L)** | **100-SD (bg)** | **-0.00...** | **-354** | **-201** | **Yes** | **40** | **65** | **n/a** | **n/a** | **0.02** | **NP** |
| Phosphorus Total (mg/L) | 104-SD (bg) | 0 | 116 | 201 | No | 40 | 47.5 | n/a | n/a | 0.02 | NP |
| Phosphorus Total (mg/L) | 106-SD (bg) | 0.004108 | 185 | 201 | No | 40 | 15 | n/a | n/a | 0.02 | NP |
| Phosphorus Total (mg/L) | 111-SD (bg) | 0 | 3 | 201 | No | 40 | 72.5 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 100-SD (bg) | 0 | 47 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 104-SD (bg) | 0 | 42 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 106-SD (bg) | 0 | 74 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| Selenium Total (ug/L) | 111-SD (bg) | 0 | 11 | 201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |

# Trend Test

Bridgeton LF Client: RSI Data: BRIDGETON Printed 1/7/2016, 1:20 PM

| Constituent | Well | Slope | Calc. | Critical | Sig. | N | %NDs | Normality | Xform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Silver Total (ug/L) | 100-SD (bg) | 0 | -25 | -186 | No | 38 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 104-SD (bg) | 0 | -28 | -186 | No | 38 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 106-SD (bg) | 0 | -63 | -194 | No | 39 | 100 | n/a | n/a | 0.02 | NP |
| Silver Total (ug/L) | 111-SD (bg) | 0 | -98 | -194 | No | 39 | 100 | n/a | n/a | 0.02 | NP |
| **Sodium Total (ug/L)** | **100-SD (bg)** | **-253.5** | **-546** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **104-SD (bg)** | **3202** | **597** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sodium Total (ug/L)** | **106-SD (bg)** | **-1074** | **-298** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Sodium Total (ug/L) | 111-SD (bg) | -74.78 | -132 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Specific Conductance [Field] (u... | 100-SD (bg) | -0.9396 | -91 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Specific Conductance [Field] (u...** | **104-SD (bg)** | **26.36** | **365** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Specific Conductance [Field] (u... | 106-SD (bg) | -4.65 | -136 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Specific Conductance [Field] (u...** | **111-SD (bg)** | **-4.974** | **-243** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Sulfate as SO4 (mg/L) | 100-SD (bg) | 0 | 29 | 201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| Sulfate as SO4 (mg/L) | 104-SD (bg) | -1.274 | -176 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Sulfate as SO4 (mg/L)** | **106-SD (bg)** | **-4.359** | **-587** | **-201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Sulfate as SO4 (mg/L)** | **111-SD (bg)** | **-0.7977** | **-581** | **-201** | **Yes** | **40** | **2.5** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **100-SD (bg)** | **0** | **-303** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **104-SD (bg)** | **0** | **-270** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **106-SD (bg)** | **0** | **-270** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Thallium Total (ug/L)** | **111-SD (bg)** | **0** | **-314** | **-201** | **Yes** | **40** | **100** | **n/a** | **n/a** | **0.02** | **NP** |
| **Total Dissolved Solids [TDS] (m...** | **100-SD (bg)** | **-2.689** | **-301** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| **Total Dissolved Solids [TDS] (m...** | **104-SD (bg)** | **16.66** | **360** | **201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Dissolved Solids [TDS] (m... | 106-SD (bg) | -7.344 | -193 | -201 | No | 40 | 0 | n/a | n/a | 0.02 | NP |
| **Total Dissolved Solids [TDS] (m...** | **111-SD (bg)** | **-2.784** | **-253** | **-201** | **Yes** | **40** | **0** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Organic Carbon [TOC] (mg/L) | 100-SD (bg) | 0 | -82 | -201 | No | 40 | 32.5 | n/a | n/a | 0.02 | NP |
| **Total Organic Carbon [TOC] (mg/L)** | **104-SD (bg)** | **0.2006** | **433** | **201** | **Yes** | **40** | **50** | **n/a** | **n/a** | **0.02** | **NP** |
| **Total Organic Carbon [TOC] (mg/L)** | **106-SD (bg)** | **0.07738** | **270** | **201** | **Yes** | **40** | **35** | **n/a** | **n/a** | **0.02** | **NP** |
| Total Organic Carbon [TOC] (mg/L) | 111-SD (bg) | 0 | 145 | 201 | No | 40 | 42.5 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 100-SD (bg) | 0 | -27 | -201 | No | 40 | 100 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 104-SD (bg) | 0 | 159 | 201 | No | 40 | 87.5 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 106-SD (bg) | 0 | 109 | 201 | No | 40 | 90 | n/a | n/a | 0.02 | NP |
| Vanadium Total (ug/L) | 111-SD (bg) | 0 | 9 | 201 | No | 40 | 97.5 | n/a | n/a | 0.02 | NP |
| **Zinc Total (ug/L)** | **100-SD (bg)** | **0** | **-218** | **-201** | **Yes** | **40** | **82.5** | **n/a** | **n/a** | **0.02** | **NP** |
| Zinc Total (ug/L) | 104-SD (bg) | 0 | -111 | -201 | No | 40 | 77.5 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 106-SD (bg) | 0 | -166 | -201 | No | 40 | 80 | n/a | n/a | 0.02 | NP |
| Zinc Total (ug/L) | 111-SD (bg) | 0 | -162 | -201 | No | 40 | 82.5 | n/a | n/a | 0.02 | NP |

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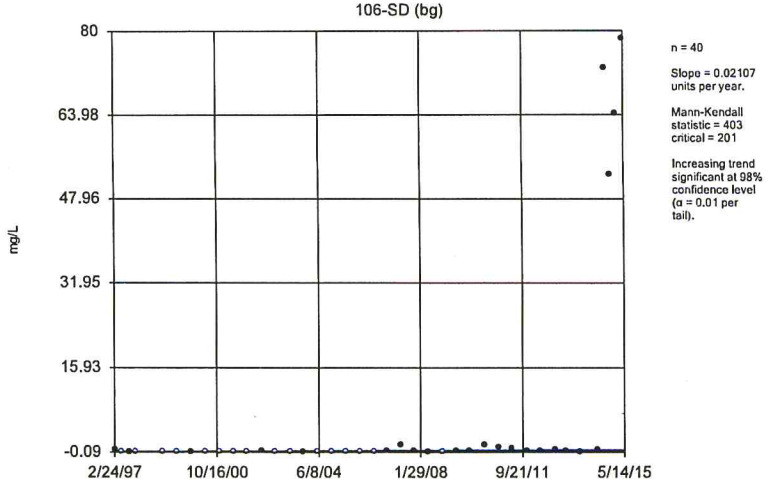
Hollow symbols indicate censored values.

## Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 0.02107 units per year.

Mann-Kendall statistic = 403
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Ammonia as N Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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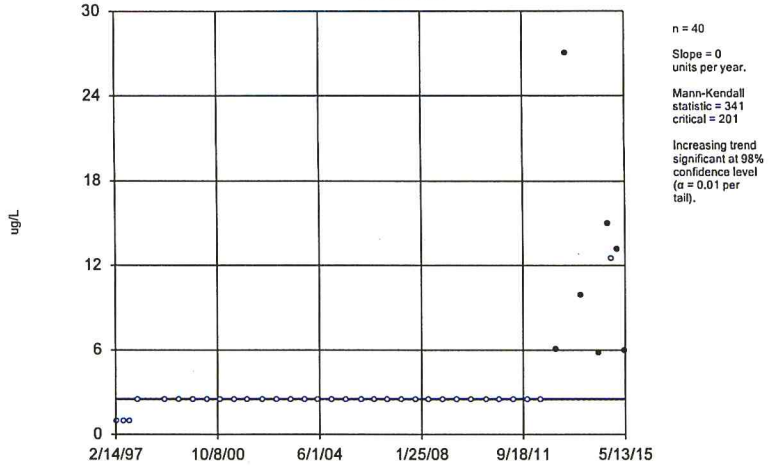
Hollow symbols indicate censored values.

## Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = 341
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Arsenic Total Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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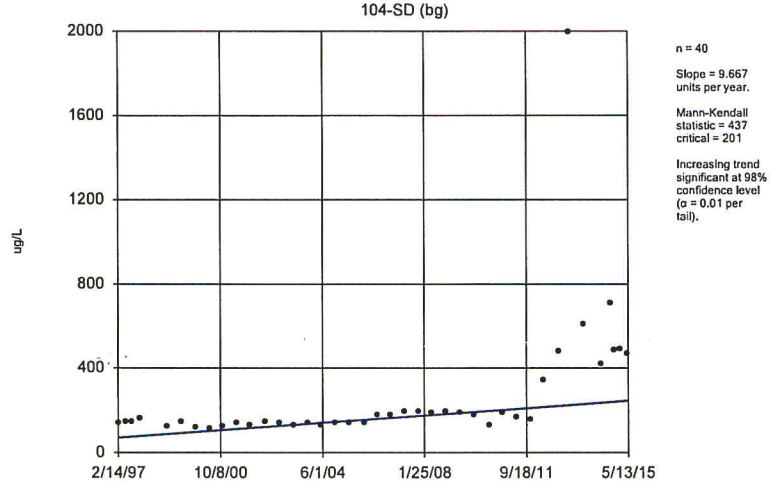
## Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 9.667 units per year.

Mann-Kendall statistic = 437
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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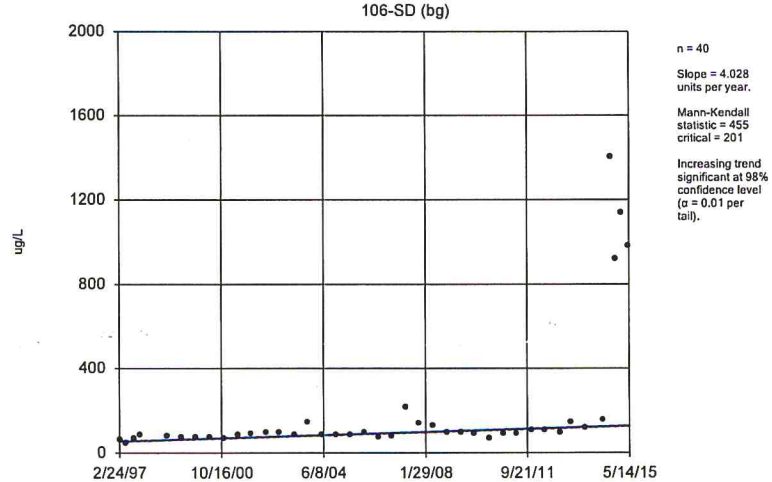
## Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 4.028 units per year.

Mann-Kendall statistic = 455
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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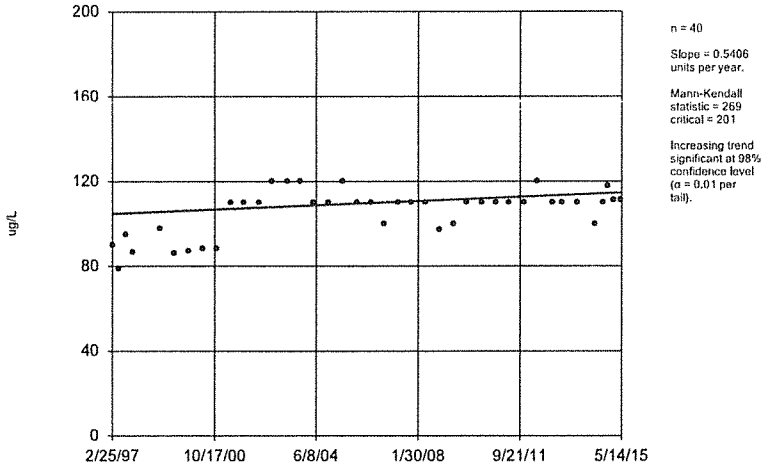
## Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = 0.5406 units per year.

Mann-Kendall statistic = 269 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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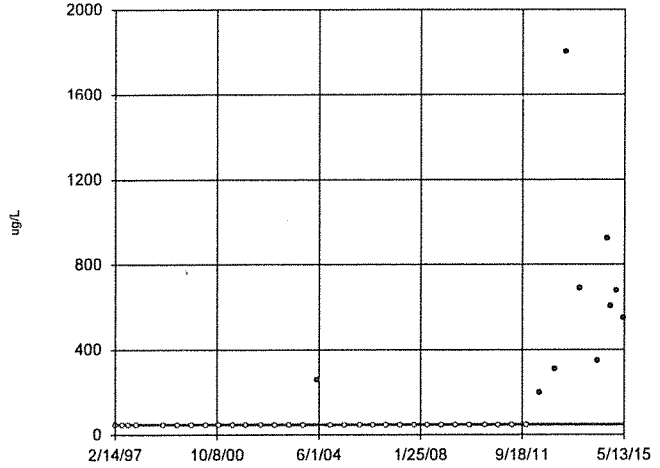
Hollow symbols indicate censored values.

## Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = 283 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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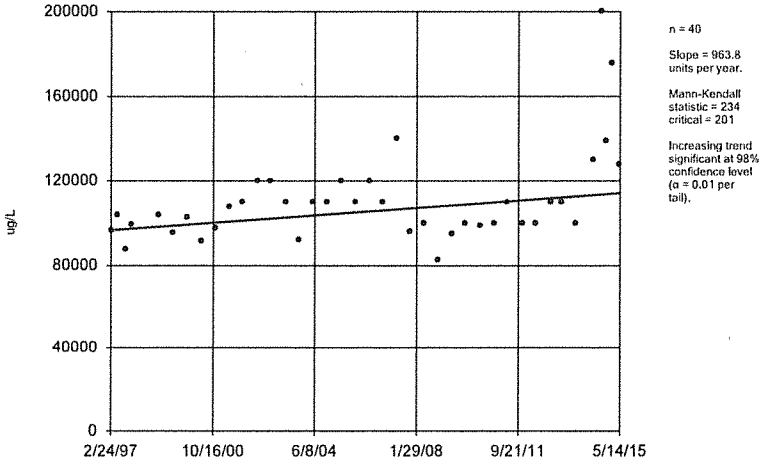
## Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 963.8 units per year.

Mann-Kendall statistic = 234 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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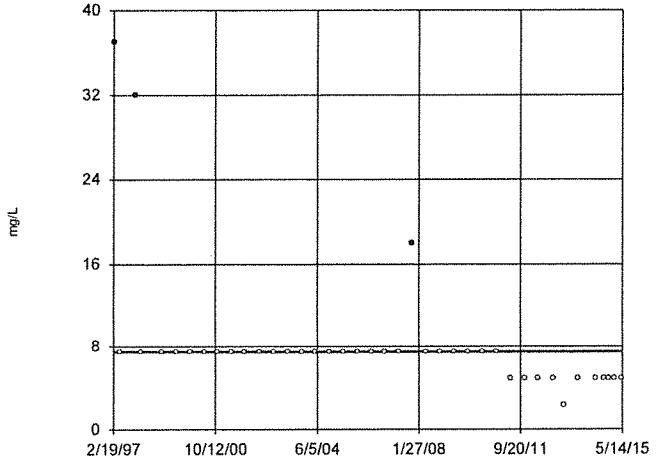
Hollow symbols indicate censored values.

## Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -356 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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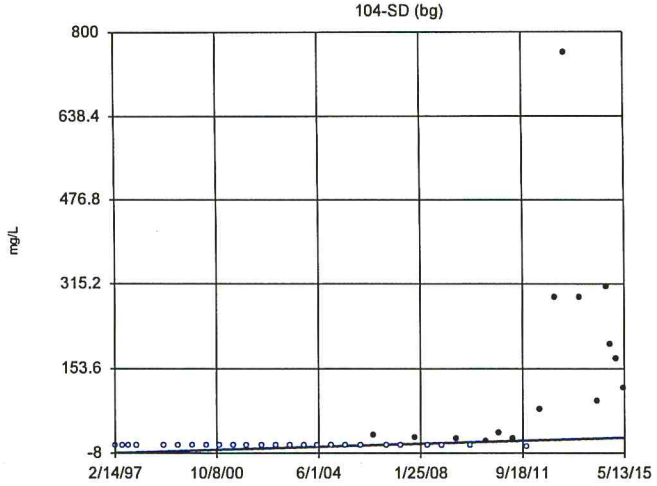
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 1.603 units per year.

Mann-Kendall statistic = 366
critical = 201

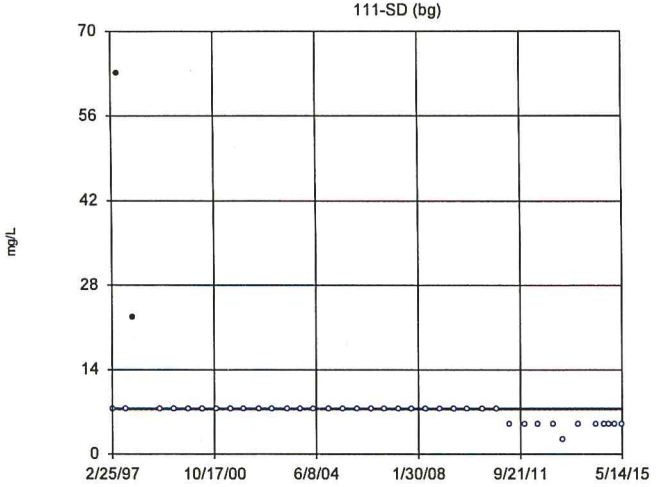
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -366
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chemical Oxygen Demand [COD] Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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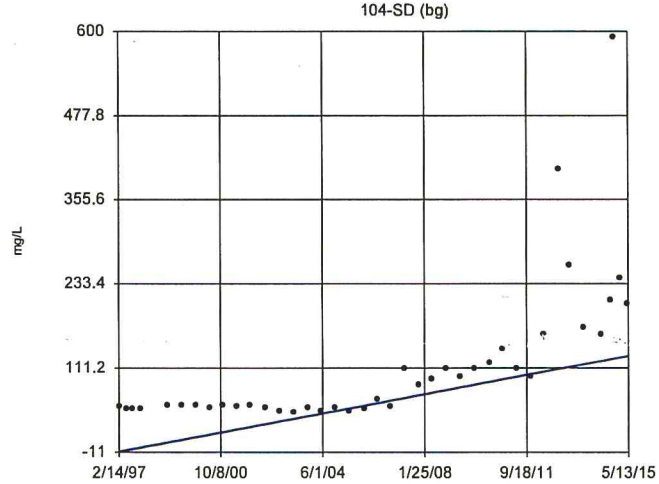
Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 7.593 units per year.

Mann-Kendall statistic = 494
critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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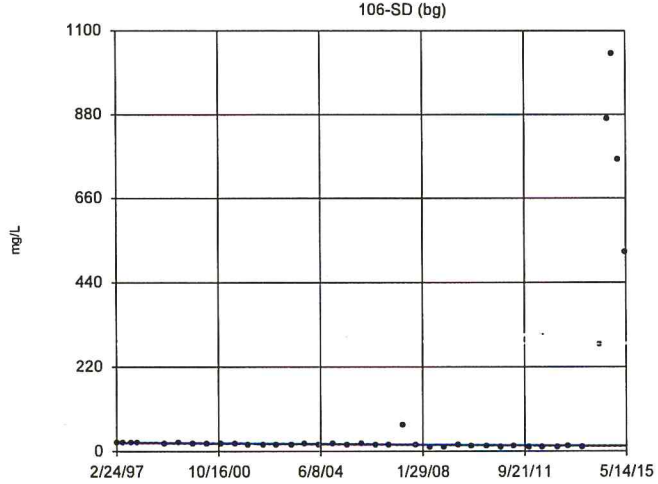
Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = -0.5238 units per year.

Mann-Kendall statistic = -243
critical = -201

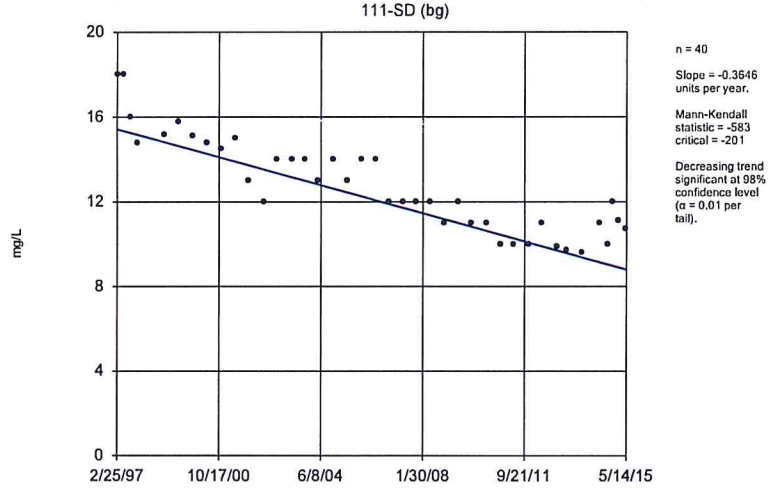
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = -0.3646 units per year.

Mann-Kendall statistic = -583 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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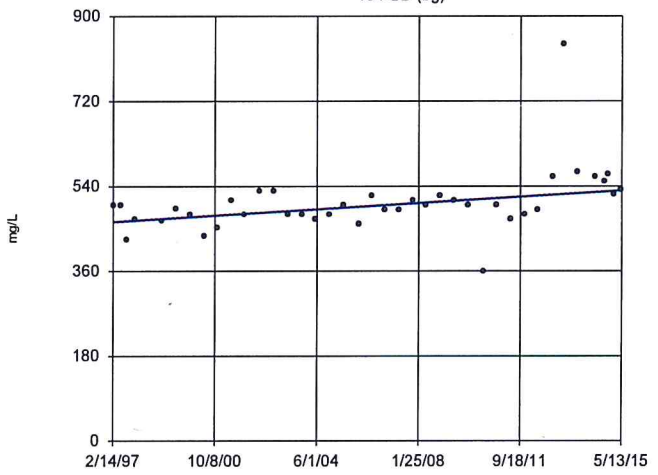
Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 3.617 units per year.

Mann-Kendall statistic = 289 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

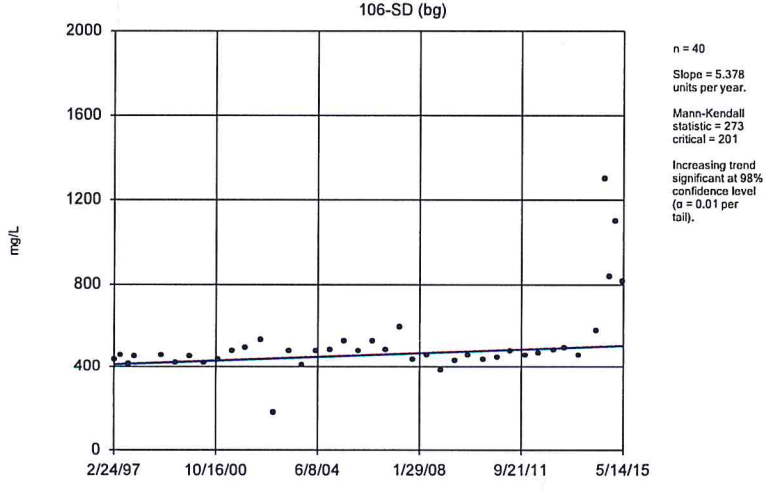
Constituent: Hardness Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 5.378 units per year.

Mann-Kendall statistic = 273 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

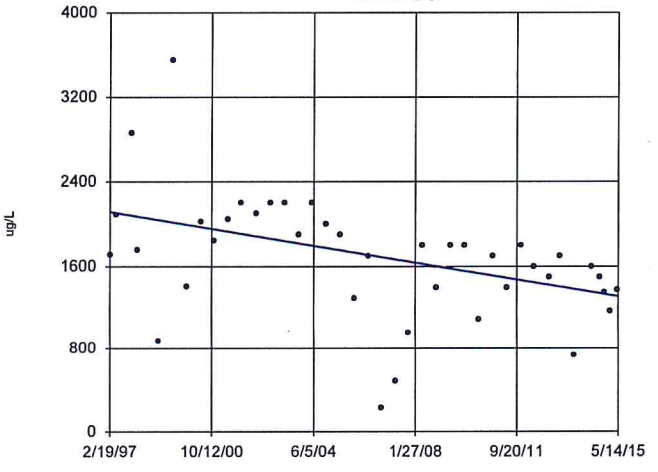
Constituent: Hardness Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = -43.81 units per year.

Mann-Kendall statistic = -299 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Iron Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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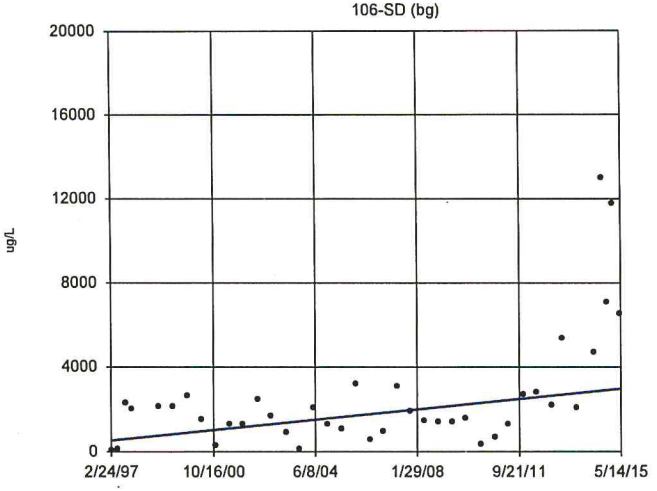
Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 133.3 units per year.

Mann-Kendall statistic = 256 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

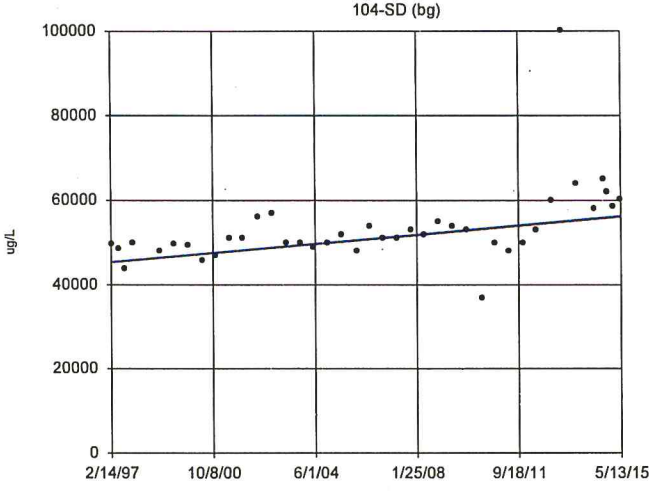
Constituent: Iron Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 595.7 units per year.

Mann-Kendall statistic = 376 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

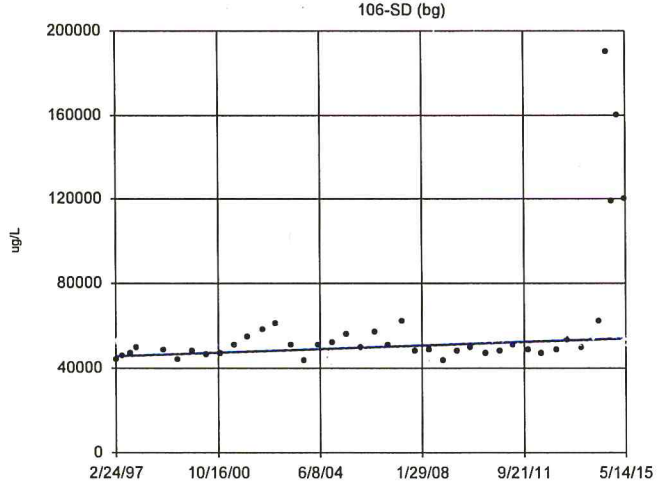
Constituent: Magnesium Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 446.9 units per year.

Mann-Kendall statistic = 249 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

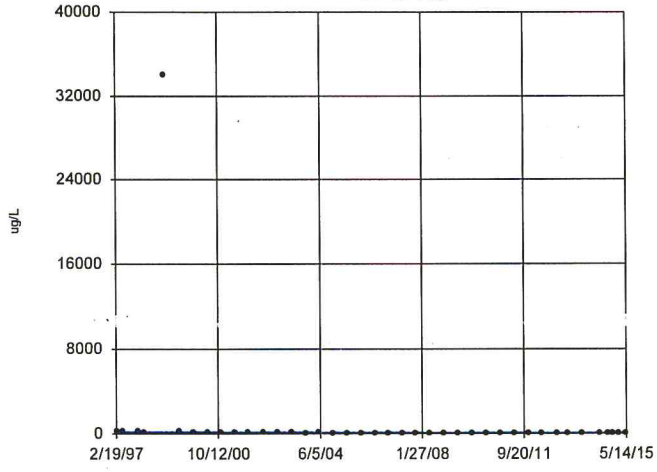
Constituent: Magnesium Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = -6.669 units per year.

Mann-Kendall statistic = -667 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 1/7/2016 1:19 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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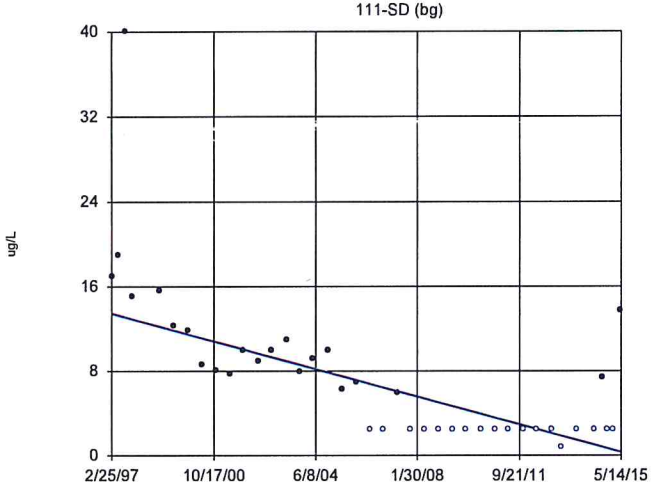
Hollow symbols indicate censored values.

Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = -0.7201 units per year.

Mann-Kendall statistic = -457
critical = -201

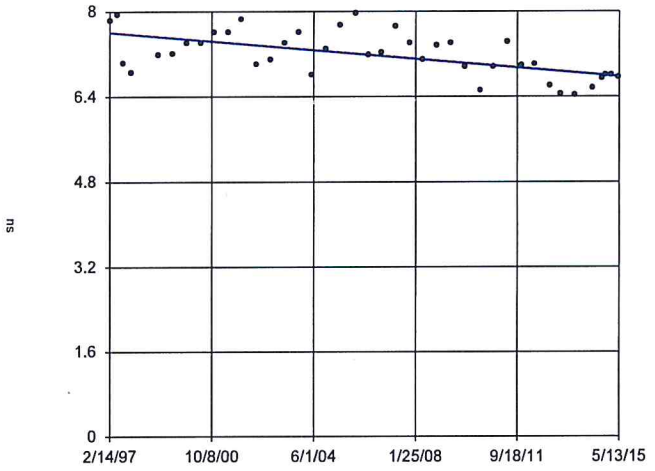
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Manganese Total Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = -0.04514 units per year.

Mann-Kendall statistic = -318
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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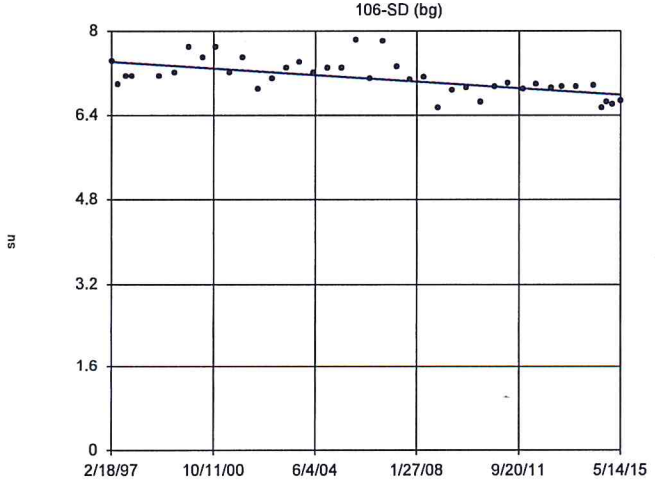
Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = -0.03461 units per year.

Mann-Kendall statistic = -354
critical = -201

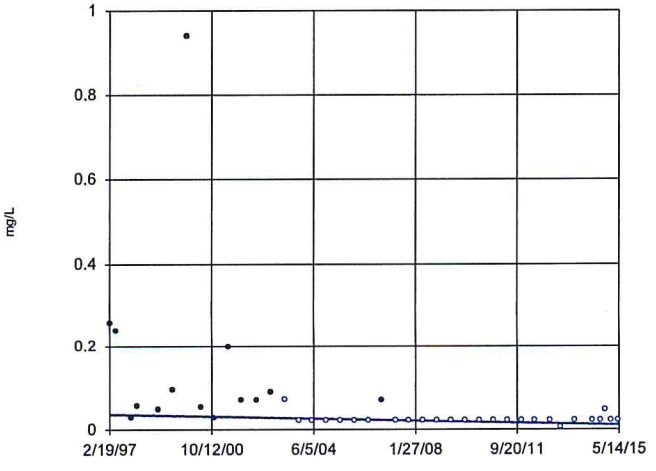
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH [Field] Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = -0.001393 units per year.

Mann-Kendall statistic = -354
critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Phosphorus Total Analysis Run 1/7/2016 1:19 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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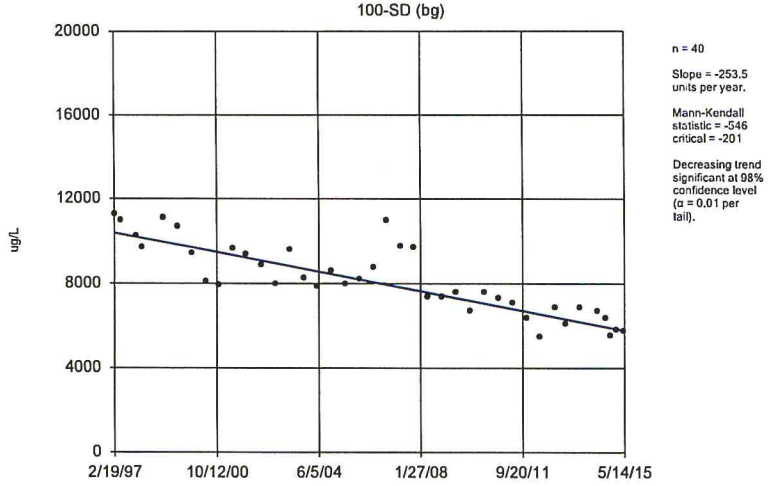
Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = -253.5 units per year.

Mann-Kendall statistic = -546 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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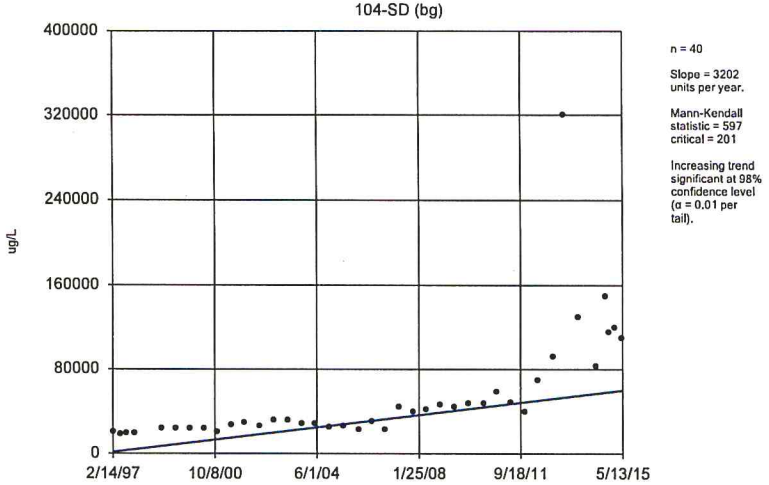
Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 3202 units per year.

Mann-Kendall statistic = 597 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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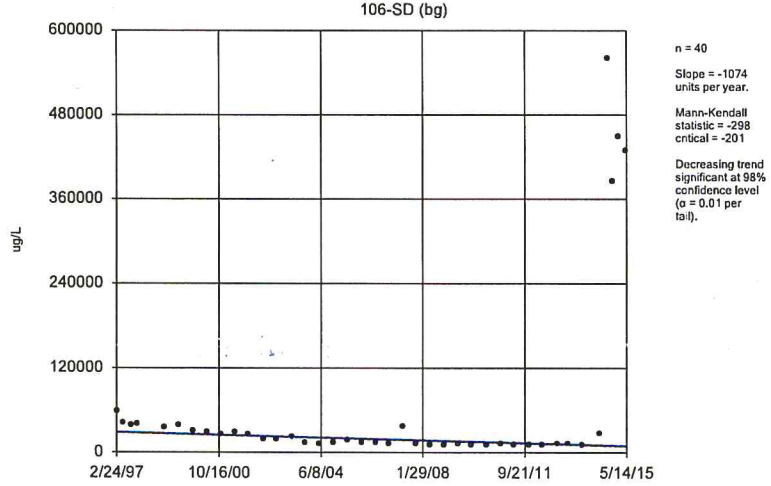
Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = -1074 units per year.

Mann-Kendall statistic = -298 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Total Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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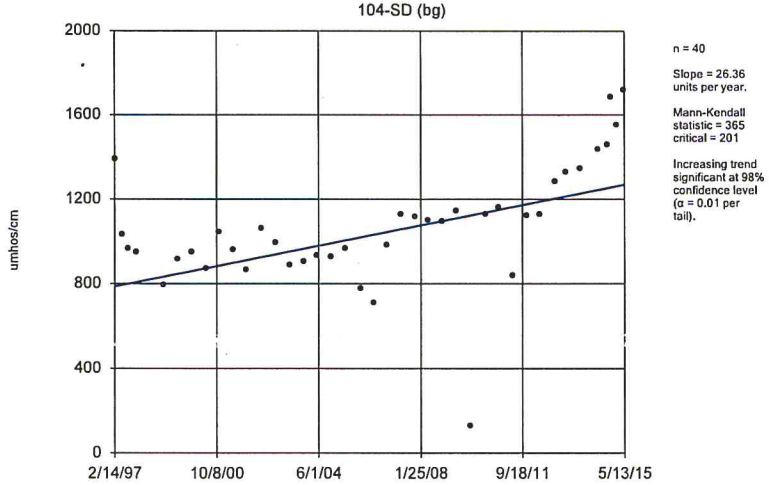
Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 26.36 units per year.

Mann-Kendall statistic = 365 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Specific Conductance [Field] Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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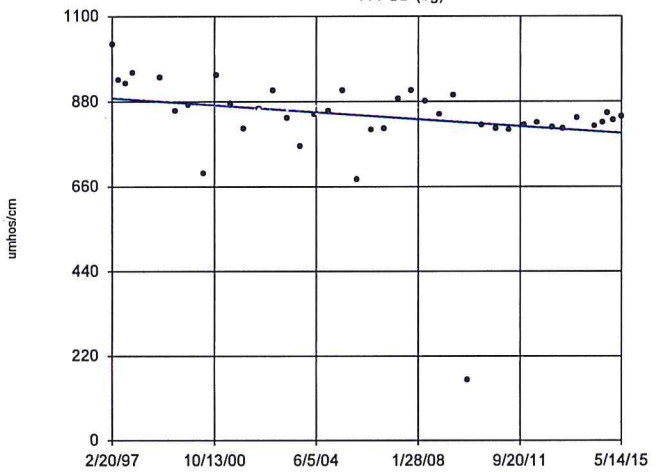
Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = -4.974 units per year.

Mann-Kendall statistic = -243 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Specific Conductance [Field] Analysis Run 1/7/2016 1:20 PM

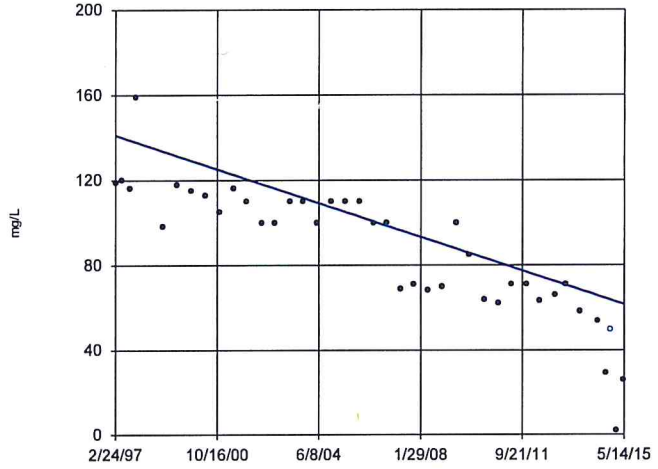
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = -4.359 units per year.

Mann-Kendall statistic = -587 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:20 PM

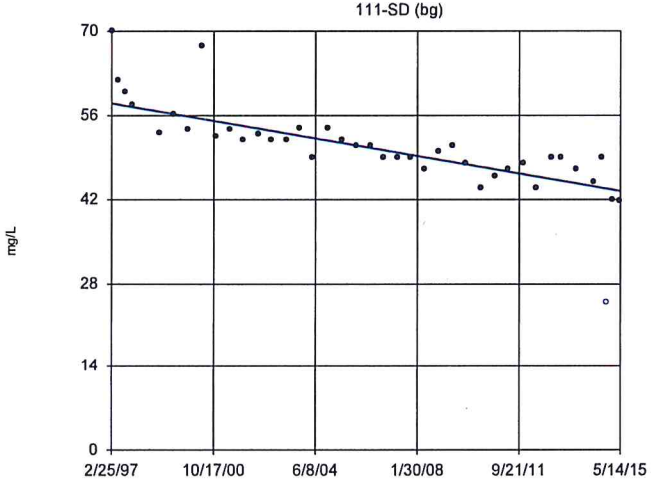
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = -0.7977 units per year.

Mann-Kendall statistic = -581 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate as SO4 Analysis Run 1/7/2016 1:20 PM

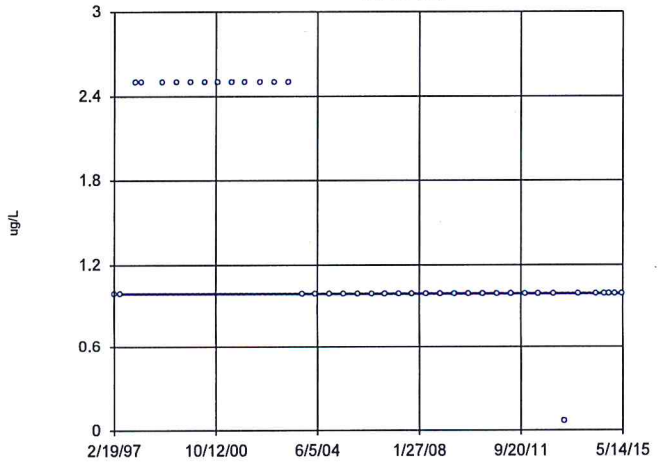
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -303 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

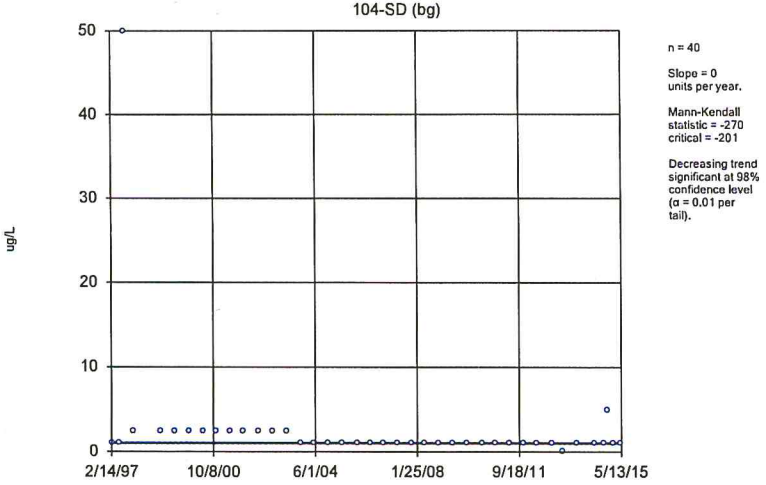
Constituent: Thallium Total Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 0
units per year.

Mann-Kendall
statistic = -270
critical = -201

Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:20 PM
Bridgeton LF Client: RSI Data: BRIDGETON

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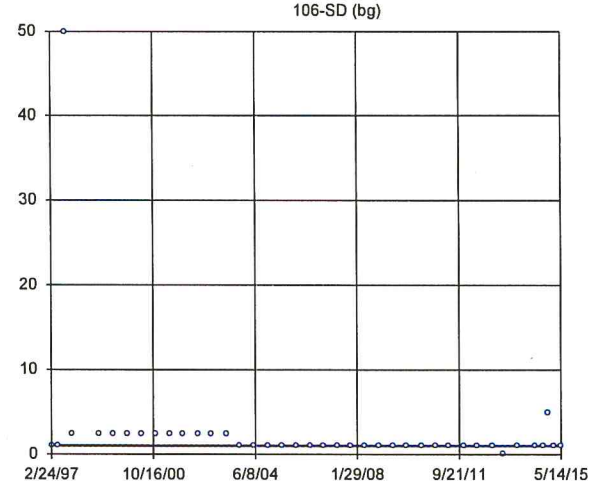
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 0
units per year.

Mann-Kendall
statistic = -270
critical = -201

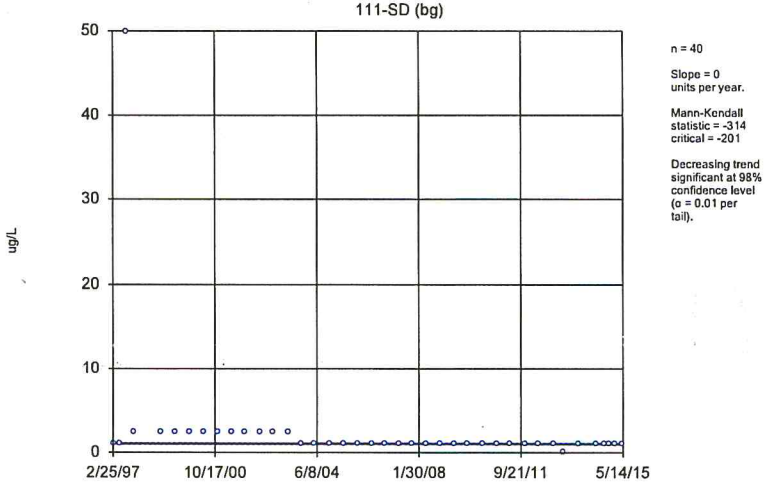
Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:20 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = 0
units per year.

Mann-Kendall
statistic = -314
critical = -201

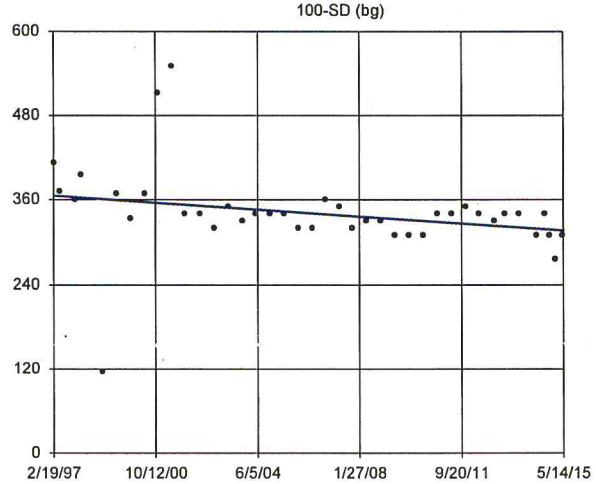
Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Thallium Total Analysis Run 1/7/2016 1:20 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = -2.689
units per year.

Mann-Kendall
statistic = -301
critical = -201

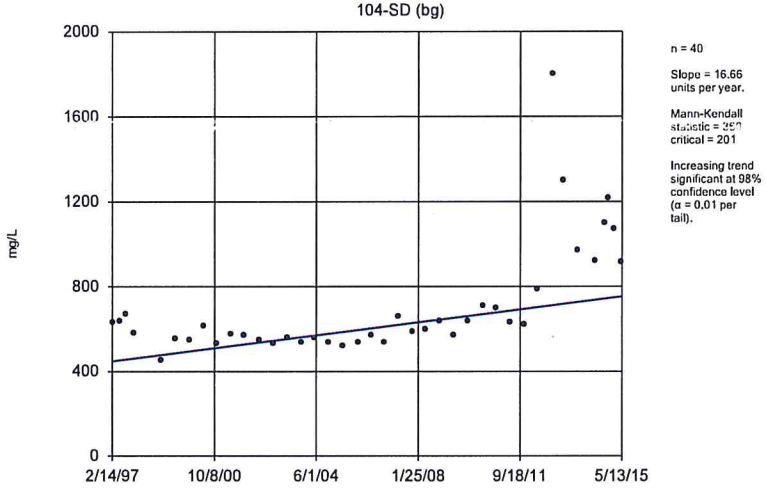
Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 1/7/2016 1:20 PM
Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 16.66 units per year.

Mann-Kendall statistic = 350 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

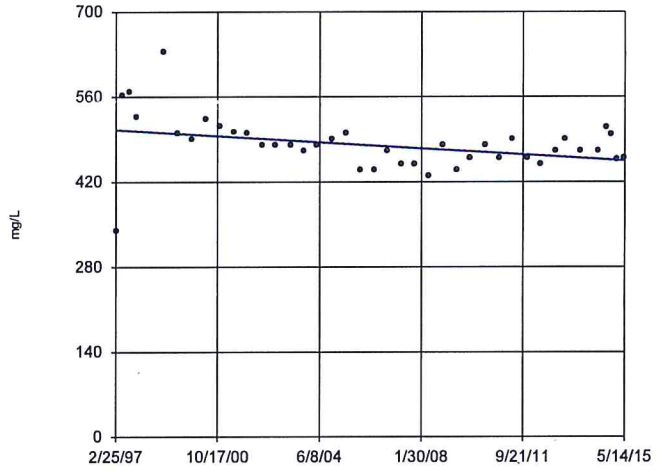
Constituent: Total Dissolved Solids [TDS] Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

111-SD (bg)




n = 40

Slope = -2.784 units per year.

Mann-Kendall statistic = -253 critical = -201

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

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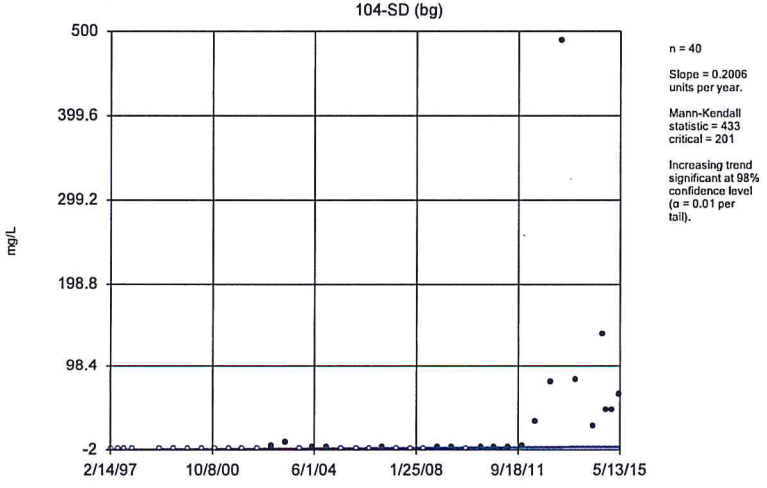
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)




n = 40

Slope = 0.2006 units per year.

Mann-Kendall statistic = 433 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

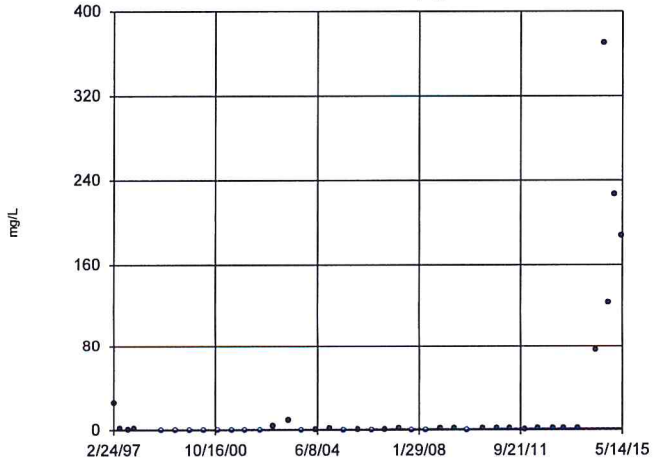
Constituent: Total Organic Carbon [TOC] Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)




n = 40

Slope = 0.07738 units per year.

Mann-Kendall statistic = 270 critical = 201

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

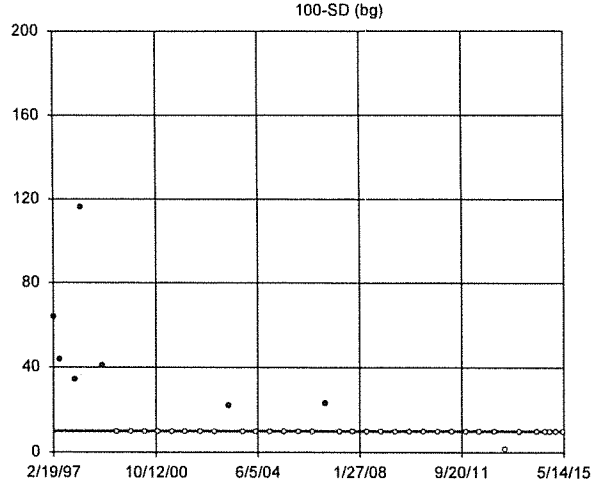
Constituent: Total Organic Carbon [TOC] Analysis Run 1/7/2016 1:20 PM

Bridgeton LF Client: RSI Data: BRIDGETON

Sanitas™ v.9.5.20 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)




n = 40

Slope = 0
units per year.

Mann-Kendall
statistic = -218
critical = -201

Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Zinc Total Analysis Run 1/7/2016 1:20 PM
Bridgeton LF Client: RSI Data: BRIDGETON

# INTRA-WELL PREDICTION LIMITS

Background data were evaluated for increasing statistical trends (or either increasing or decreasing trends for field pH). In those cases where the background data were determined to exhibit a statistical trend, typically the most recent background data were excluded until the data no longer exhibited a statistical trend. For each of the constituent-well pairs listed below, the specified modified background data period was utilized in the determination of the intra-well prediction limit.

**Salem Formation Zone**

- Ammonia as N at PZ-106-SD (2/97 through 11/10)
- Barium (Total) at PZ-104-SD (2/97 through 5/10)
- Barium (Total) at PZ-106-SD (2/97 through 11/01)
- Barium (Total) at PZ-111-SD (2/97 through 5/02)
- Calcium (Total) at PZ-106-SD (2/97 through 11/14)
- Chemical oxygen demand at PZ-104-SD (2/97 through 5/14)
- Chloride at PZ-104-SD (2/97 through 5/09)
- Hardness (Total) at PZ-104-SD (2/97 through 10/13)
- Hardness (Total) at PZ-106-SD (2/97 through 9/14)
- Iron (Total) at PZ-106-SD (2/97 through 9/14)
- Magnesium (Total) at PZ-104-SD (2/97 through 5/12)
- Magnesium (Total) at PZ-106-SD (2/97 through 11/14)
- pH (Field) at PZ-104-SD (2/97 through 4/13)
- pH (Field) at PZ-106-SD (2/97 through 11/11)
- Sodium (Total) at PZ-104-SD (2/97 through 5/01)
- Specific conductance (Field) at PZ-104-SD (2/97 through 4/13)
- Total dissolved solids at PZ-104-SD (2/97 through 11/12)
- Total organic carbon at PZ-104-SD (2/97 through 5/12)
- Total organic carbon at PZ-106-SD (2/97 through 9/14)

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 11:58 AM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N (mg/L) | 100-SD | 0.63 | n/a | 9/7/2016 | 0.47 | No | 37 | 0.4359 | 0.07903 | 0 | None | No | 0.0001937 | Param Intra 1 of 2 |
| Ammonia as N (mg/L) | 104-SD | 66 | n/a | 8/24/2016 | 55.4 | No | 40 | n/a | n/a | 32.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| **Ammonia as N (mg/L)** | **106-SD** | **1.4** | **n/a** | **8/23/2016** | **58.6** | **Yes** | **29** | **n/a** | **n/a** | **55.17** | **n/a** | **n/a** | **0.002152** | **NP Intra (NDs) 1 of 2** |
| Ammonia as N (mg/L) | 111-SD | 0.35 | n/a | 9/7/2016 | 0.13 | No | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 100-SD | 2.5 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 104-SD | 50 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 106-SD | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Antimony Total (ug/L) | 111-SD | 50 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 100-SD | 15 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 104-SD | 27 | n/a | 8/24/2016 | 17.9 | No | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 106-SD | 12 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 77.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Arsenic Total (ug/L) | 111-SD | 5.3 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Barium Total (ug/L) | 100-SD | 340 | n/a | 9/7/2016 | 318 | No | 40 | 7.4e9 | 2.2e9 | 0 | None | x^4 | 0.0001937 | Param Intra 1 of 2 |
| **Barium Total (ug/L)** | **104-SD** | **230** | **n/a** | **8/24/2016** | **628** | **Yes** | **28** | **5.011** | **0.17** | **0** | **None** | **ln(x)** | **0.0001937** | **Param Intra 1 of 2** |
| **Barium Total (ug/L)** | **106-SD** | **100** | **n/a** | **8/23/2016** | **664** | **Yes** | **11** | **465937** | **199834** | **0** | **None** | **x^3** | **0.0001937** | **Param Intra 1 of 2** |
| Barium Total (ug/L) | 111-SD | 130 | n/a | 9/7/2016 | 103 | No | 12 | 4.538 | 0.1113 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Beryllium Total (ug/L) | 100-SD | 2.2 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 104-SD | 5.0 | n/a | 8/24/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 106-SD | 5.0 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Beryllium Total (ug/L) | 111-SD | 1.0 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 100-SD | 50 | n/a | 9/7/2016 | 50ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 104-SD | 1800 | n/a | 8/24/2016 | 1240 | No | 40 | n/a | n/a | 75 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 106-SD | 2900 | n/a | 8/23/2016 | 1400 | No | 40 | n/a | n/a | 85 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Boron Total (ug/L) | 111-SD | 100 | n/a | 9/7/2016 | 50ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 100-SD | 2.5 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 104-SD | 2.5 | n/a | 8/24/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 106-SD | 2.5 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cadmium Total (ug/L) | 111-SD | 2.5 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Calcium Total (ug/L) | 100-SD | 88000 | n/a | 9/7/2016 | 76600 | No | 40 | 11.25 | 0.05606 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 104-SD | 170000 | n/a | 8/24/2016 | 116000 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Calcium Total (ug/L) | 106-SD | 140000 | n/a | 8/23/2016 | 105000 | No | 37 | 11.57 | 0.1154 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Calcium Total (ug/L) | 111-SD | 100000 | n/a | 9/7/2016 | 89000 | No | 38 | 7.5e14 | 1.2e14 | 0 | None | x^3 | 0.0001937 | Param Intra 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 100-SD | 37 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 92.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 104-SD | 760 | n/a | 8/24/2016 | 401 | No | 36 | n/a | n/a | 69.44 | n/a | n/a | 0.00142 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 106-SD | 3400 | n/a | 8/23/2016 | 214 | No | 40 | n/a | n/a | 75 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chemical Oxygen Demand [COD] (mg/L) | 111-SD | 63 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chloride (mg/L) | 100-SD | 13 | n/a | 9/7/2016 | 1.7 | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| **Chloride (mg/L)** | **104-SD** | **110** | **n/a** | **8/24/2016** | **356** | **Yes** | **26** | **n/a** | **n/a** | **0** | **n/a** | **n/a** | **0.002637** | **NP Intra (normality) 1 of 2** |
| Chloride (mg/L) | 106-SD | 1000 | n/a | 8/23/2016 | 306 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Chloride (mg/L) | 111-SD | 19 | n/a | 9/7/2016 | 10.4 | No | 40 | 2.531 | 0.173 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Chromium Total (ug/L) | 100-SD | 13 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| **Chromium Total (ug/L)** | **104-SD** | **13** | **n/a** | **8/24/2016** | **16.9** | **Yes** | **40** | **n/a** | **n/a** | **82.5** | **n/a** | **n/a** | **0.001152** | **NP Intra (NDs) 1 of 2** |
| Chromium Total (ug/L) | 106-SD | 42 | n/a | 8/23/2016 | 7.4 | No | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Chromium Total (ug/L) | 111-SD | 22 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 100-SD | 10 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 104-SD | 10 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 106-SD | 12 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Cobalt Total (ug/L) | 111-SD | 10 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 100-SD | 10 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 104-SD | 13 | n/a | 8/24/2016 | 5.1 | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 11:58 AM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper Total (ug/L) | 106-SD | 47 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Copper Total (ug/L) | 111-SD | 10 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Fluoride (mg/L) | 100-SD | 2.4 | n/a | 9/7/2016 | 2.2 | No | 26 | 4.154 | 0.6542 | 0 | None | x^2 | 0.0001937 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 104-SD | 1 | n/a | 8/24/2016 | , | No | 22 | 0.6967 | 0.1384 | 0 | None | x^2 | 0.0001937 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 106-SD | 1.5 | n/a | 8/23/2016 | 1.4 | No | 23 | 1.552 | 0.68 | 0 | None | x^3 | 0.0001937 | Param Intra 1 of 2 |
| Fluoride (mg/L) | 111-SD | 2.4 | n/a | 9/7/2016 | 2.2 | No | 25 | 18.37 | 5.15 | 0 | None | x^4 | 0.0001937 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 100-SD | 380 | n/a | 9/7/2016 | 337 | No | 39 | 5.824 | 0.04847 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| **Hardness Total (mg/L)** | **104-SD** | **570** | **n/a** | **8/24/2016** | **590** | **Yes** | **34** | **1.2e8** | **2.6e7** | **0** | **None** | **x^3** | **0.0001937** | **Param Intra 1 of 2** |
| Hardness Total (mg/L) | 106-SD | 590 | n/a | 8/23/2016 | 574 | No | 35 | 6.15 | 0.09469 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Hardness Total (mg/L) | 111-SD | 500 | n/a | 9/7/2016 | 438 | No | 38 | 7.638 | 0.1242 | 0 | None | x^(1/3) | 0.0001937 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 100-SD | 2900 | n/a | 9/7/2016 | 759 | No | 39 | 1623 | 514.4 | 0 | None | No | 0.0001937 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 104-SD | 31000 | n/a | 8/24/2016 | 16100 | No | 40 | 7.096 | 1.332 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 106-SD | 8600 | n/a | 8/23/2016 | 1780 | No | 37 | 11.73 | 3.576 | 0 | None | x^(1/3) | 0.0001937 | Param Intra 1 of 2 |
| Iron Total (ug/L) | 111-SD | 8200 | n/a | 9/7/2016 | 900 | No | 40 | 6.026 | 1.228 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Lead Total (ug/L) | 100-SD | 2.5 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 104-SD | 25 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 106-SD | 25 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Lead Total (ug/L) | 111-SD | 25 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Magnesium Total (ug/L) | 100-SD | 40000 | n/a | 9/7/2016 | 35500 | No | 40 | 10.48 | 0.04911 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| **Magnesium Total (ug/L)** | **104-SD** | **58000** | **n/a** | **8/24/2016** | **72900** | **Yes** | **31** | **36.99** | **0.6987** | **0** | **None** | **x^(1/3)** | **0.0001937** | **Param Intra 1 of 2** |
| **Magnesium Total (ug/L)** | **106-SD** | **63000** | **n/a** | **8/23/2016** | **75600** | **Yes** | **36** | **10.82** | **0.09234** | **0** | **None** | **ln(x)** | **0.0001937** | **Param Intra 1 of 2** |
| Magnesium Total (ug/L) | 111-SD | 60000 | n/a | 9/7/2016 | 52300 | No | 39 | 10.89 | 0.0489 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Manganese Total (ug/L) | 100-SD | 34000 | n/a | 9/7/2016 | 56.5 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Manganese Total (ug/L) | 104-SD | 200 | n/a | 8/24/2016 | 137 | No | 40 | 4.643 | 0.2679 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Manganese Total (ug/L) | 106-SD | 560 | n/a | 8/23/2016 | 29.1 | No | 40 | 5.302 | 1.222 | 0 | None | x^(1/3) | 0.0001937 | Param Intra 1 of 2 |
| Manganese Total (ug/L) | 111-SD | 40 | n/a | 9/7/2016 | 21.4 | No | 40 | n/a | n/a | 45 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Mercury Total (ug/L) | 100-SD | 0.10 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 104-SD | 0.10 | n/a | 8/24/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 106-SD | 0.10 | n/a | 8/23/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Mercury Total (ug/L) | 111-SD | 0.10 | n/a | 9/7/2016 | 0.1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 100-SD | 20 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| **Nickel Total (ug/L)** | **104-SD** | **60** | **n/a** | **8/24/2016** | **70.1** | **Yes** | **40** | **n/a** | **n/a** | **75** | **n/a** | **n/a** | **0.001152** | **NP Intra (NDs) 1 of 2** |
| Nickel Total (ug/L) | 106-SD | 60 | n/a | 8/23/2016 | 17.1 | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nickel Total (ug/L) | 111-SD | 20 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 100-SD | 0.050 | n/a | 9/7/2016 | 0.05ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 104-SD | 1.3 | n/a | 8/24/2016 | 0.05ND | No | 40 | n/a | n/a | 95 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 106-SD | 0.30 | n/a | 8/23/2016 | 0.05ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Nitrate/Nitrite (mg/L) | 111-SD | 5.0 | n/a | 9/7/2016 | 0.05ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| pH [Field] (su) | 100-SD | 8.2 | 6.6 | 9/7/2016 | 7.15 | No | 39 | 1.993 | 0.04354 | 0 | None | ln(x) | 0.00009683 | Param Intra 1 of 2 |
| pH [Field] (su) | 104-SD | 8.2 | 6.2 | 8/24/2016 | 6.9 | No | 34 | 53 | 5.7 | 0 | None | x^2 | 0.00009683 | Param Intra 1 of 2 |
| pH [Field] (su) | 106-SD | 8 | 6.5 | 8/23/2016 | 6.8 | No | 31 | 1.973 | 0.04295 | 0 | None | ln(x) | 0.00009683 | Param Intra 1 of 2 |
| pH [Field] (su) | 111-SD | 8.1 | 6.4 | 9/7/2016 | 7.01 | No | 39 | 1.976 | 0.04679 | 0 | None | ln(x) | 0.00009683 | Param Intra 1 of 2 |
| Phosphorus Total (mg/L) | 100-SD | 0.94 | n/a | 9/7/2016 | 0.025ND | No | 40 | n/a | n/a | 65 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Phosphorus Total (mg/L) | 104-SD | 0.29 | n/a | 8/24/2016 | 0.17 | No | 40 | -3.189 | 0.7998 | 47.5 | Kaplan-Meier | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Phosphorus Total (mg/L) | 106-SD | 0.23 | n/a | 8/23/2016 | 0.11 | No | 40 | 0.09779 | 0.05309 | 15 | None | No | 0.0001937 | Param Intra 1 of 2 |
| Phosphorus Total (mg/L) | 111-SD | 0.37 | n/a | 9/7/2016 | 0.025ND | No | 40 | n/a | n/a | 72.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 100-SD | 2.5 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 104-SD | 50 | n/a | 8/24/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 106-SD | 50 | n/a | 8/23/2016 | 2.5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Selenium Total (ug/L) | 111-SD | 50 | n/a | 9/7/2016 | 2.5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

# Prediction Limit

Bridgeton LF Client: RSI Data: Bridgeton LF Printed 10/10/2016, 11:58 AM

| Constituent | Well | Upper Lim. | Lower Lim. | Date | Observ. | Sig. | Bg N | Bg Mean | Std. Dev. | %NDs | ND Adj. | Transform | Alpha | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Silver Total (ug/L) | 100-SD | 2.5 | n/a | 9/7/2016 | 2.5ND | No | 38 | n/a | n/a | 100 | n/a | n/a | 0.001286 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 104-SD | 12 | n/a | 8/24/2016 | 2.5ND | No | 38 | n/a | n/a | 100 | n/a | n/a | 0.001286 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 106-SD | 12 | n/a | 8/23/2016 | 2.5ND | No | 39 | n/a | n/a | 100 | n/a | n/a | 0.001219 | NP Intra (NDs) 1 of 2 |
| Silver Total (ug/L) | 111-SD | 5.0 | n/a | 9/7/2016 | 2.5ND | No | 39 | n/a | n/a | 100 | n/a | n/a | 0.001219 | NP Intra (NDs) 1 of 2 |
| Sodium Total (ug/L) | 100-SD | 13000 | n/a | 9/7/2016 | 6750 | No | 40 | 20.08 | 1.372 | 0 | None | x^(1/3) | 0.0001937 | Param Intra 1 of 2 |
| **Sodium Total (ug/L)** | **104-SD** | **34000** | **n/a** | **8/24/2016** | **197000** | **Yes** | **10** | **10** | **0.1276** | **0** | **None** | **ln(x)** | **0.0001937** | **Param Intra 1 of 2** |
| Sodium Total (ug/L) | 106-SD | 560000 | n/a | 8/23/2016 | 246000 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Sodium Total (ug/L) | 111-SD | 25000 | n/a | 9/7/2016 | 17500 | No | 38 | 9.94 | 0.08286 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Specific Conductance [Field] (umhos/cm) | 100-SD | 710 | n/a | 9/7/2016 | 567 | No | 39 | 2.5e8 | 4.1e7 | 0 | None | x^3 | 0.0001937 | Param Intra 1 of 2 |
| **Specific Conductance [Field] (umhos/cm)** | **104-SD** | **1500** | **n/a** | **8/24/2016** | **2030** | **Yes** | **33** | **6.911** | **0.1526** | **0** | **None** | **ln(x)** | **0.0001937** | **Param Intra 1 of 2** |
| **Specific Conductance [Field] (umhos/cm)** | **106-SD** | **1200** | **n/a** | **8/23/2016** | **2680** | **Yes** | **36** | **6.803** | **0.1014** | **0** | **None** | **ln(x)** | **0.0001937** | **Param Intra 1 of 2** |
| Specific Conductance [Field] (umhos/cm) | 111-SD | 1000 | n/a | 9/7/2016 | 697 | No | 39 | 731124 | 112677 | 0 | None | x^2 | 0.0001937 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 100-SD | 15 | n/a | 9/7/2016 | 10 | No | 40 | 2.323 | 0.1561 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 104-SD | 100 | n/a | 8/24/2016 | 0.69 | No | 40 | n/a | n/a | 0 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Sulfate (mg/L) | 106-SD | 160 | n/a | 8/23/2016 | 35.8 | No | 40 | 87.24 | 31.12 | 2.5 | None | No | 0.0001937 | Param Intra 1 of 2 |
| Sulfate (mg/L) | 111-SD | 67 | n/a | 9/7/2016 | 45.7 | No | 39 | 3.932 | 0.1116 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Thallium Total (ug/L) | 100-SD | 2.5 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 104-SD | 50 | n/a | 8/24/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 106-SD | 50 | n/a | 8/23/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Thallium Total (ug/L) | 111-SD | 50 | n/a | 9/7/2016 | 1ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Total Dissolved Solids [TDS] (mg/L) | 100-SD | 400 | n/a | 9/7/2016 | 323 | No | 37 | 5.819 | 0.07451 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| **Total Dissolved Solids [TDS] (mg/L)** | **104-SD** | **780** | **n/a** | **8/24/2016** | **1370** | **Yes** | **32** | **6.38** | **0.11** | **0** | **None** | **ln(x)** | **0.0001937** | **Param Intra 1 of 2** |
| **Total Dissolved Solids [TDS] (mg/L)** | **106-SD** | **700** | **n/a** | **8/23/2016** | **1360** | **Yes** | **36** | **538.1** | **65.86** | **0** | **None** | **No** | **0.0001937** | **Param Intra 1 of 2** |
| Total Dissolved Solids [TDS] (mg/L) | 111-SD | 560 | n/a | 9/7/2016 | 424 | No | 38 | 6.175 | 0.06301 | 0 | None | ln(x) | 0.0001937 | Param Intra 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 100-SD | 29 | n/a | 9/7/2016 | 0.5ND | No | 40 | n/a | n/a | 32.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| **Total Organic Carbon [TOC] (mg/L)** | **104-SD** | **32** | **n/a** | **8/24/2016** | **110** | **Yes** | **32** | **n/a** | **n/a** | **62.5** | **n/a** | **n/a** | **0.001789** | **NP Intra (NDs) 1 of 2** |
| Total Organic Carbon [TOC] (mg/L) | 106-SD | 370 | n/a | 8/23/2016 | 64.1 | No | 37 | n/a | n/a | 37.84 | n/a | n/a | 0.001353 | NP Intra (normality) 1 of 2 |
| Total Organic Carbon [TOC] (mg/L) | 111-SD | 30 | n/a | 9/7/2016 | 0.5ND | No | 40 | n/a | n/a | 42.5 | n/a | n/a | 0.001152 | NP Intra (normality) 1 of 2 |
| Vanadium Total (ug/L) | 100-SD | 5.0 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 100 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 104-SD | 38 | n/a | 8/24/2016 | 17.5 | No | 40 | n/a | n/a | 87.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 106-SD | 42 | n/a | 8/23/2016 | 5ND | No | 40 | n/a | n/a | 90 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Vanadium Total (ug/L) | 111-SD | 33 | n/a | 9/7/2016 | 5ND | No | 40 | n/a | n/a | 97.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 100-SD | 120 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 104-SD | 96 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 77.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 106-SD | 77 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 80 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |
| Zinc Total (ug/L) | 111-SD | 100 | n/a | n/a | 1 future | n/a | 40 | n/a | n/a | 82.5 | n/a | n/a | 0.001152 | NP Intra (NDs) 1 of 2 |

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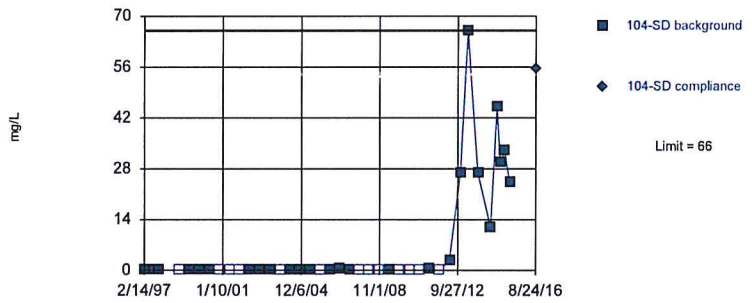
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 32.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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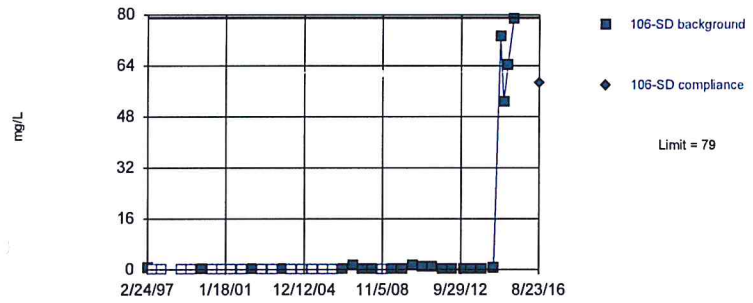
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 40% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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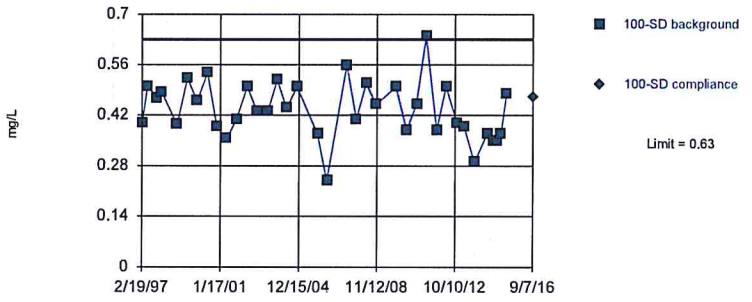
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=0.4359, Std. Dev.=0.07903, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9826, critical = 0.914. Kappa = 2.45 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Three background outliers were removed: <0.1 (5/24/2005); 0.13 (11/8/2006); 1.2 (5/8/2009).

Constituent: Ammonia as N Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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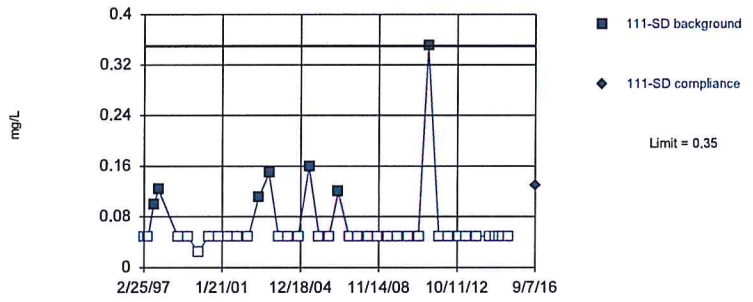
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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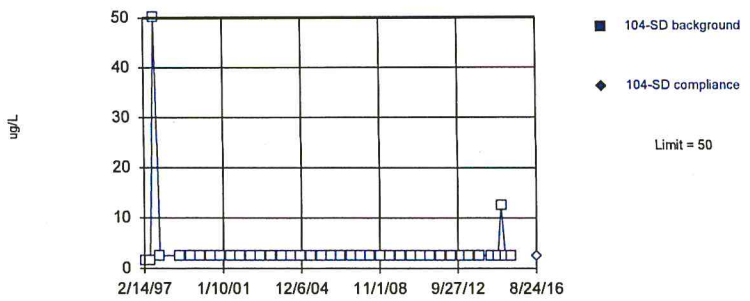
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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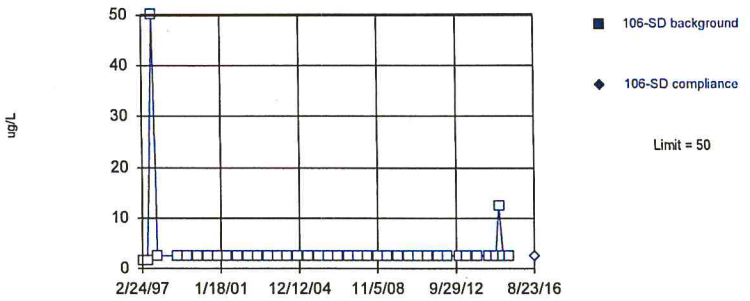
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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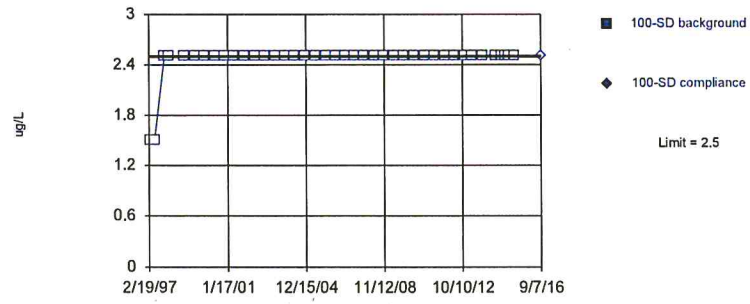
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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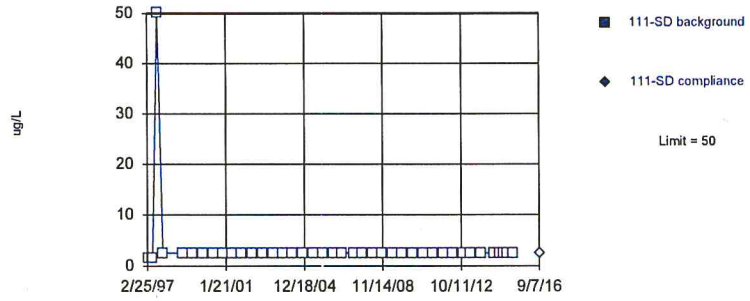
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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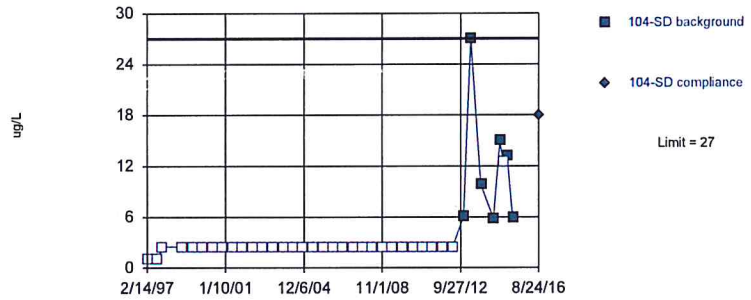
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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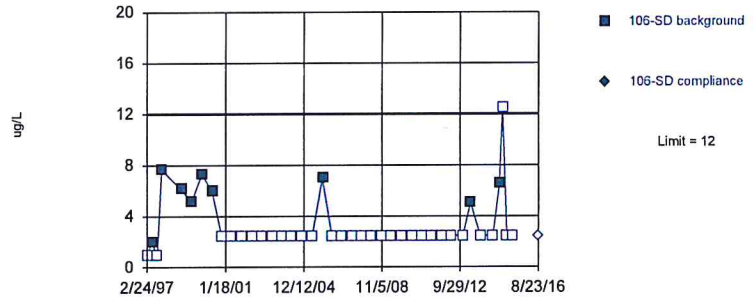
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 77.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

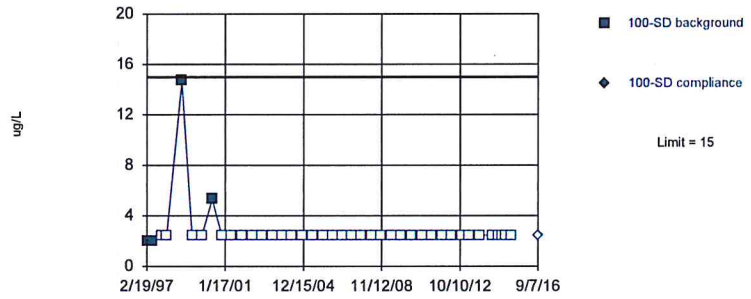
Constituent: Arsenic Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

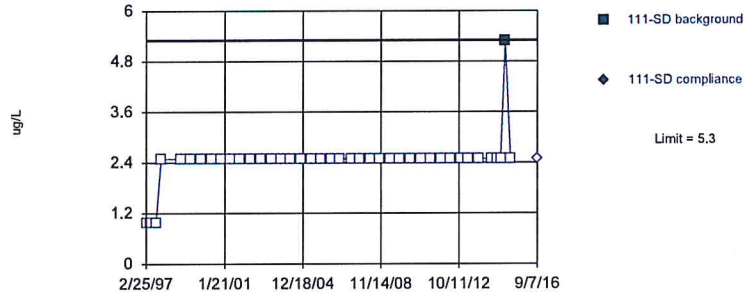
Constituent: Arsenic Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

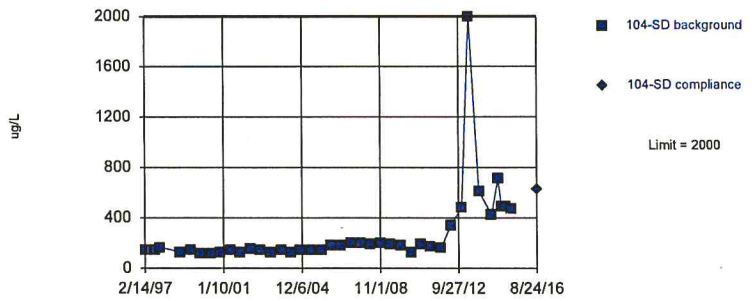
Constituent: Arsenic Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Barium Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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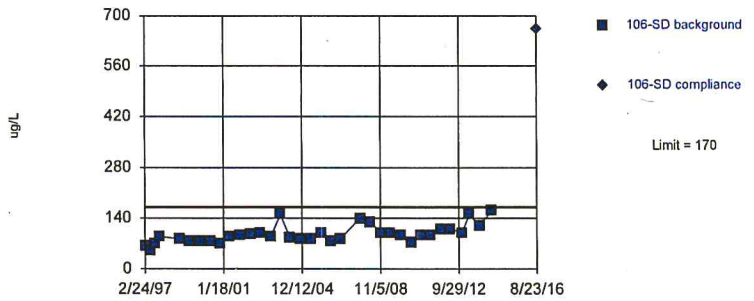
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=4.53, Std. Dev.=0.2517, n=35. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9644, critical = 0.91. Kappa = 2.466 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Five background outliers were removed: 220 (5/21/2007); 1400 (9/24/2014); 924 (11/20/2014); 1140 (2/4/2015); 985 (5/14/2015).

Constituent: Barium Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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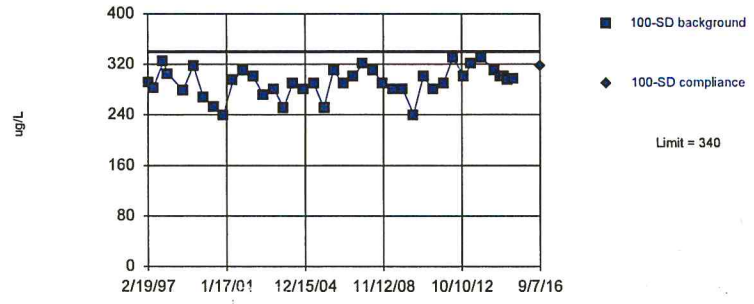
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=7.4e9, Std. Dev.=2.2e9, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9657, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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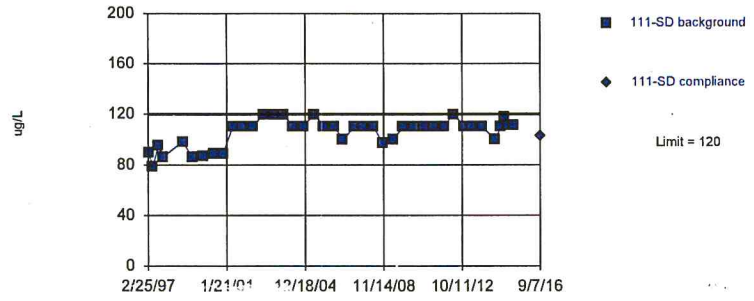
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Barium Total Analysis Run 10/10/2016 11:46 AM

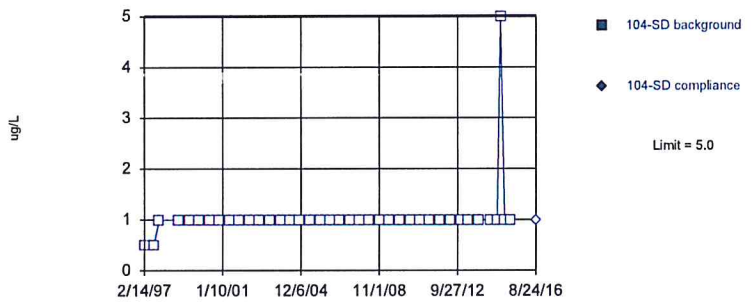
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

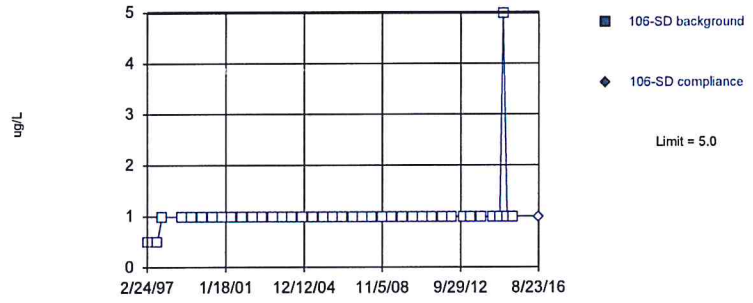
Constituent: Beryllium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

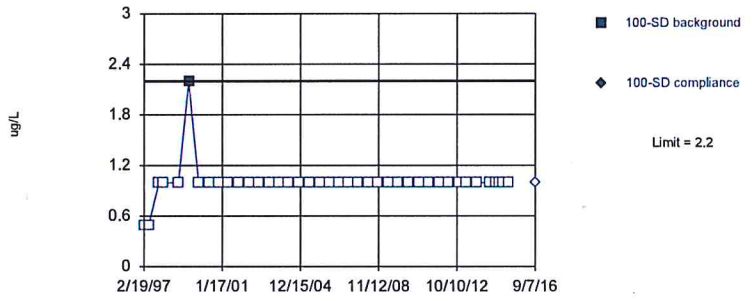
Constituent: Beryllium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

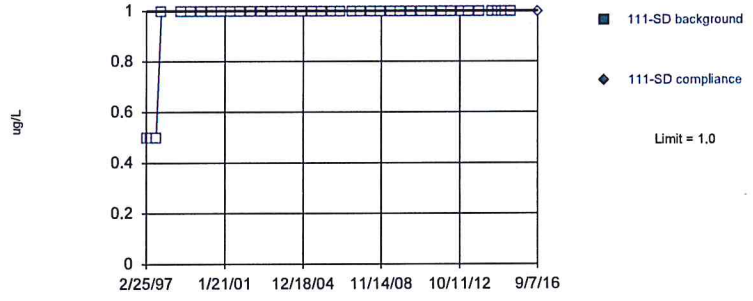
Constituent: Beryllium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

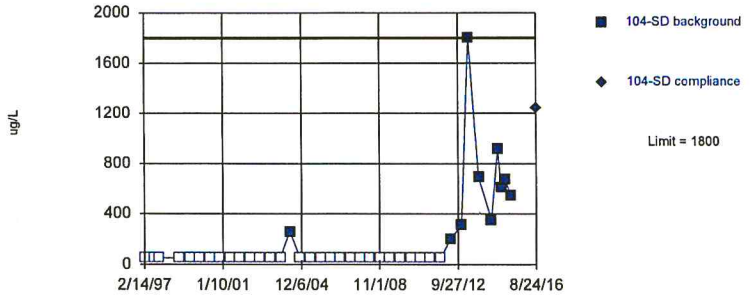
Constituent: Beryllium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 11:46 AM

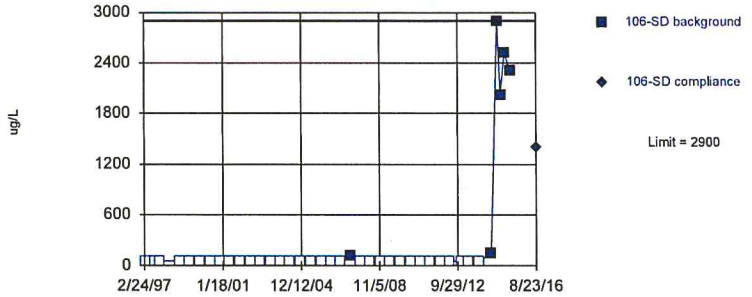
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 11:46 AM

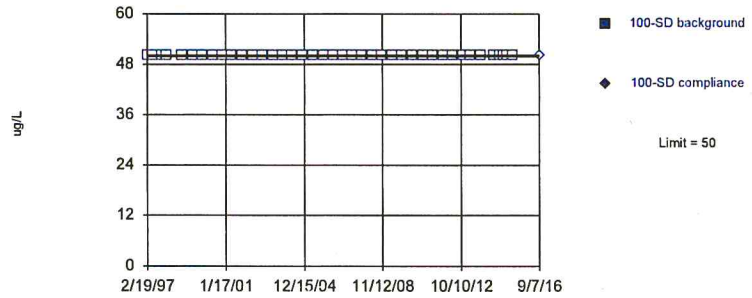
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 11:46 AM

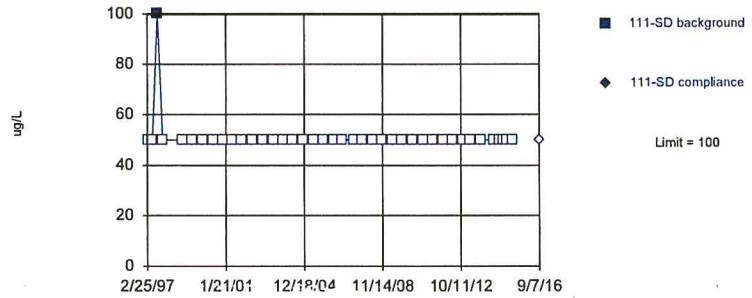
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 10/10/2016 11:46 AM

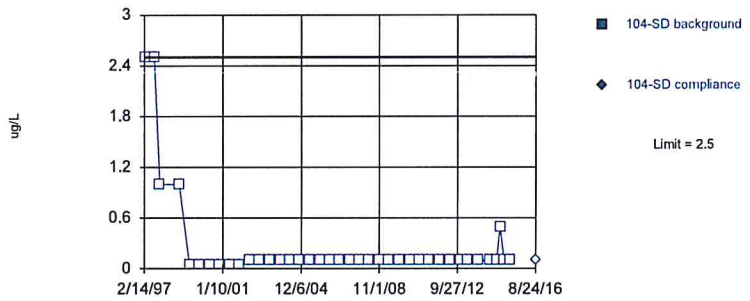
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

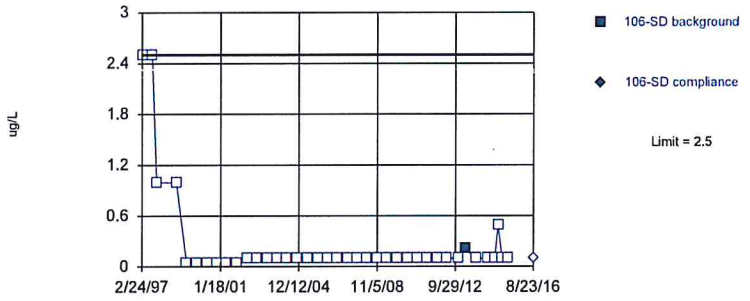
Constituent: Cadmium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

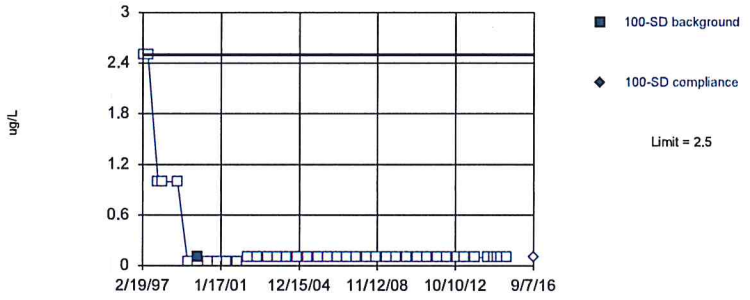
Constituent: Cadmium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

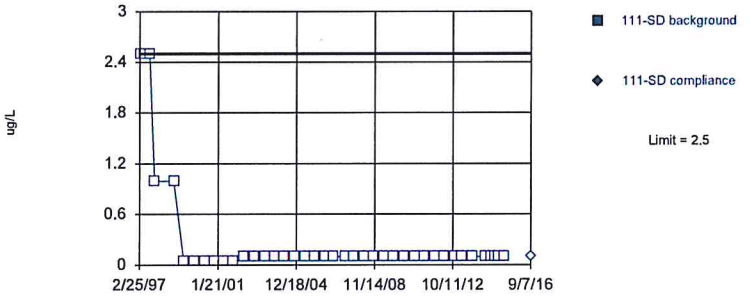
Constituent: Cadmium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

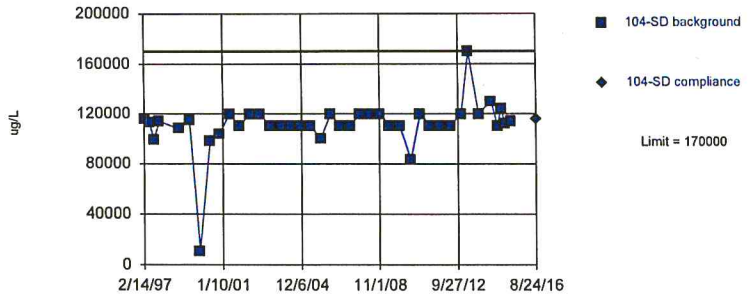
Constituent: Cadmium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Calcium Total Analysis Run 10/10/2016 11:46 AM

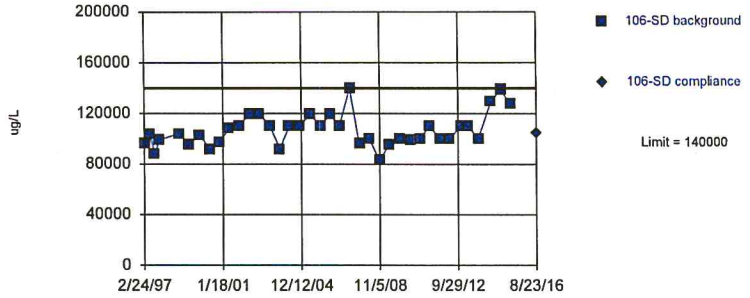
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.57, Std. Dev.=0.1181, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9547, critical = 0.916. Kappa = 2.442 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Two background outliers were removed: 200000 (9/24/2014); 176000 (2/4/2015).

Constituent: Calcium Total Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.25, Std. Dev.=0.05606, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9571, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Calcium Total Analysis Run 10/10/2016 11:46 AM

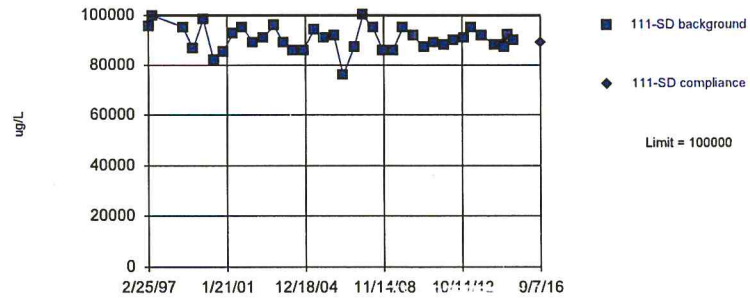
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=7.5e14, Std. Dev.=1.2e14, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9719, critical = 0.916. Kappa = 2.442 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Two background outliers were removed: 8590 (8/21/1997); 70400 (11/24/1997).

Constituent: Calcium Total Analysis Run 10/10/2016 11:46 AM

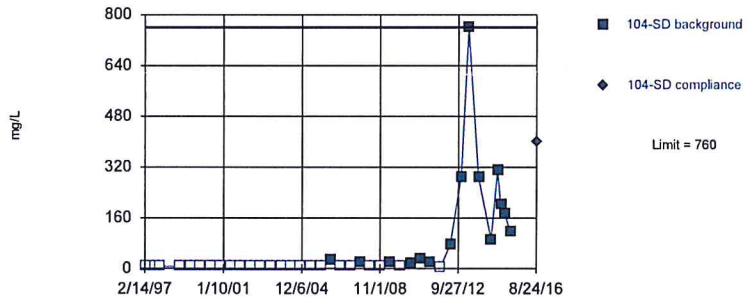
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

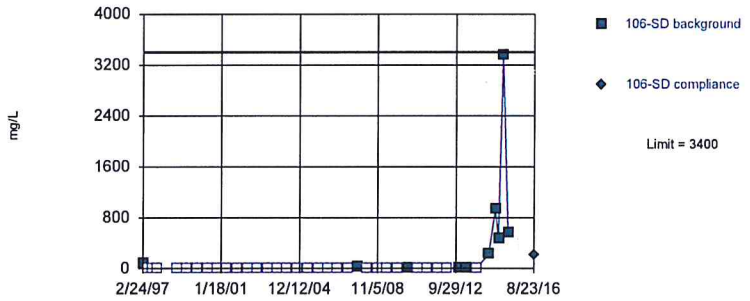
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

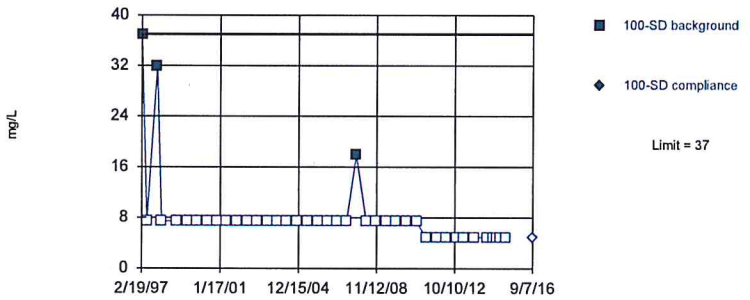
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

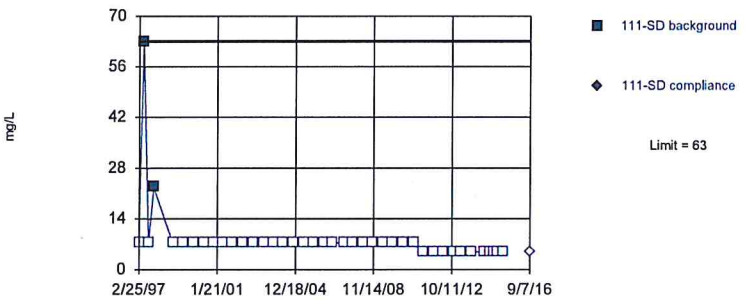
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

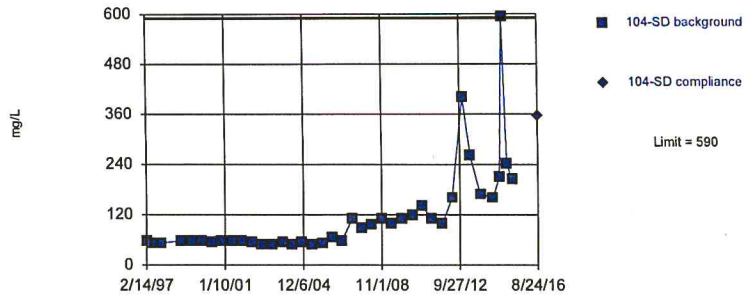
Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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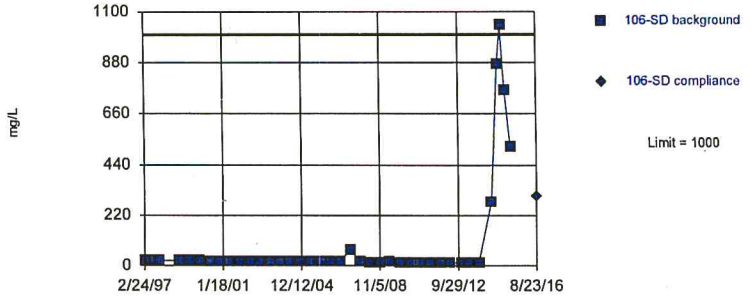
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Chloride Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

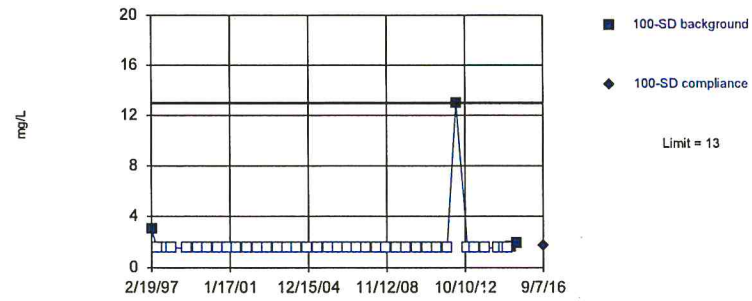
Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 11:46 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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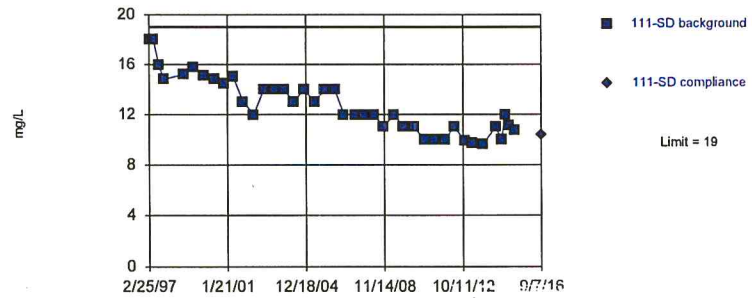
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=2.531, Std. Dev.=0.173, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9432, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 10/10/2016 11:46 AM

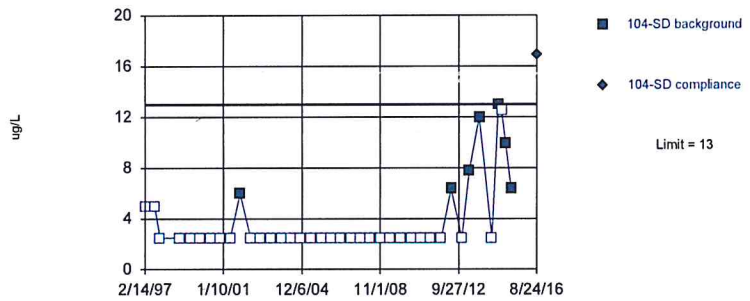
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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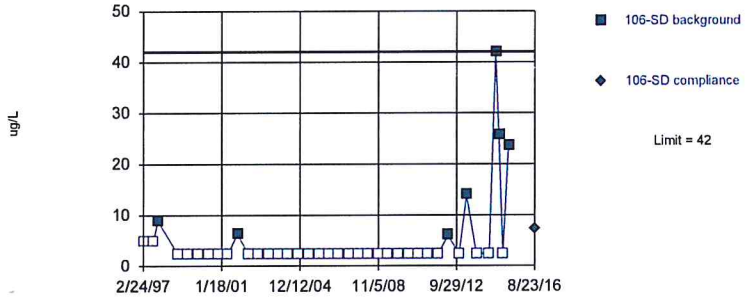
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

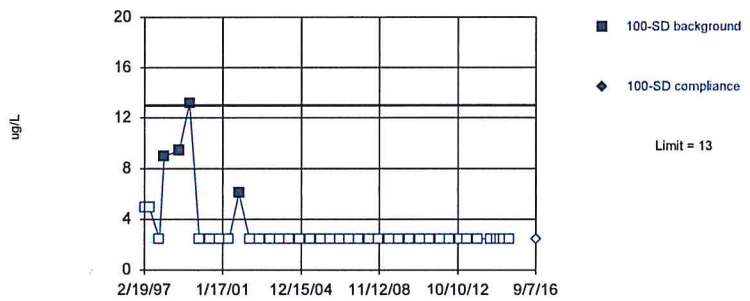
Constituent: Chromium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

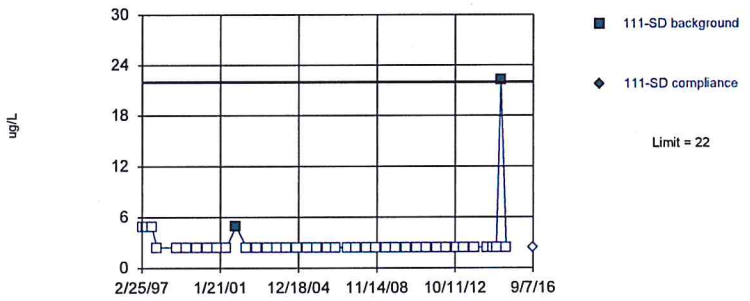
Constituent: Chromium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

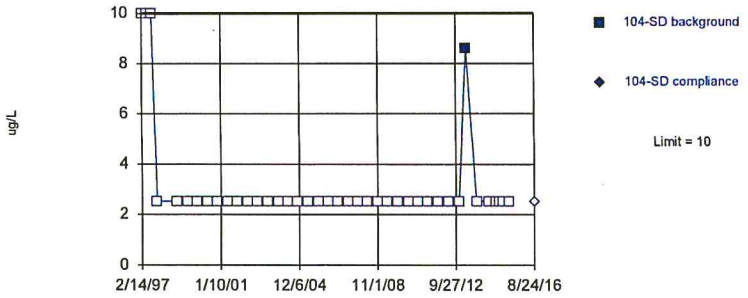
Constituent: Chromium Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

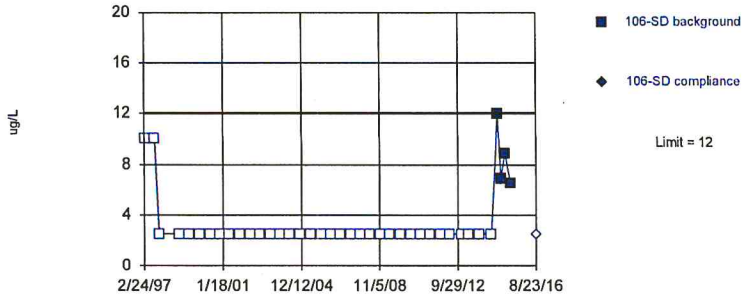
Constituent: Cobalt Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

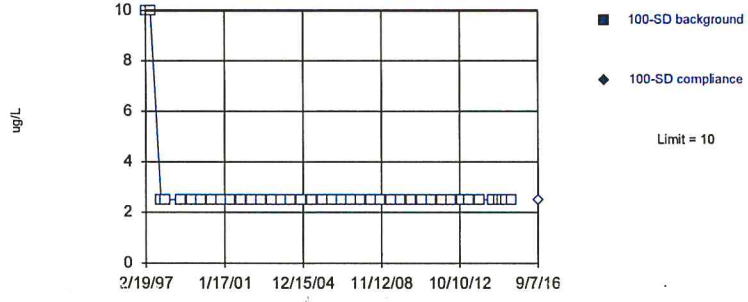
Constituent: Cobalt Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

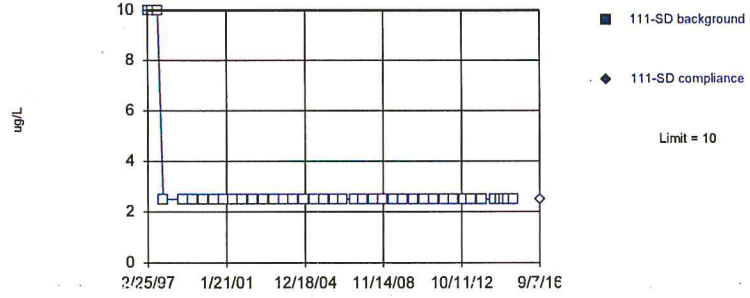
Constituent: Cobalt Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

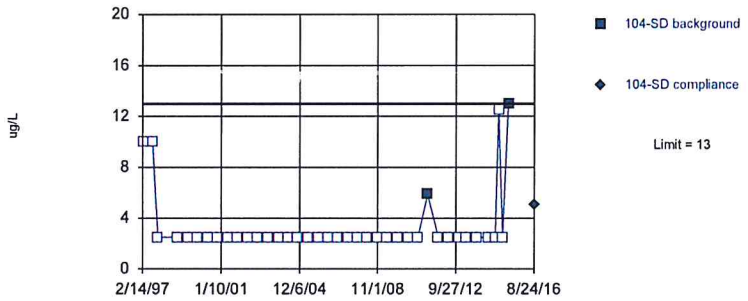
Constituent: Cobalt Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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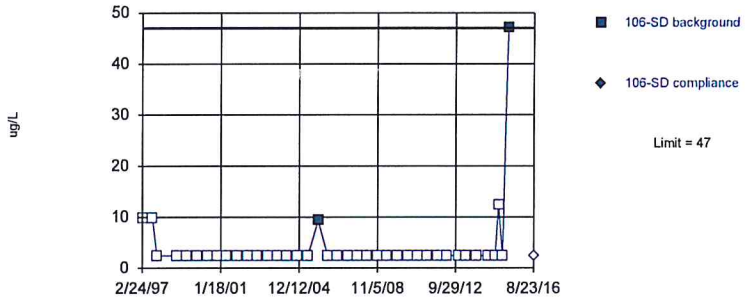
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

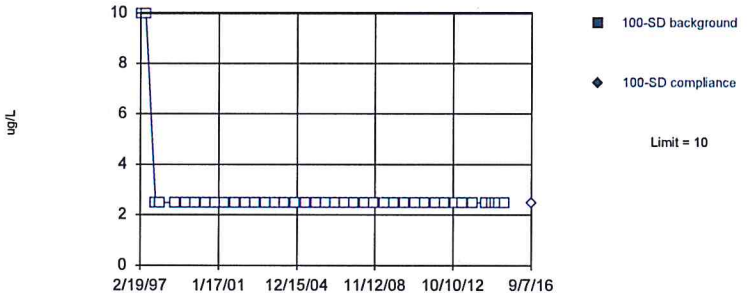
Constituent: Copper Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

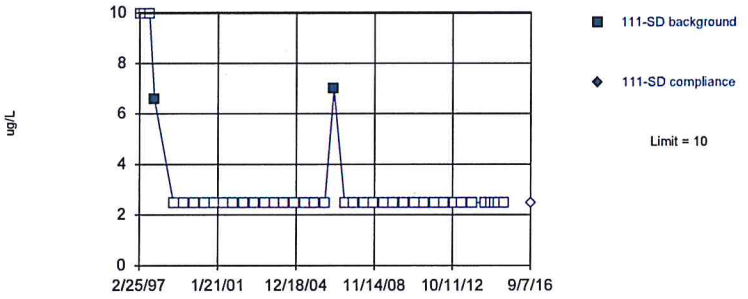
Constituent: Copper Total Analysis Run 10/10/2016 11:46 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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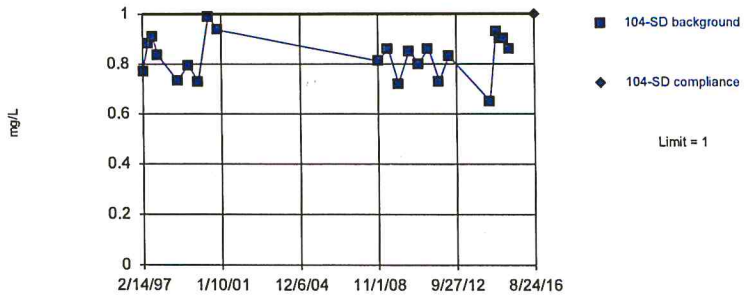
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=0.6967, Std. Dev.=0.1384, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9836, critical = 0.878. Kappa = 2.66 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Four background outliers were removed: 1.26 (5/15/2001); <0.1 (11/27/2012); 0.21 (4/11/2013); <0.1 (10/7/2013).

Constituent: Fluoride Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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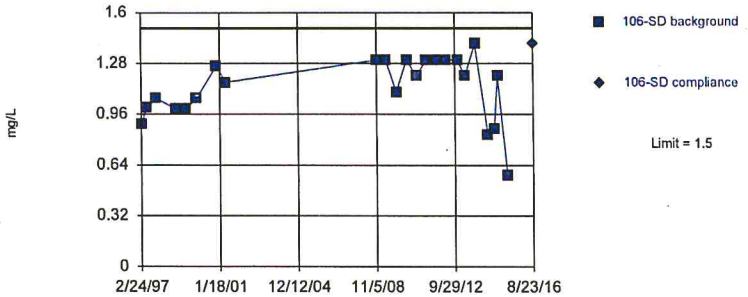
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.552, Std. Dev.=0.68, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9378, critical = 0.881. Kappa = 2.637 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Three background outliers were removed: <0.25 (8/28/1997); 2.24 (5/23/2000); 0.18 (2/4/2015).

Constituent: Fluoride Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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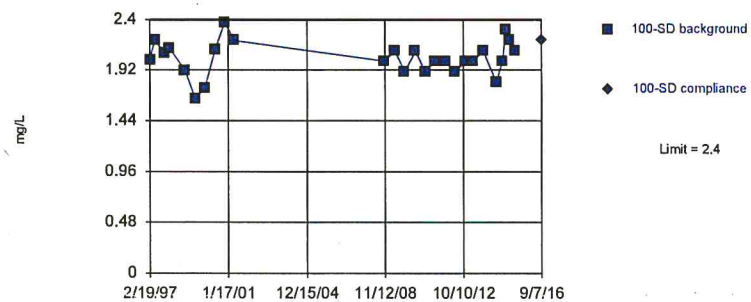
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=4.154, Std. Dev.=0.6542, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9765, critical = 0.891. Kappa = 2.575 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Fluoride Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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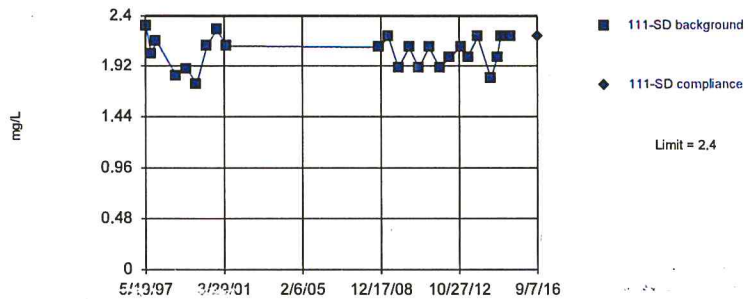
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on x^4 transformation): Mean=18.37, Std. Dev.=5.15, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9559, critical = 0.888. Kappa = 2.59 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 1.2 (2/25/1997).

Constituent: Fluoride Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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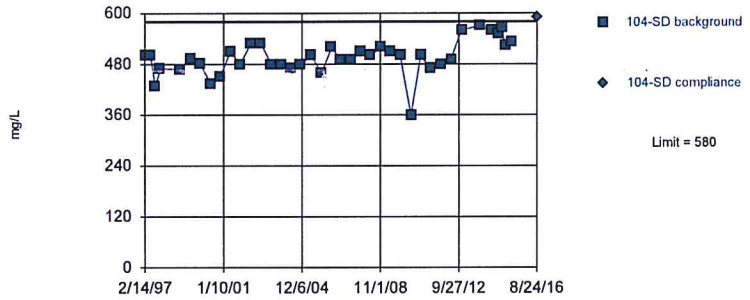
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.2e8, Std. Dev.=2.9e7, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 840 (4/11/2013).

Constituent: Hardness Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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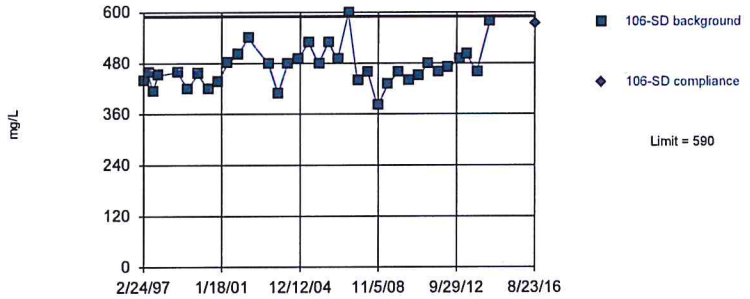
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.15, Std. Dev.=0.09469, n=35. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9671, critical = 0.91. Kappa = 2.466 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Five background outliers were removed: 180 (11/19/2002); 1300 (9/24/2014); 838 (11/20/2014); 1100 (2/4/2015); 817 (5/14/2015).

Constituent: Hardness Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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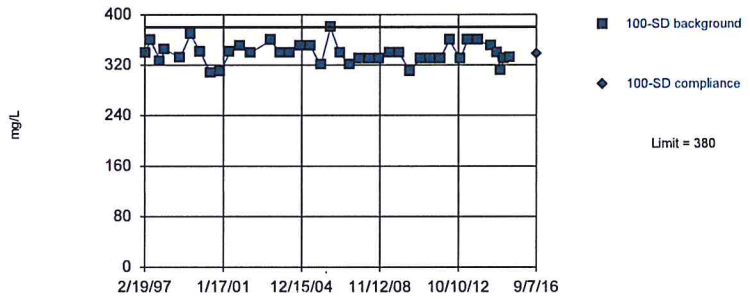
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.824, Std. Dev.=0.04847, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9622, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 120 (11/19/2002).

Constituent: Hardness Total Analysis Run 10/10/2016 11:47 AM

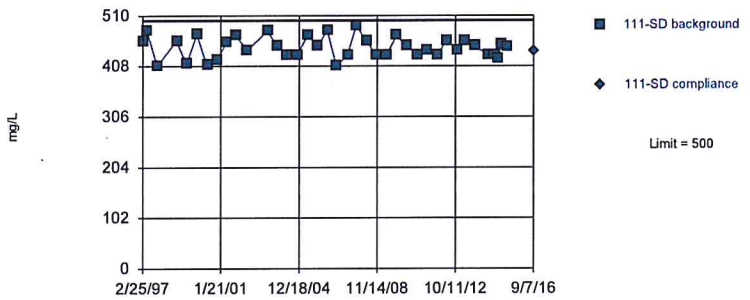
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=7.638, Std. Dev.=0.1242, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9532, critical = 0.916. Kappa = 2.442 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Two background outliers were removed: 37.1 (8/21/1997); 150 (11/19/2002).

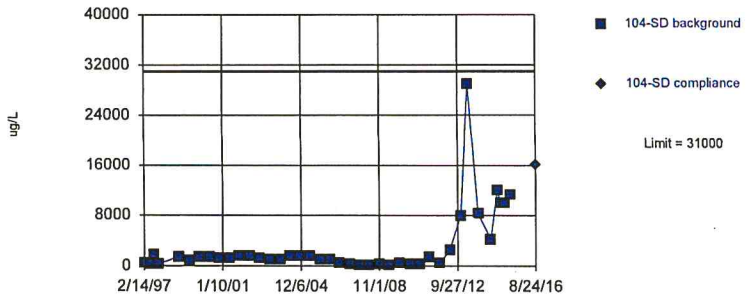
Constituent: Hardness Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=7.096, Std. Dev.=1.332, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9354, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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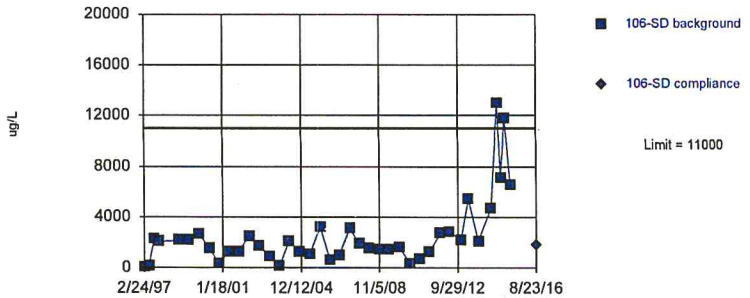
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=12.37, Std. Dev.=4.148, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9425, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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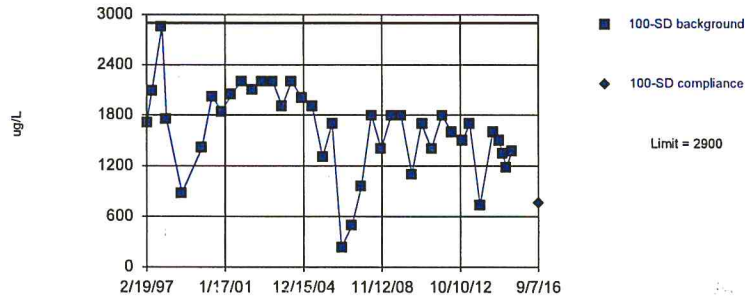
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=1623, Std. Dev.=514.4, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9632, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 3550 (5/18/1999).

Constituent: Iron Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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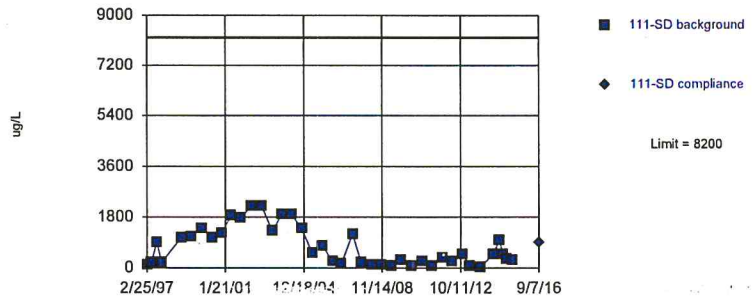
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.026, Std. Dev.=1.228, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9369, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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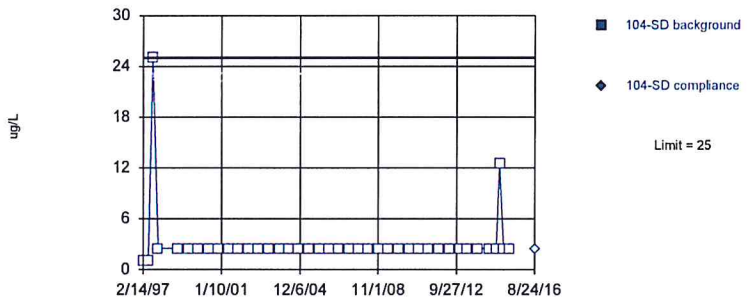
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 11:47 AM

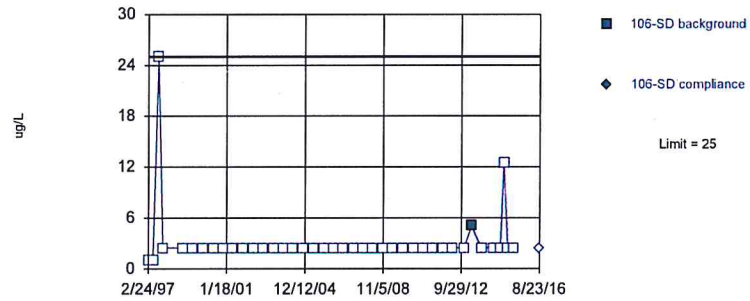
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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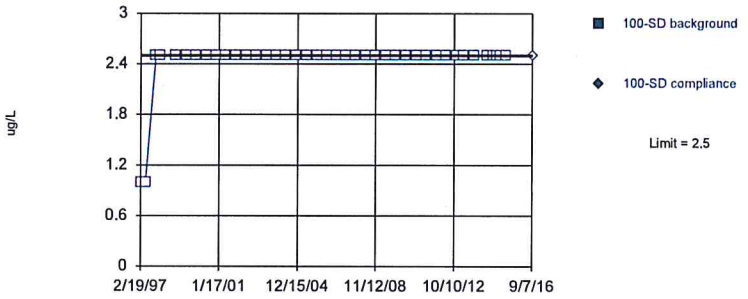
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 11:47 AM

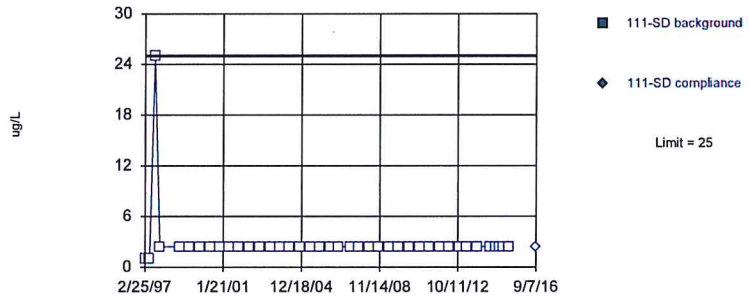
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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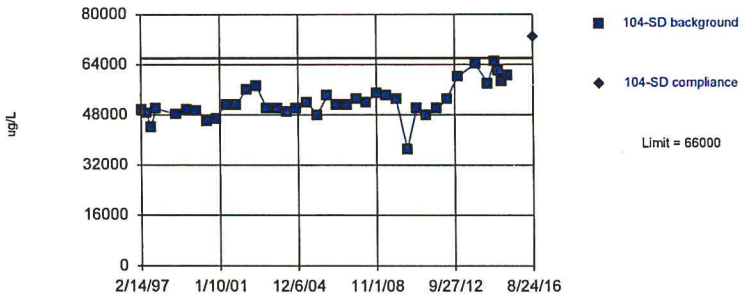
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square root transformation): Mean=228.1, Std. Dev.=12.08, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9487, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 100000 (4/11/2013).

Constituent: Magnesium Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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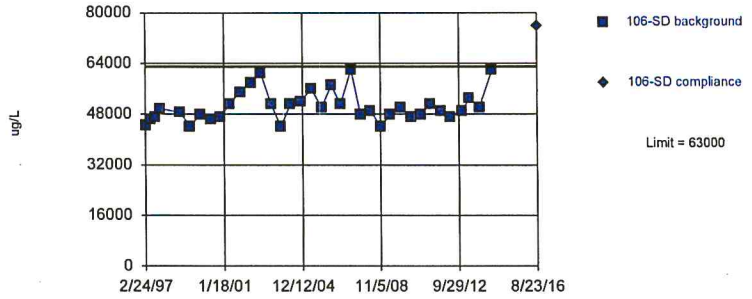
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.82, Std. Dev.=0.09234, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9134, critical = 0.912. Kappa = 2.458 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Four background outliers were removed: 190000 (9/24/2014); 119000 (11/20/2014); 160000 (2/4/2015); 120000 (5/14/2015).

Constituent: Magnesium Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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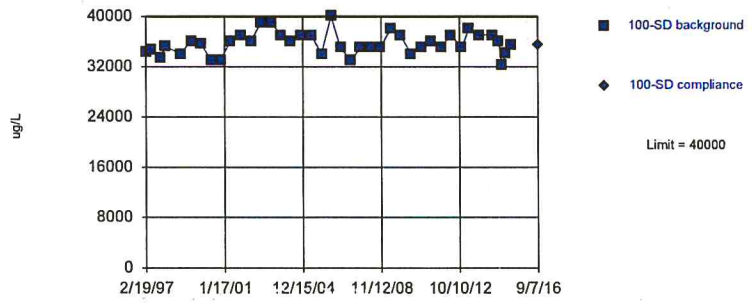
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.48, Std. Dev.=0.04911, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9731, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Magnesium Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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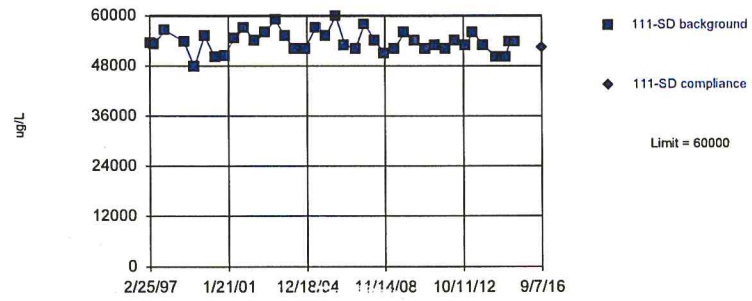
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.89, Std. Dev.=0.0489, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9842, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 3810 (8/21/1997).

Constituent: Magnesium Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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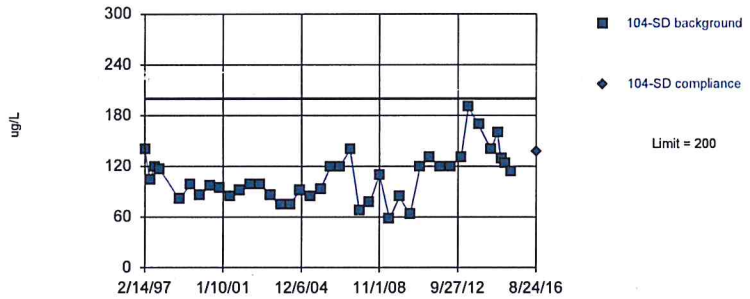
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=4.643, Std. Dev.=0.2679, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9844, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Manganese Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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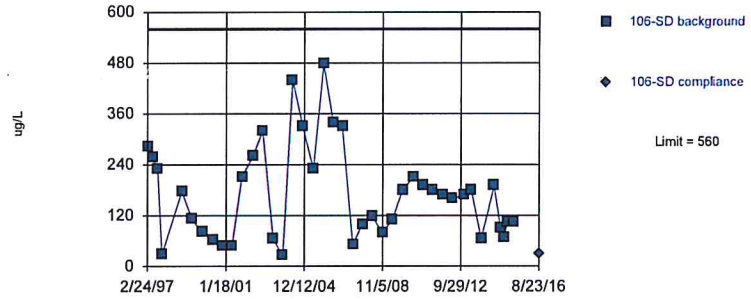
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=5.302, Std. Dev.=1.222, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9728, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Manganese Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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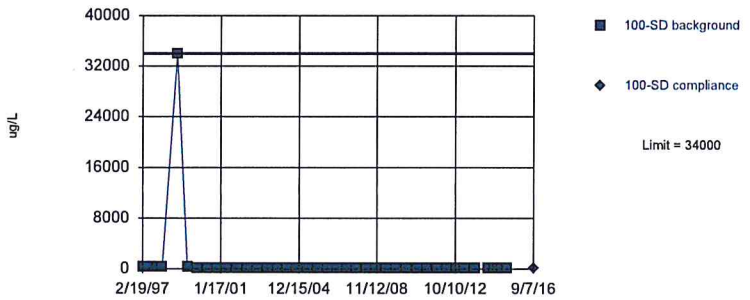
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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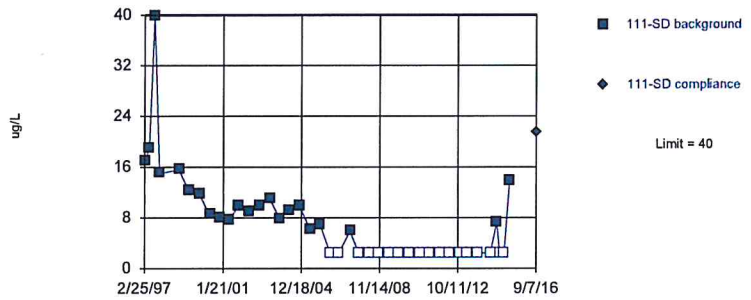
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 45% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 10/10/2016 11:47 AM

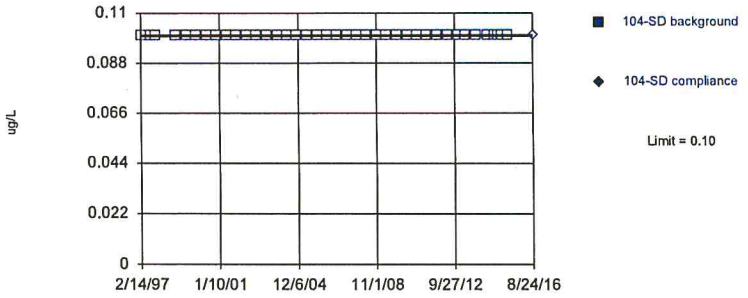
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 10/10/2016 11:47 AM

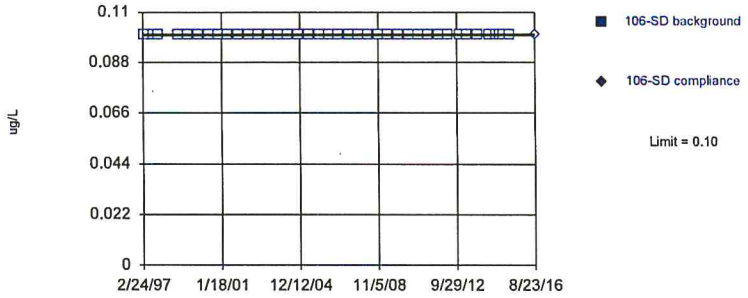
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 10/10/2016 11:47 AM

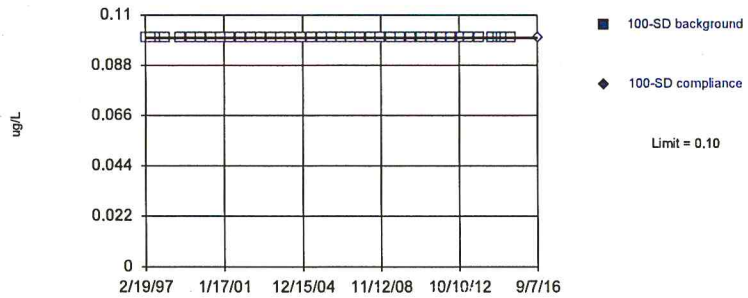
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 10/10/2016 11:47 AM

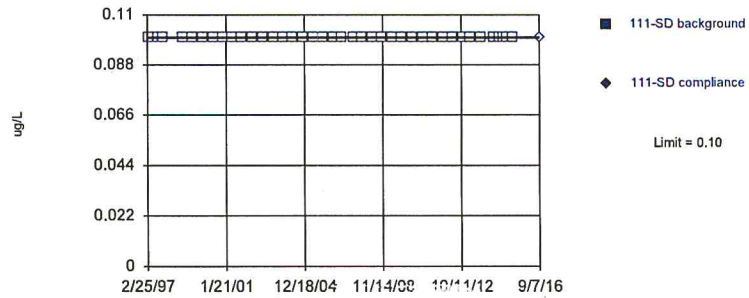
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 10/10/2016 11:47 AM

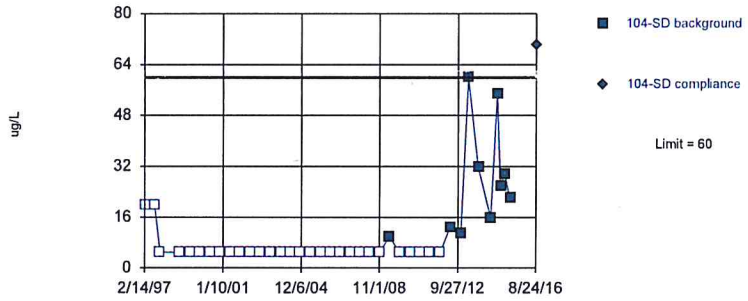
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 75% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

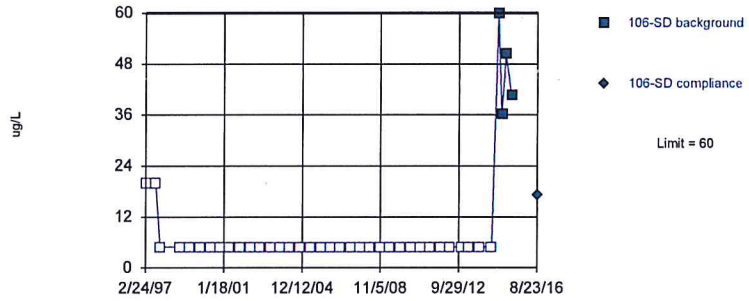
Constituent: Nickel Total Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

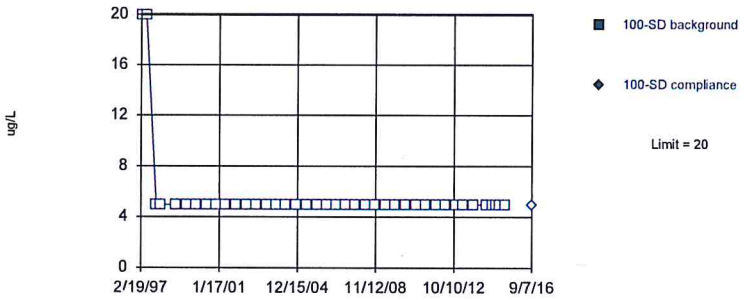
Constituent: Nickel Total Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

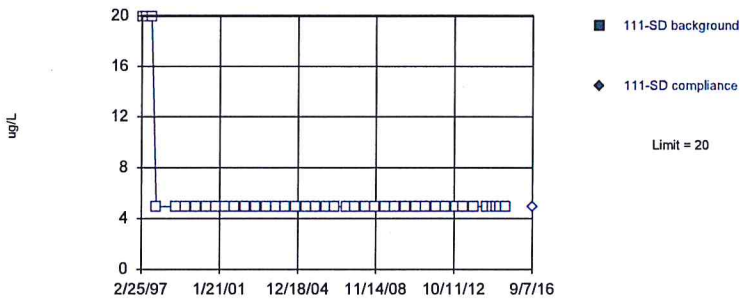
Constituent: Nickel Total Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

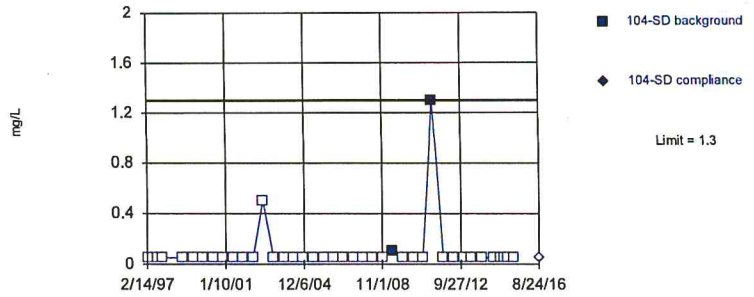
Constituent: Nickel Total Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 11:47 AM

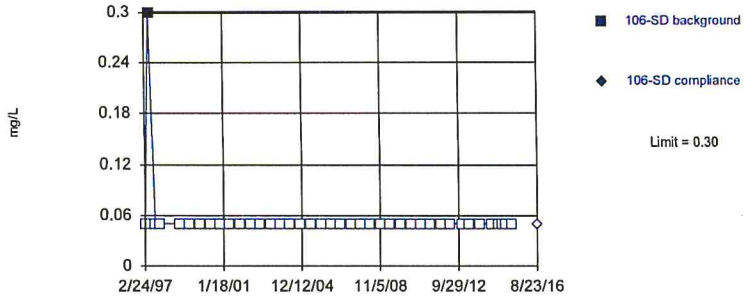
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 11:47 AM

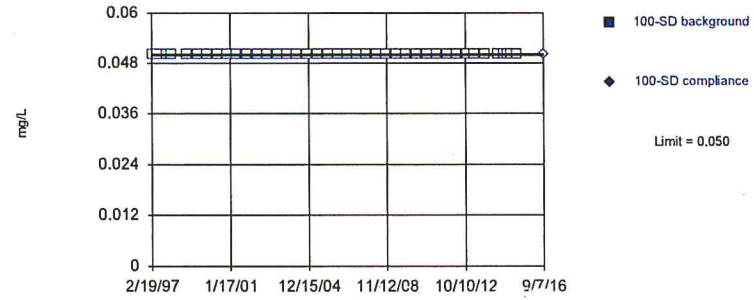
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 11:47 AM

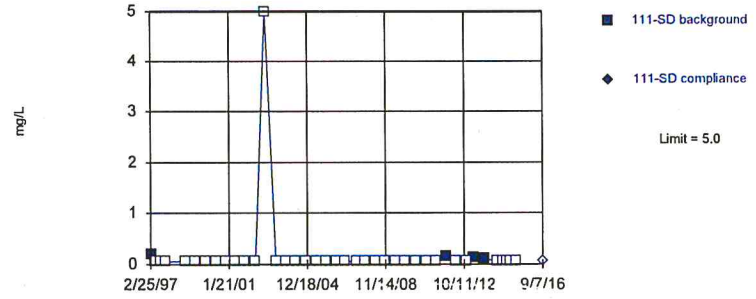
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 10/10/2016 11:47 AM

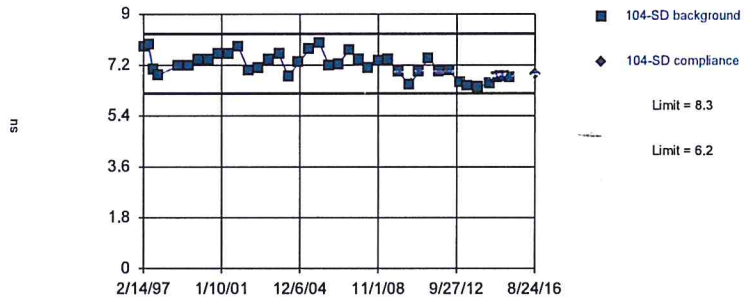
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.97, Std. Dev.=0.05879, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9631, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 11:47 AM

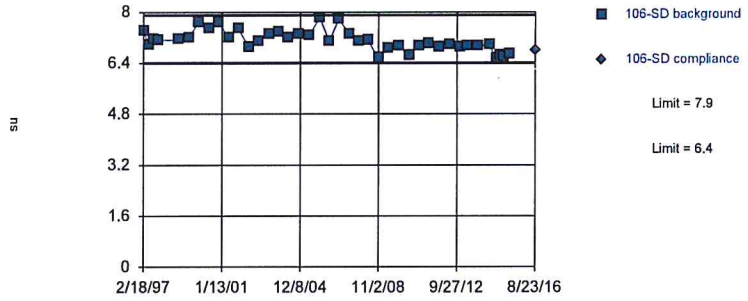
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.961, Std. Dev.=0.04615, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9633, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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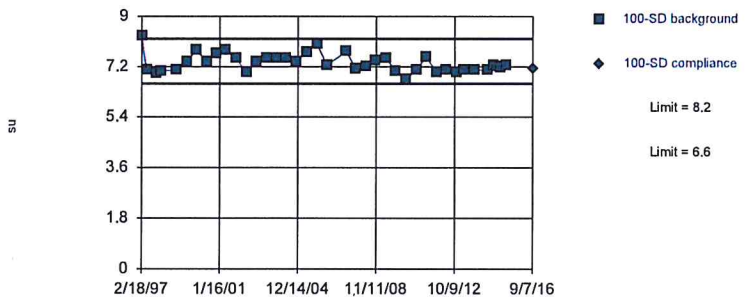
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.993, Std. Dev.=0.04354, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.942, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 8.5 (11/8/2006).

Constituent: pH [Field] Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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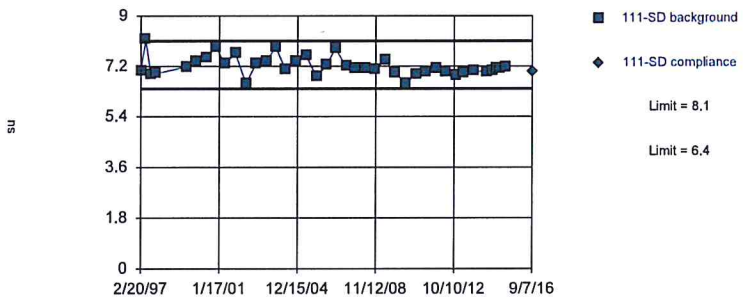
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.976, Std. Dev.=0.04679, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9391, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 5.2 (11/12/1998).

Constituent: pH [Field] Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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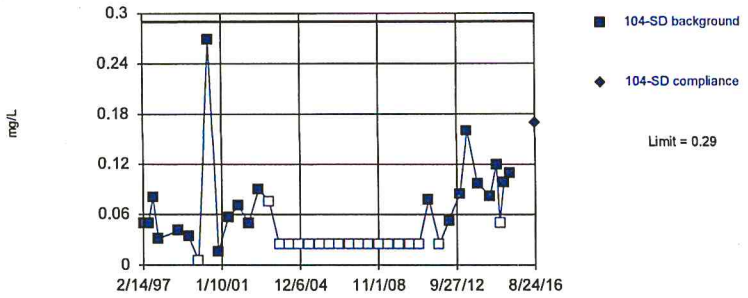
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-3.189, Std. Dev.=0.7998, n=40, 47.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9209, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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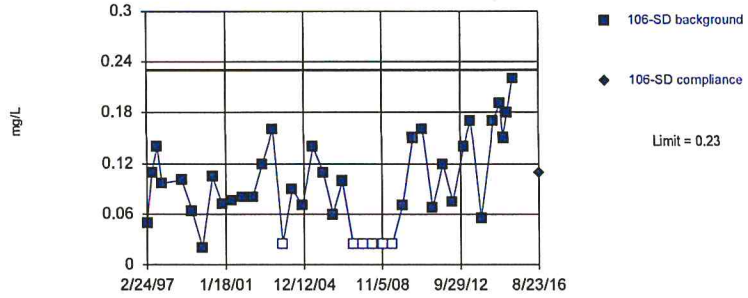
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=0.09779, Std. Dev.=0.05309, n=40, 15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9491, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Phosphorus Total Analysis Run 10/10/2016 11:47 AM

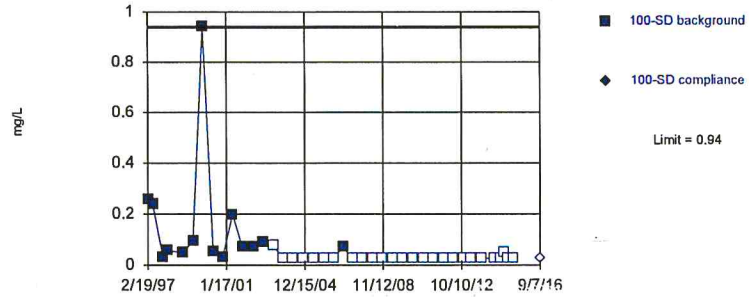
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 65% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 10/10/2016 11:47 AM

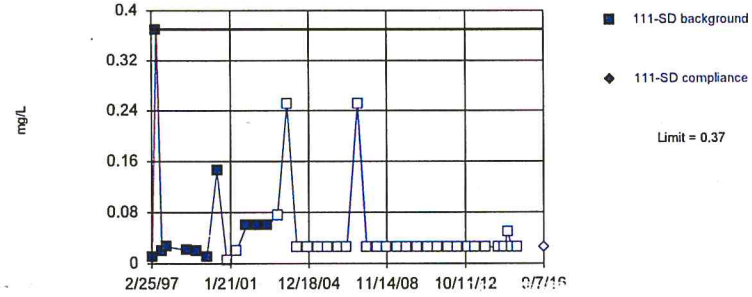
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 72.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 10/10/2016 11:47 AM

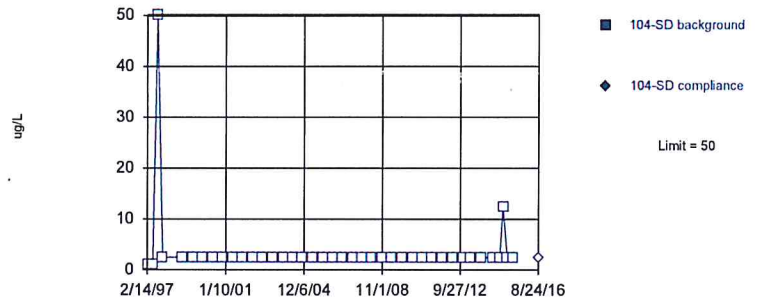
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 11:47 AM

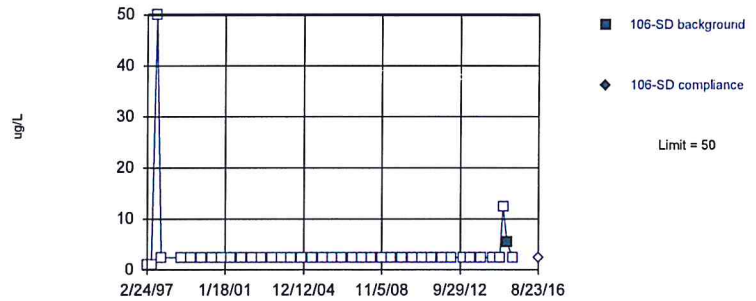
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 11:47 AM

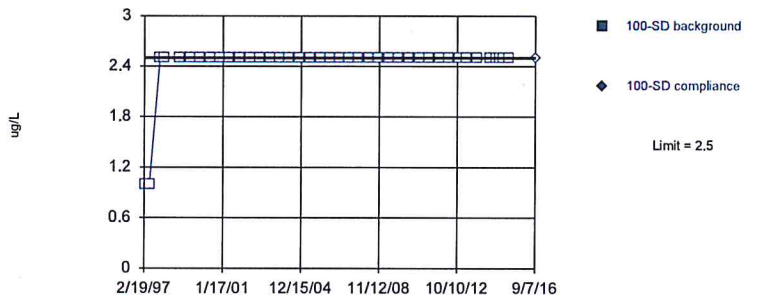
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 11:47 AM

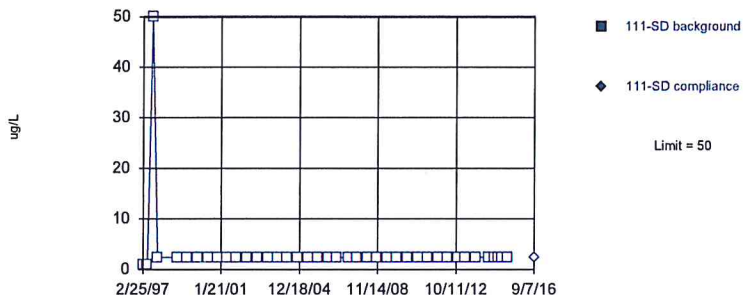
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 10/10/2016 11:47 AM

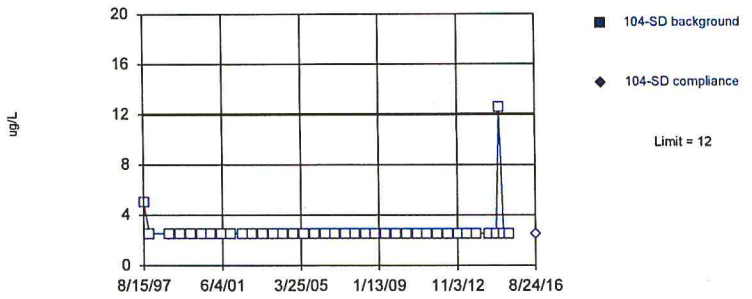
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 100% NDs. Well-constituent pair annual alpha = 0.005135. Individual comparison alpha = 0.001286 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 11:47 AM

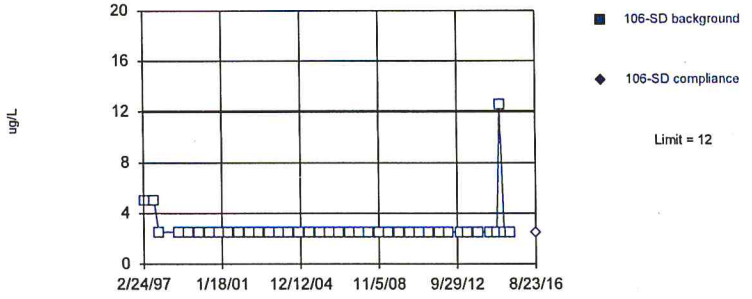
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 100% NDs. Well-constituent pair annual alpha = 0.004868. Individual comparison alpha = 0.001219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 11:47 AM

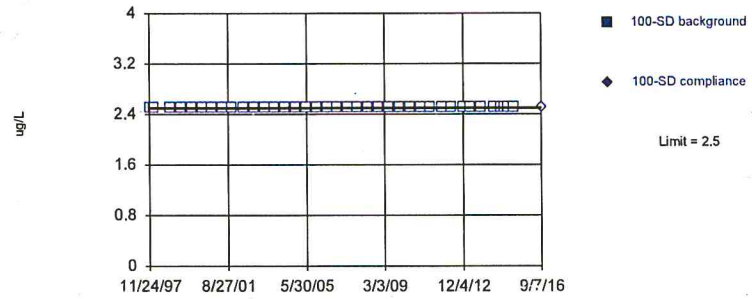
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 100% NDs. Well-constituent pair annual alpha = 0.005135. Individual comparison alpha = 0.001286 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 11:47 AM

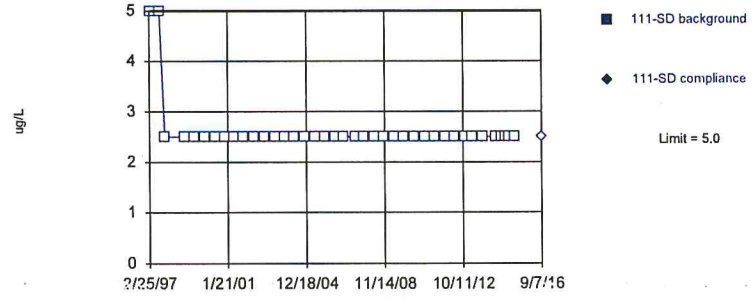
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 100% NDs. Well-constituent pair annual alpha = 0.004868. Individual comparison alpha = 0.001219 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 10/10/2016 11:47 AM

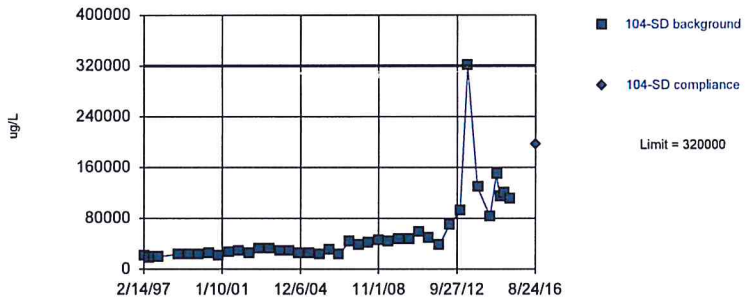
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sodium Total Analysis Run 10/10/2016 11:47 AM

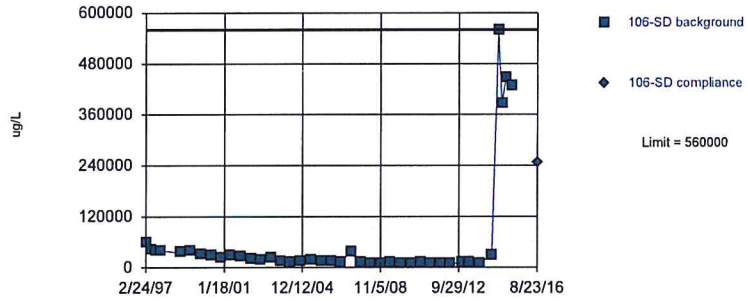
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sodium Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=20.08, Std. Dev.=1.372, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9567, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 11:47 AM

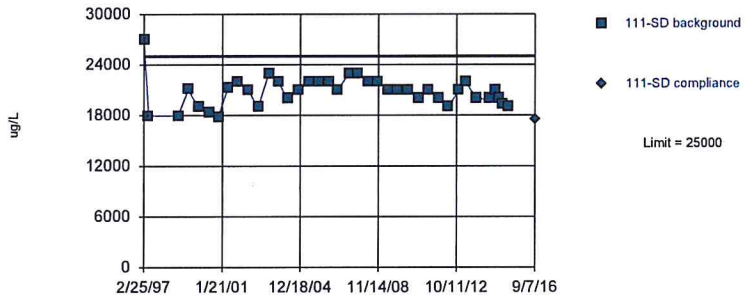
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=9.94, Std. Dev.=0.08286, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9403, critical = 0.916. Kappa = 2.442 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Two background outliers were removed: 218000 (8/21/1997); 73500 (11/24/1997).

Constituent: Sodium Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.975, Std. Dev.=0.2109, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.963, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 130.2 (11/4/2009).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 11:47 AM

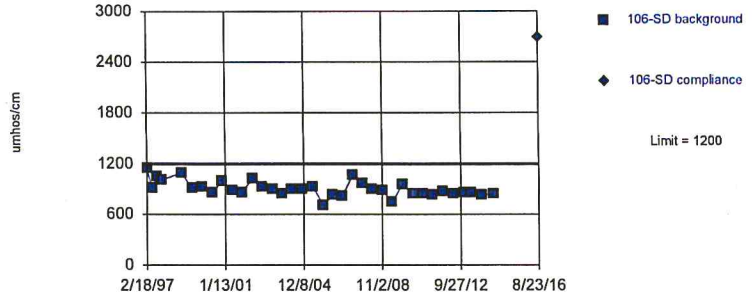
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.803, Std. Dev.=0.1014, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9655, critical = 0.912. Kappa = 2.458 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Four background outliers were removed: 4250 (9/24/2014); 3260 (11/20/2014); 3750 (2/4/2015); 3640 (5/14/2015).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 11:47 AM

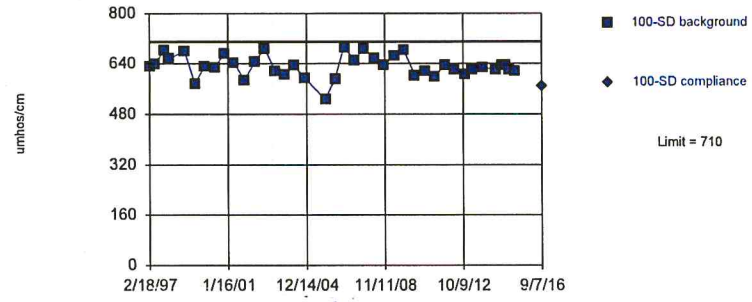
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=2.5e8, Std. Dev.=4.1e7, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9646, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 325 (5/24/2005).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 11:47 AM

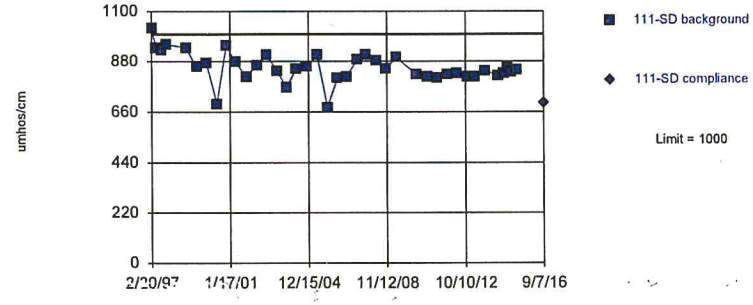
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=731124, Std. Dev.=112677, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9559, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 157.9 (11/3/2009).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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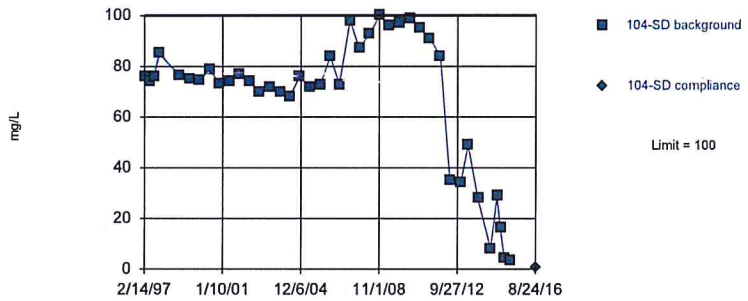
Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sulfate Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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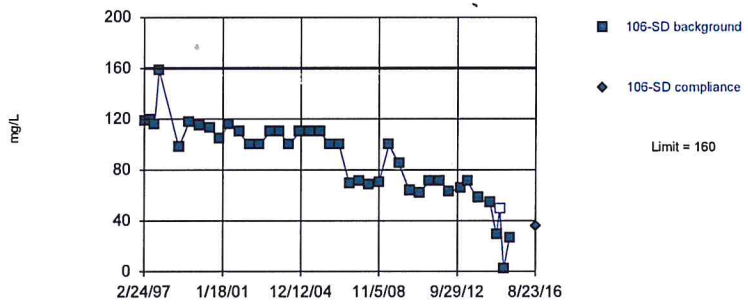
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=87.24, Std. Dev.=31.12, n=40, 2.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9381, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Sulfate Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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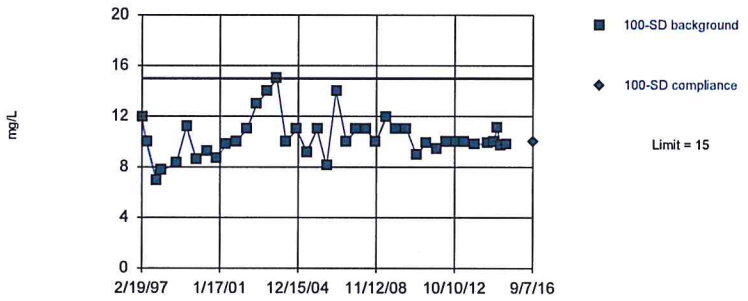
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=2.323, Std. Dev.=0.1561, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9566, critical = 0.919. Kappa = 2.426 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sulfate Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=3.932, Std. Dev.=0.1116, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9407, critical = 0.917. Kappa = 2.434 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: <50 (11/19/2014).

Constituent: Sulfate Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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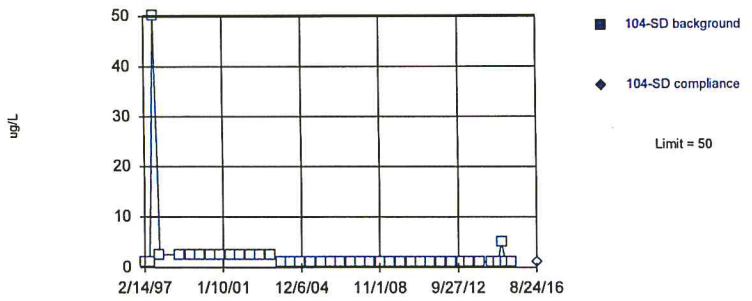
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 11:47 AM

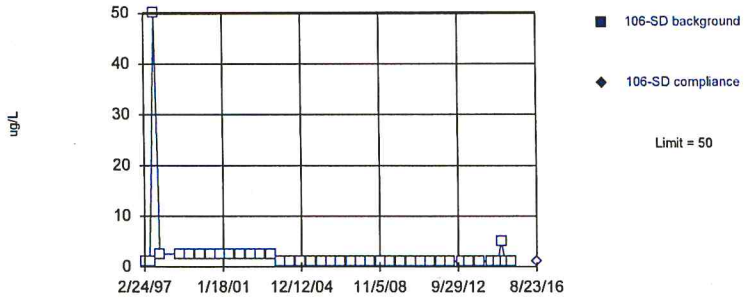
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 11:47 AM

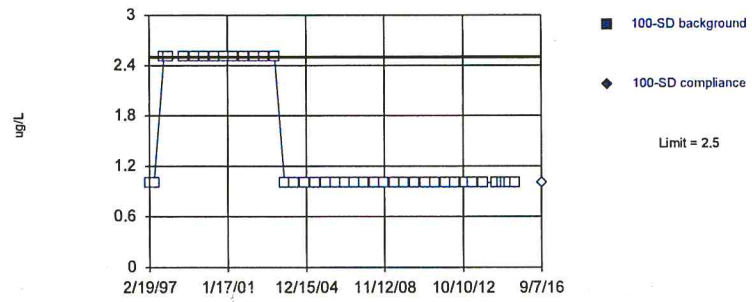
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 10/10/2016 11:47 AM

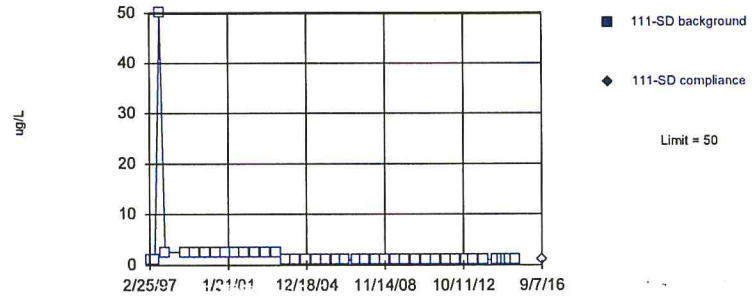
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

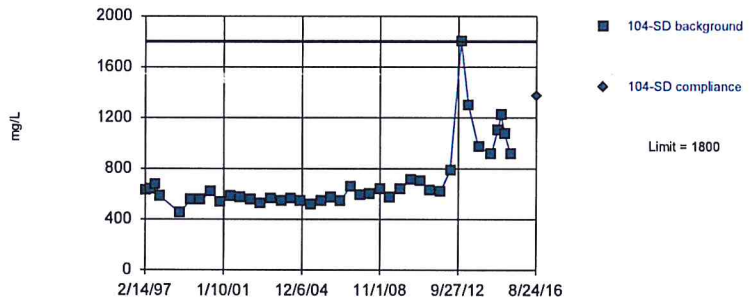
Constituent: Thallium Total Analysis Run 10/10/2016 11:47 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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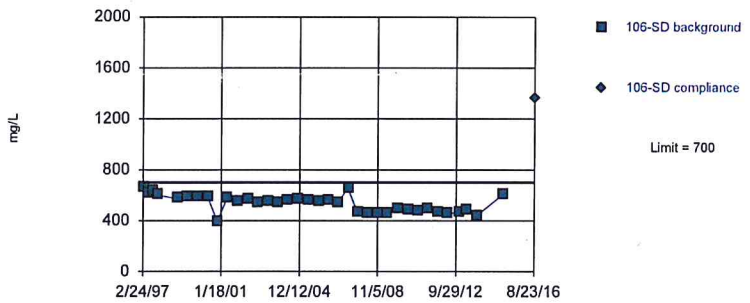
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary: Mean=538.1, Std. Dev.=65.86, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9645, critical = 0.912. Kappa = 2.458 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Four background outliers were removed: 1600 (5/28/2014); 3200 (9/24/2014); 2090 (11/20/2014); 2150 (5/14/2015).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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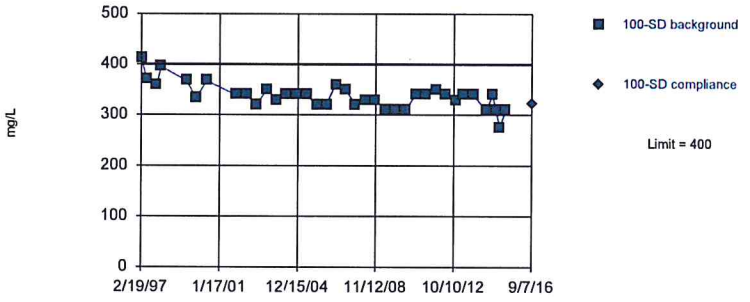
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.819, Std. Dev.=0.07451, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9522, critical = 0.914. Kappa = 2.45 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Three background outliers were removed: 116 (11/14/1998); 512 (11/13/2000); 551 (5/15/2001).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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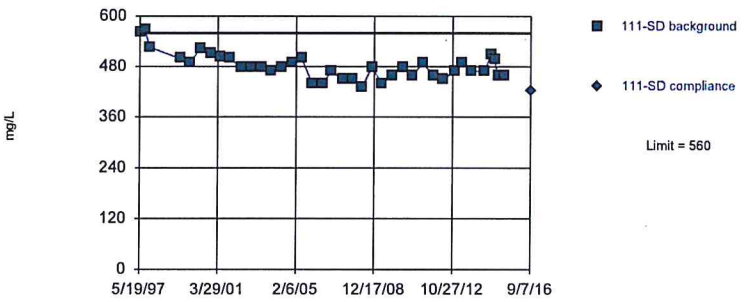
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.175, Std. Dev.=0.06301, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9556, critical = 0.916. Kappa = 2.442 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Two background outliers were removed: 340 (2/25/1997); 634 (11/12/1998).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 11:47 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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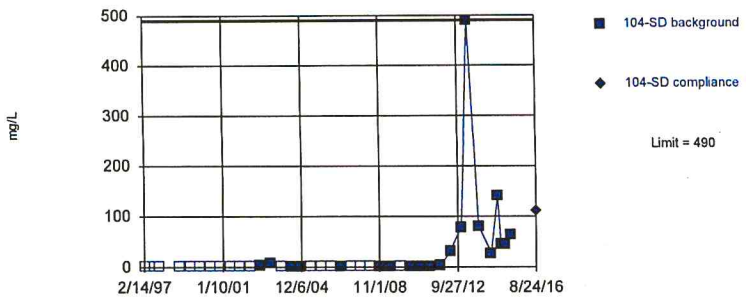
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 50% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

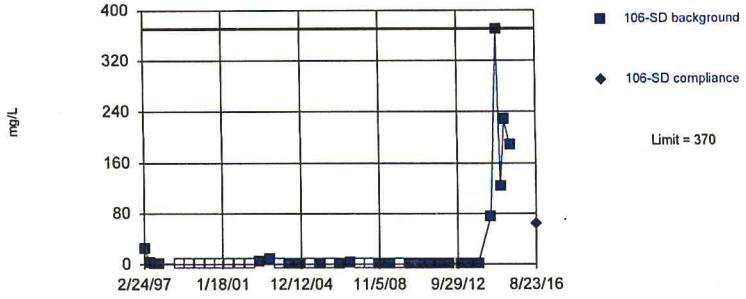
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 35% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

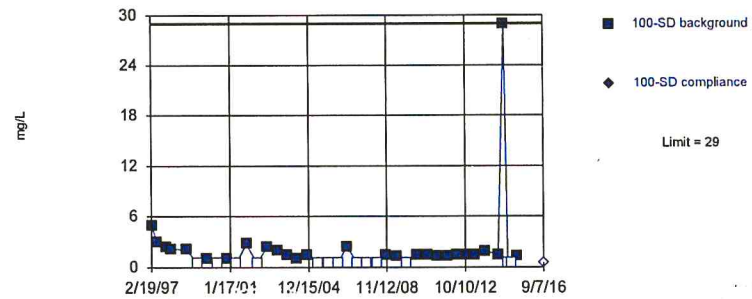
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 32.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

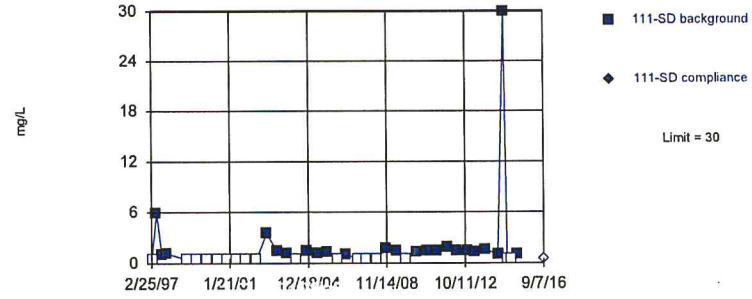
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 42.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

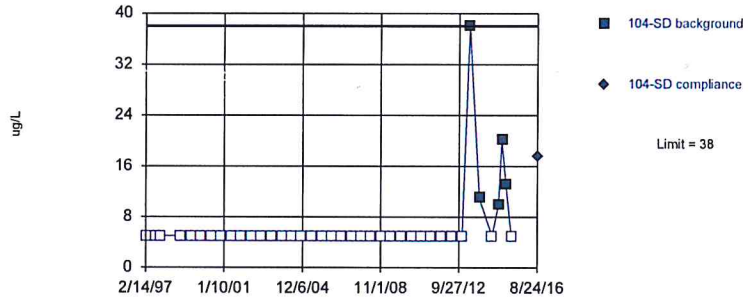
Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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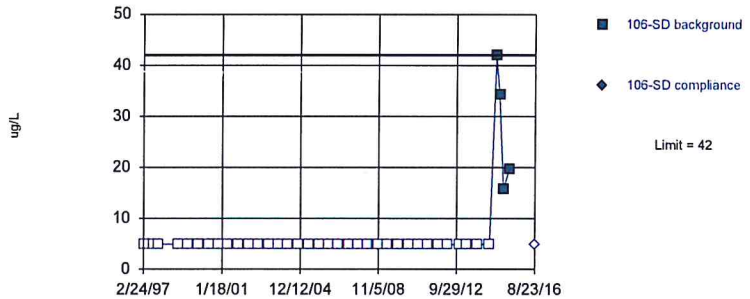
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 90% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

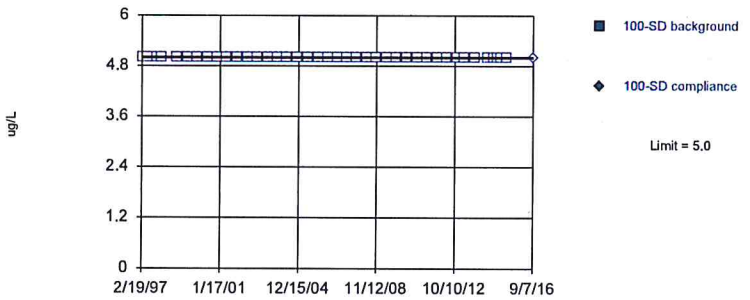
Constituent: Vanadium Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 100% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

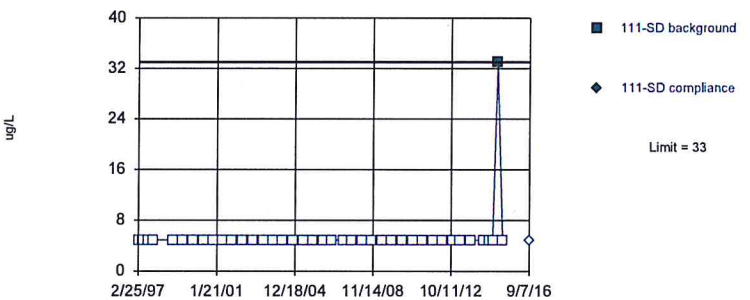
Constituent: Vanadium Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric



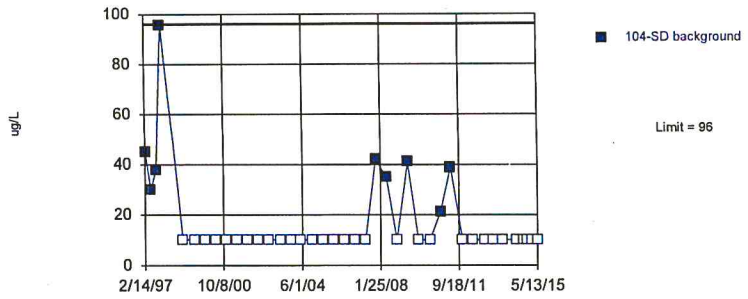

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Prediction Limit

### Intrawell Non-parametric, 104-SD



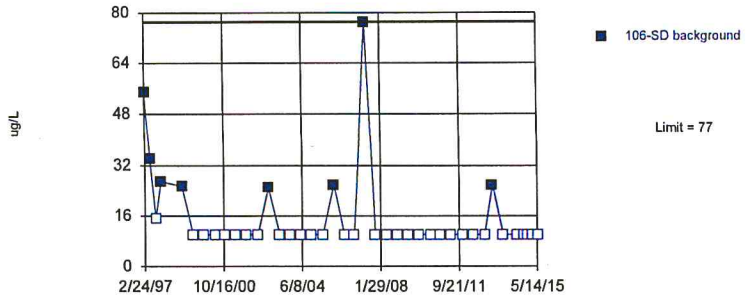

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 77.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Prediction Limit

### Intrawell Non-parametric, 106-SD



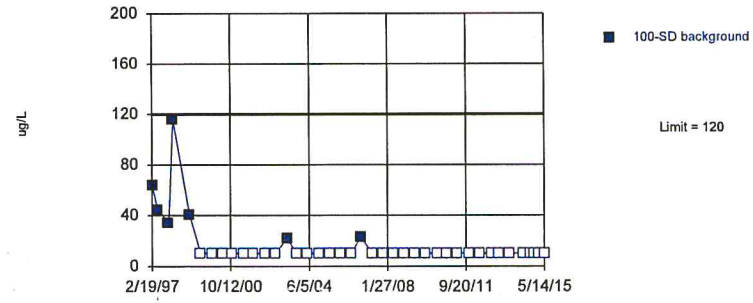

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 80% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Prediction Limit

### Intrawell Non-parametric, 100-SD



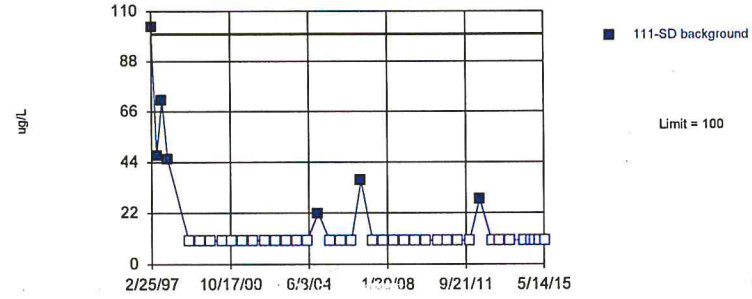

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

## Prediction Limit

### Intrawell Non-parametric, 111-SD




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 82.5% NDs. Well-constituent pair annual alpha = 0.004602. Individual comparison alpha = 0.001152 (1 of 2). Assumes 1 future value. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 10/10/2016 11:48 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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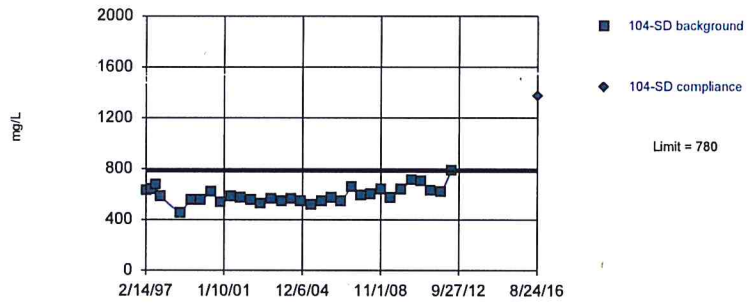
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.38, Std. Dev.=0.11, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9651, critical = 0.904. Kappa = 2.494 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 1800 (11/27/2012).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/10/2016 11:57 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

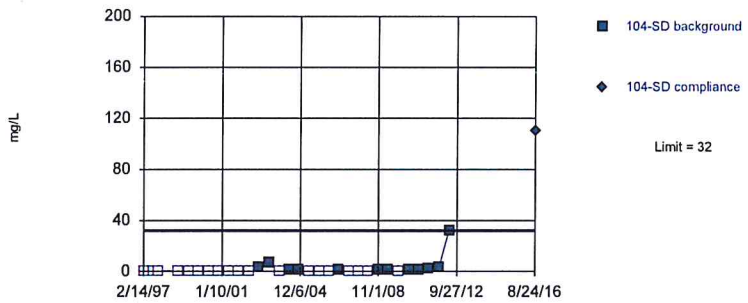
Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.007136. Individual comparison alpha = 0.001789 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 11:57 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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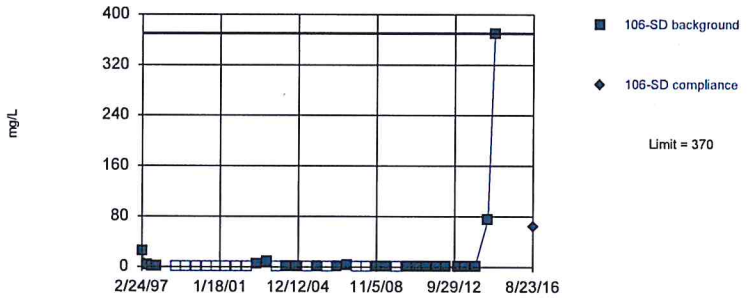
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 37 background values. 37.84% NDs. Well-constituent pair annual alpha = 0.005401. Individual comparison alpha = 0.001353 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 10/10/2016 11:58 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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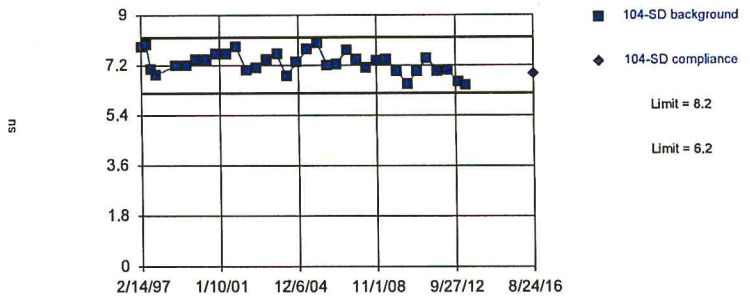
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on square transformation): Mean=53, Std. Dev.=5.7, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9706, critical = 0.908. Kappa = 2.475 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 11:55 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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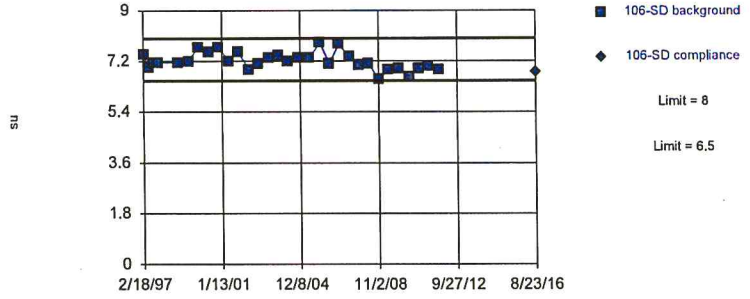
Within Limits

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=1.973, Std. Dev.=0.04295, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9748, critical = 0.902. Kappa = 2.504 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 10/10/2016 11:56 AM

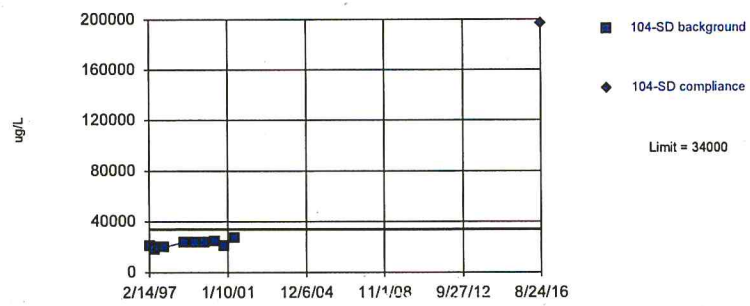
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10, Std. Dev.=0.1276, n=10. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9451, critical = 0.842. Kappa = 3.482 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Sodium Total Analysis Run 10/10/2016 11:56 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6,911, Std. Dev.=0.1526, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9837, critical = 0.906. Kappa = 2.485 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 130.2 (11/4/2009).

Constituent: Specific Conductance [Field] Analysis Run 10/10/2016 11:57 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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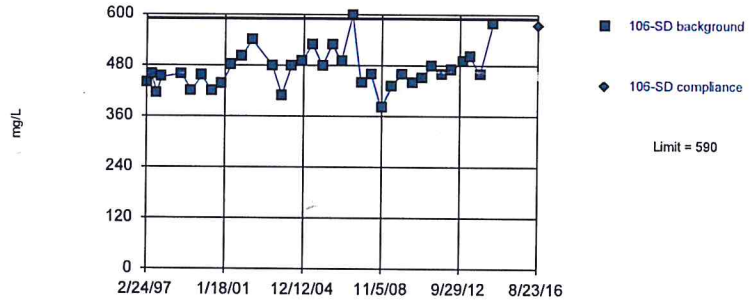
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=6.15, Std. Dev.=0.09469, n=35. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9671, critical = 0.91. Kappa = 2.466 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Two background outliers were removed: 180 (11/19/2002); 1300 (9/24/2014).

Constituent: Hardness Total Analysis Run 10/10/2016 11:54 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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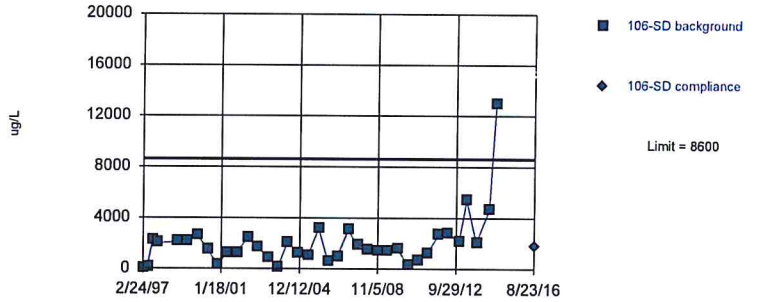
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=11.73, Std. Dev.=3.576, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9382, critical = 0.914. Kappa = 2.45 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Iron Total Analysis Run 10/10/2016 11:54 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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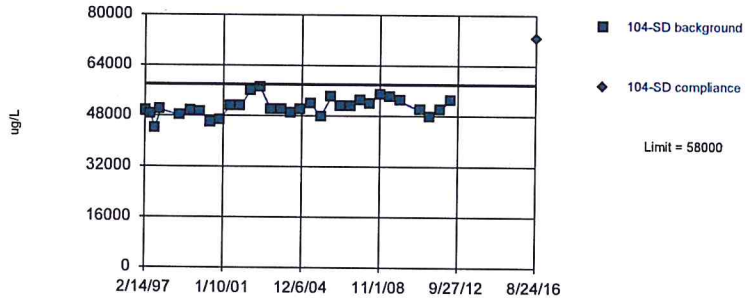
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube root transformation): Mean=36.99, Std. Dev.=0.6987, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9809, critical = 0.902. Kappa = 2.504 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 37000 (5/20/2010).

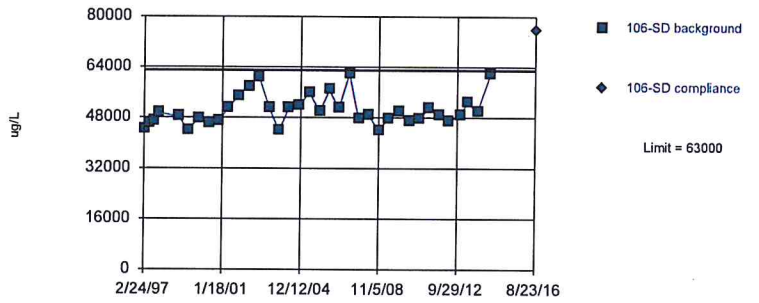
Constituent: Magnesium Total Analysis Run 10/10/2016 11:55 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=10.82, Std. Dev.=0.09234, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9134, critical = 0.912. Kappa = 2.458 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. Two background outliers were removed: 190000 (9/24/2014); 119000 (11/20/2014).

Constituent: Magnesium Total Analysis Run 10/10/2016 11:55 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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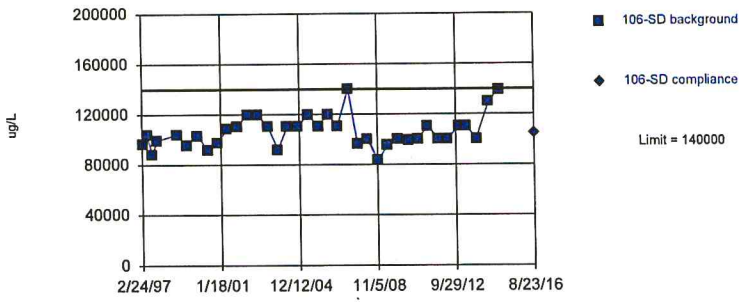
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=11.57, Std. Dev.=0.1154, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9502, critical = 0.914. Kappa = 2.45 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 200000 (9/24/2014).

Constituent: Calcium Total Analysis Run 10/10/2016 11:52 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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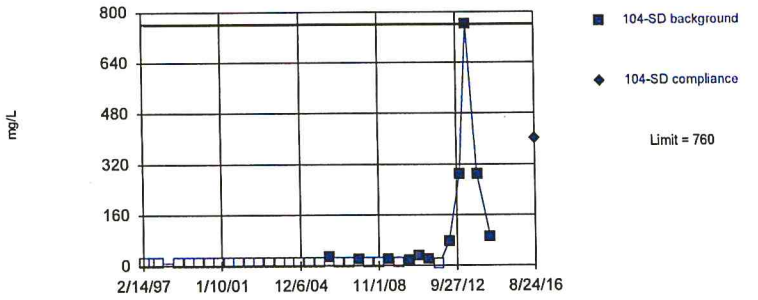
Hollow symbols indicate censored values.

Within Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 69.44% NDs. Well-constituent pair annual alpha = 0.005668. Individual comparison alpha = 0.00142 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/10/2016 11:53 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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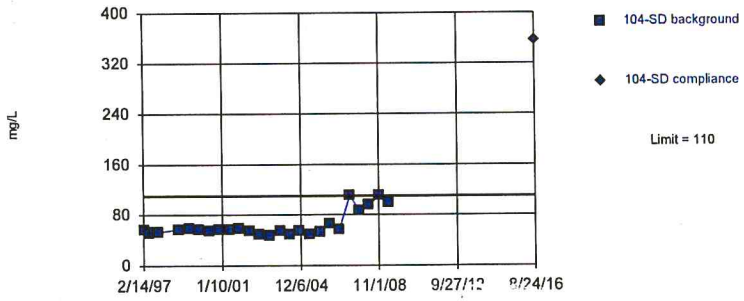
Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. Well-constituent pair annual alpha = 0.01051. Individual comparison alpha = 0.002637 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 10/10/2016 11:53 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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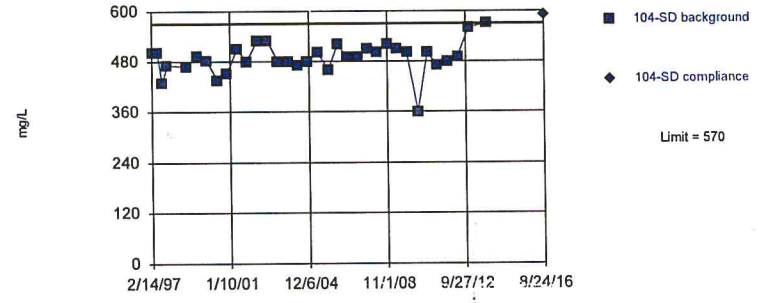
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=1.2e8, Std. Dev.=2.6e7, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9556, critical = 0.908. Kappa = 2.475 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Rosner's outlier test was performed on the background data. One background outlier was removed: 840 (4/11/2013).

Constituent: Hardness Total Analysis Run 10/10/2016 11:53 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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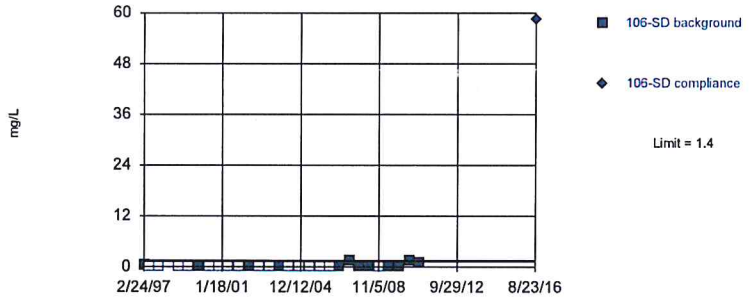
Hollow symbols indicate censored values.

Exceeds Limit

## Prediction Limit

Intrawell Non-parametric




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 55.17% NDs. Well-constituent pair annual alpha = 0.00858. Individual comparison alpha = 0.002152 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 10/10/2016 11:50 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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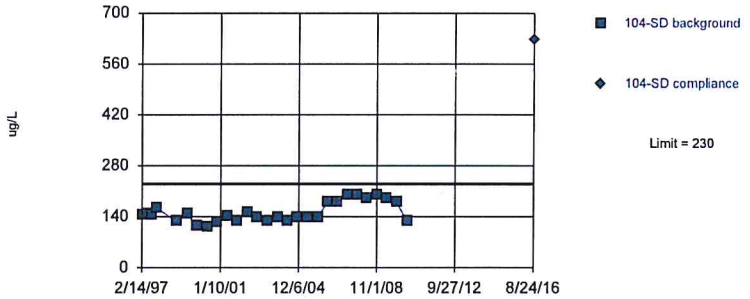
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=5.011, Std. Dev.=0.17, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9098, critical = 0.896. Kappa = 2.544 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 11:51 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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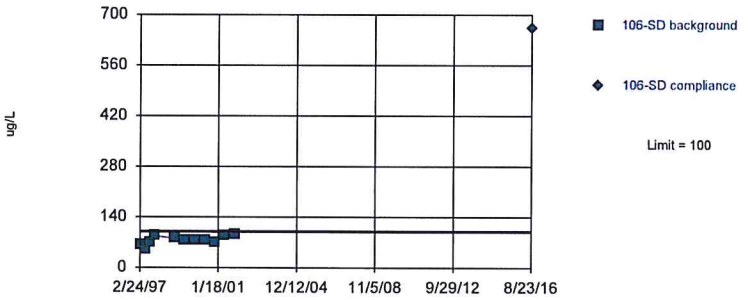
Exceeds Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on cube transformation): Mean=465937, Std. Dev.=199834, n=11. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9753, critical = 0.85. Kappa = 3.335 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. Dixon's outlier test was performed on the background data. No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 11:51 AM

Bridgeton LF Client: RSI Data: Bridgeton LF

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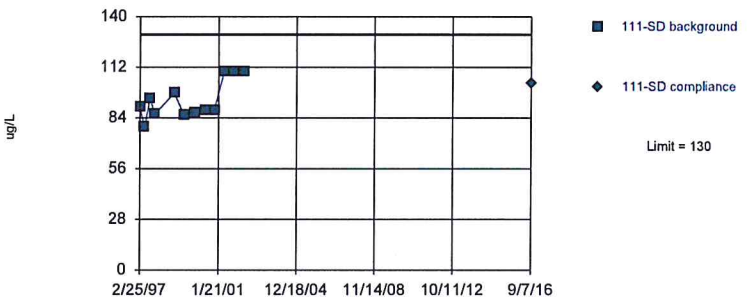
Within Limit

## Prediction Limit

Intrawell Parametric




Background Data Summary (based on natural log transformation): Mean=4.538, Std. Dev.=0.1113, n=12. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8796, critical = 0.859. Kappa = 3.187 (c=34, w=4, 1 of 2, event alpha = 0.026). Report alpha = 0.0001937. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Barium Total Analysis Run 10/10/2016 11:52 AM

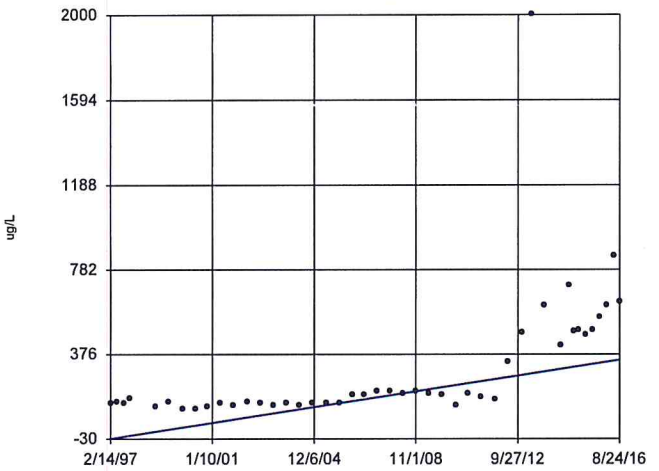
Bridgeton LF Client: RSI Data: Bridgeton LF

# TREND EVALUATION OF EXCEEDING CONSTITUENTS

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

104-SD




n = 45

Slope = 19.33 units per year.

Mann-Kendall normal approx. = 6.056
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

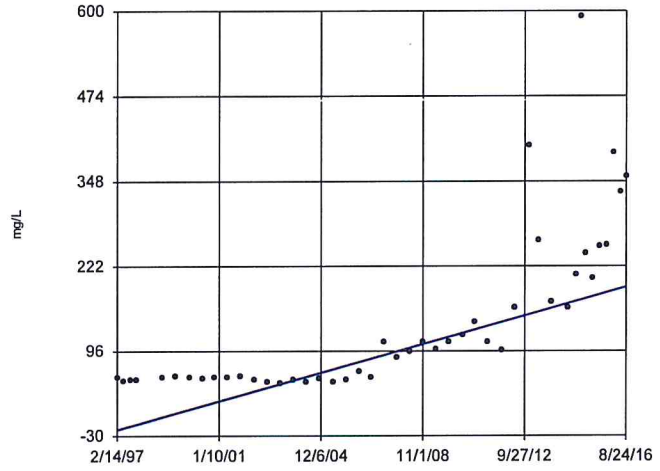
Constituent: Barium Total Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

104-SD




n = 45

Slope = 10.83 units per year.

Mann-Kendall normal approx. = 6.607
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

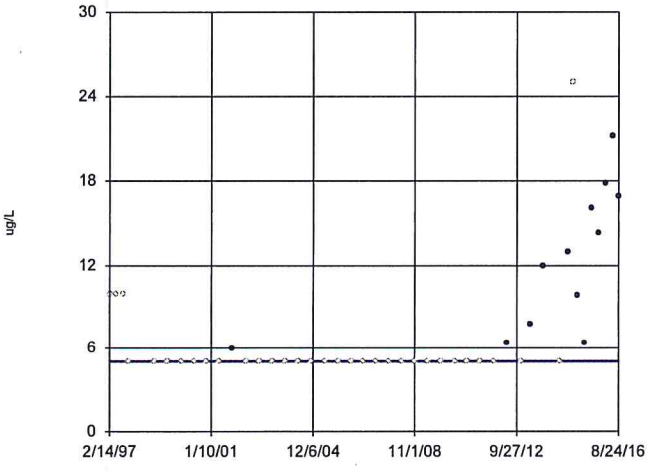
Constituent: Chloride Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD




n = 45

Slope = 0 units per year.

Mann-Kendall normal approx. = 3.337
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

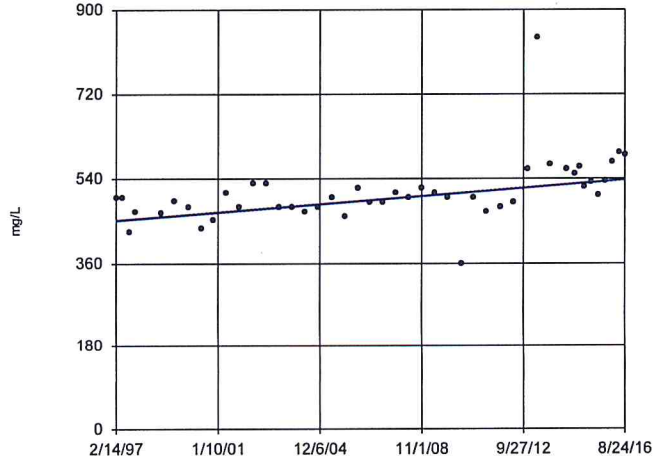
Constituent: Chromium Total Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

Sen's Slope Estimator

104-SD




n = 45

Slope = 4.373 units per year.

Mann-Kendall normal approx. = 4.394
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

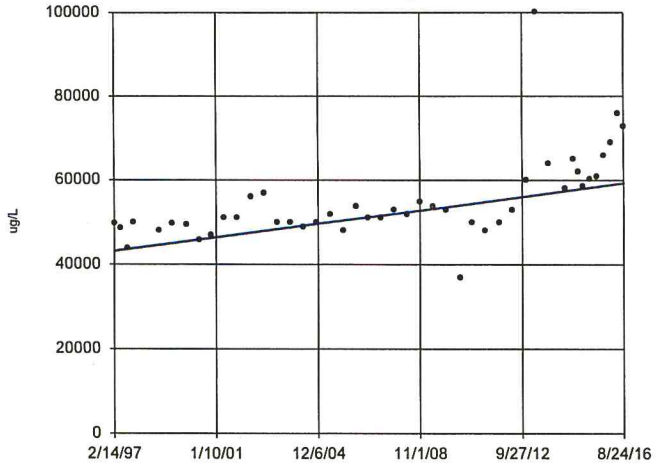
Constituent: Hardness Total Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

104-SD




n = 45

Slope = 826.5 units per year.

Mann-Kendall normal approx. = 5.557 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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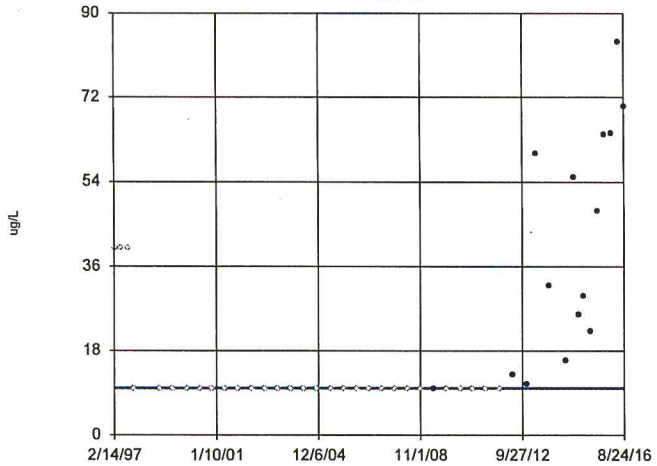
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD




n = 45

Slope = 0 units per year.

Mann-Kendall normal approx. = 4.054 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Total Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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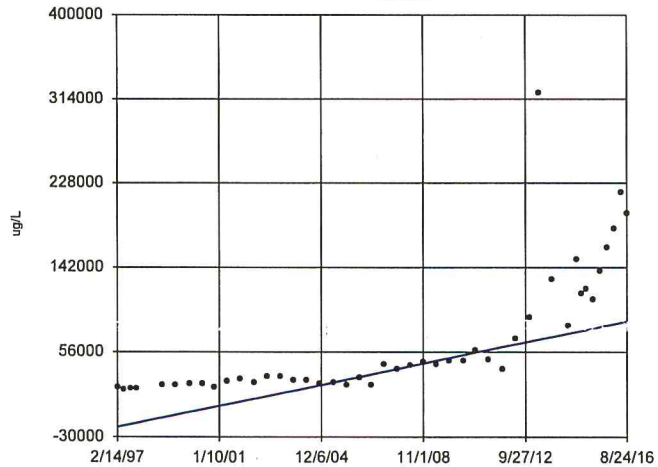
Sen's Slope Estimator

104-SD




n = 45

Slope = 5499 units per year.

Mann-Kendall normal approx. = 7.75 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

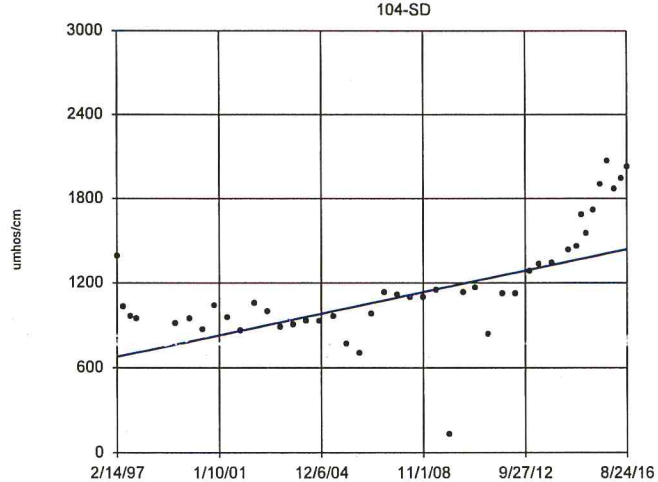
Constituent: Sodium Total Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

104-SD




n = 45

Slope = 38.78 units per year.

Mann-Kendall normal approx. = 5.537 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

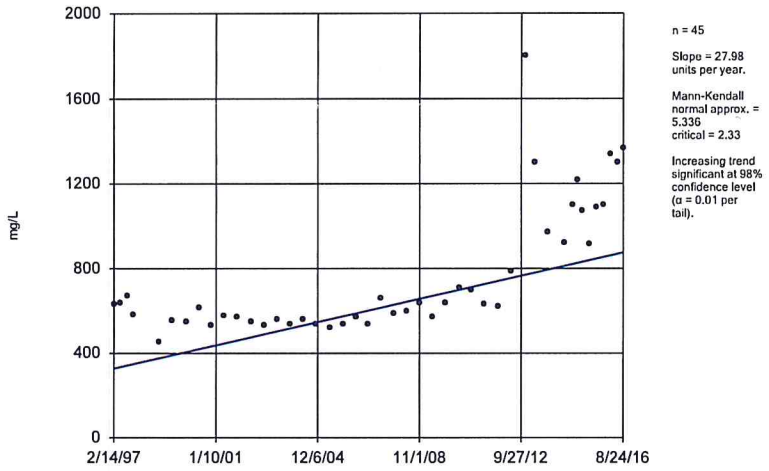
Constituent: Specific Conductance [Field] Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG

Sen's Slope Estimator

104-SD




n = 45

Slope = 27.98 units per year.

Mann-Kendall normal approx. = 5.336
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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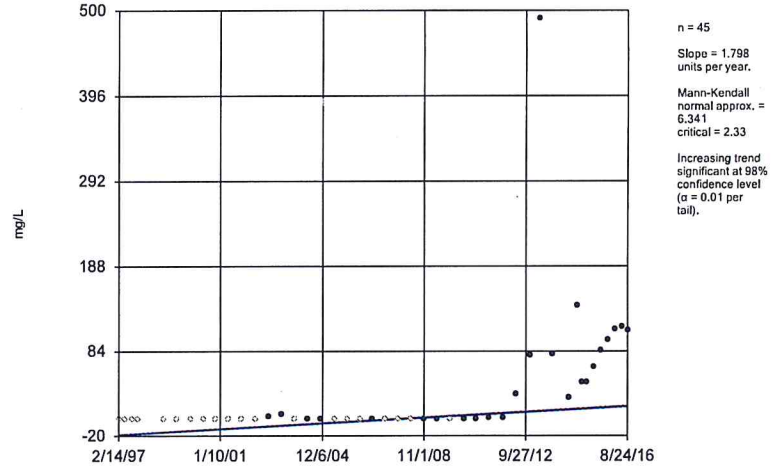
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD




n = 45

Slope = 1.798 units per year.

Mann-Kendall normal approx. = 6.341
critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Organic Carbon [TOC] Analysis Run 10/11/2016 12:48 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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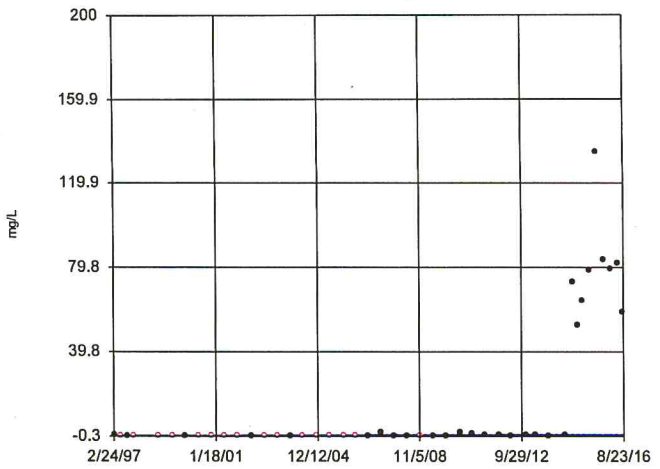
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD




n = 45

Slope = 0.03505 units per year.

Mann-Kendall normal approx. = 6.036 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Ammonia as N Analysis Run 10/11/2016 12:49 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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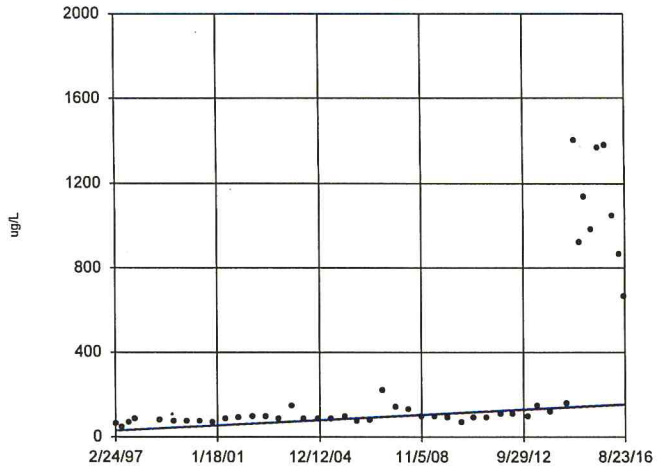
Sen's Slope Estimator

106-SD




n = 45

Slope = 6.405 units per year.

Mann-Kendall normal approx. = 6.088 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Total Analysis Run 10/11/2016 12:49 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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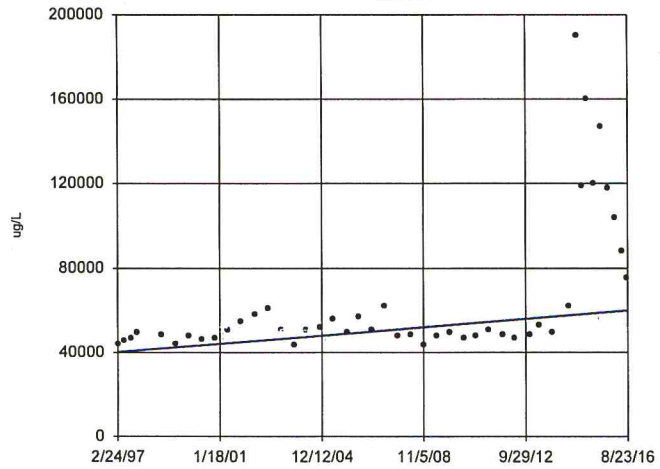
Sen's Slope Estimator

106-SD




n = 45

Slope = 1008 units per year.

Mann-Kendall normal approx. = 3.938 critical = 2.33

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Magnesium Total Analysis Run 10/11/2016 12:49 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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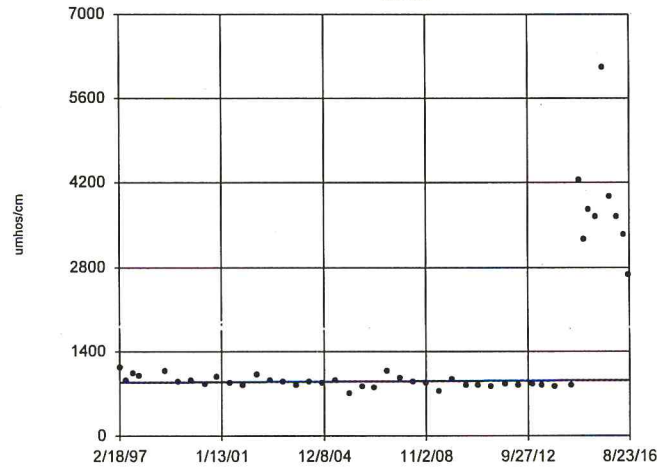
Sen's Slope Estimator

106-SD




n = 45

Slope = 1.883 units per year.

Mann-Kendall normal approx. = 0.3033 critical = 2.33

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Specific Conductance [Field] Analysis Run 10/11/2016 12:49 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

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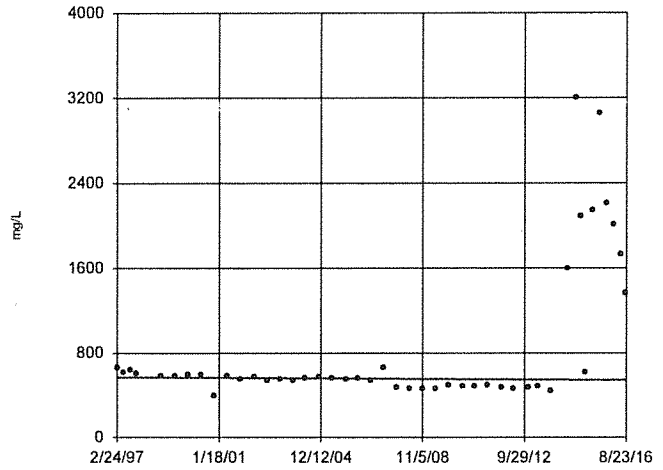
## Sen's Slope Estimator

106-SD




n = 45

Slope = -1.411 units per year.

Mann-Kendall normal approx. = -0.2547
critical = -2.33

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/11/2016 12:49 PM

Bridgeton LF Client: RSI Data: Bridgeton LF

# TIME SERIES GRAPHS

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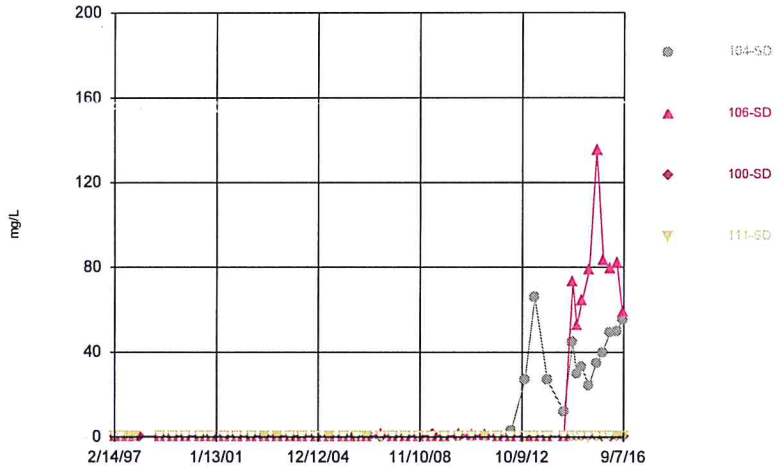
Hollow symbols indicate censored values.

Time Series




Constituent: Ammonia as N Analysis Run 10/11/2016 6:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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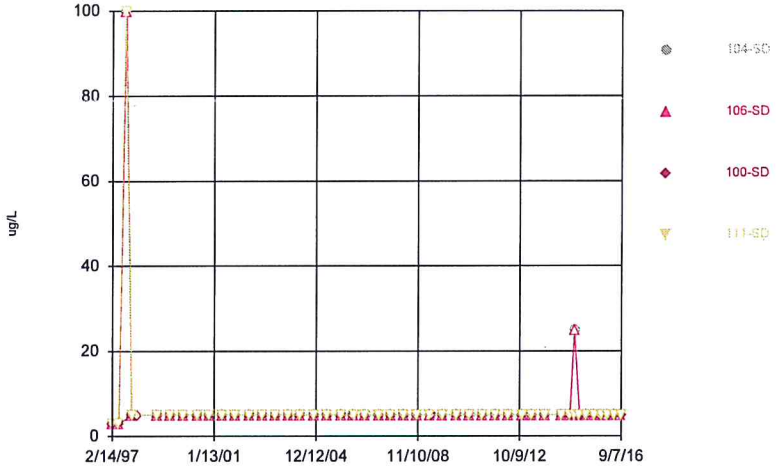
Hollow symbols indicate censored values.

Time Series




Constituent: Antimony Total Analysis Run 10/11/2016 6:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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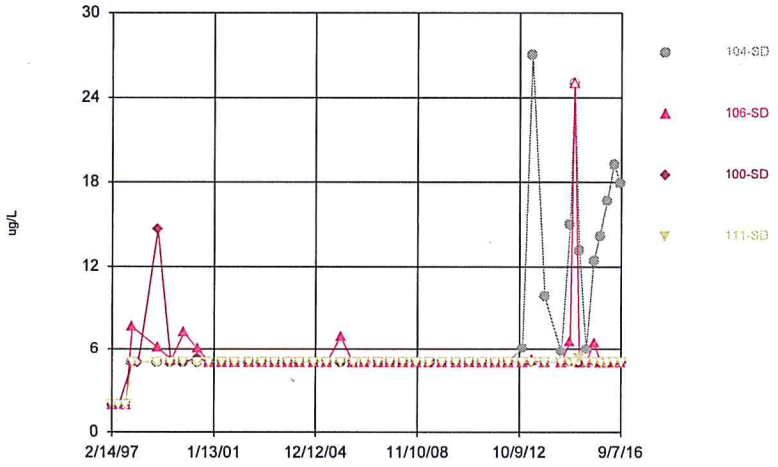
Hollow symbols indicate censored values.

Time Series




Constituent: Arsenic Total Analysis Run 10/11/2016 6:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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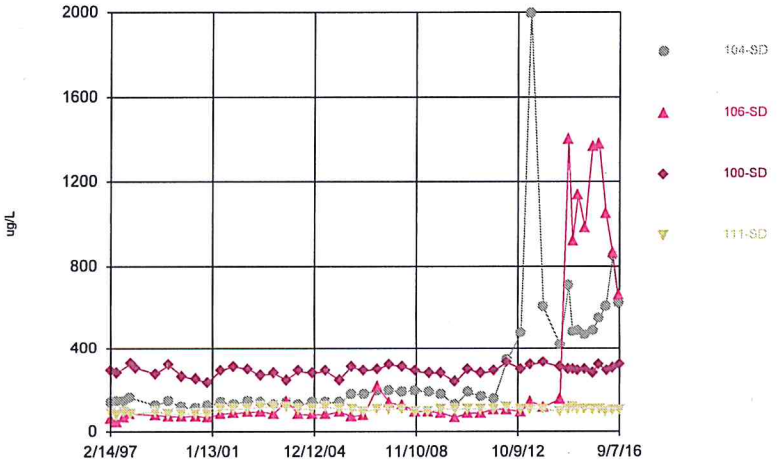
Time Series




Constituent: Barium Total Analysis Run 10/11/2016 6:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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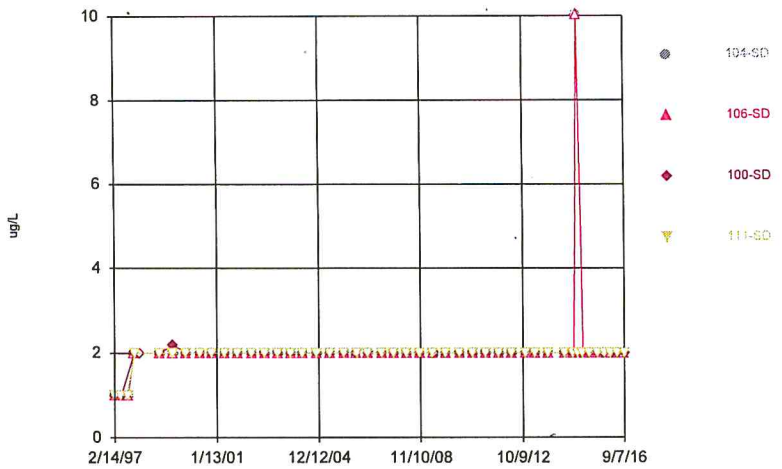
Hollow symbols indicate censored values.

Time Series




Constituent: Beryllium Total Analysis Run 10/11/2016 6:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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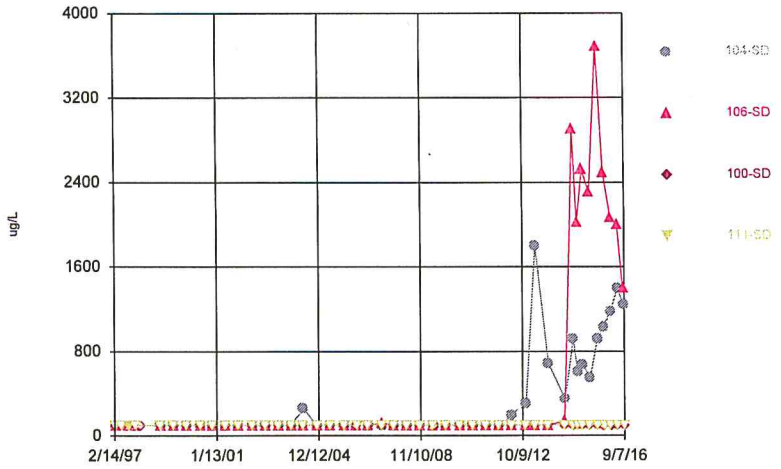
Hollow symbols indicate censored values.

Time Series




Constituent: Boron Total Analysis Run 10/11/2016 6:33 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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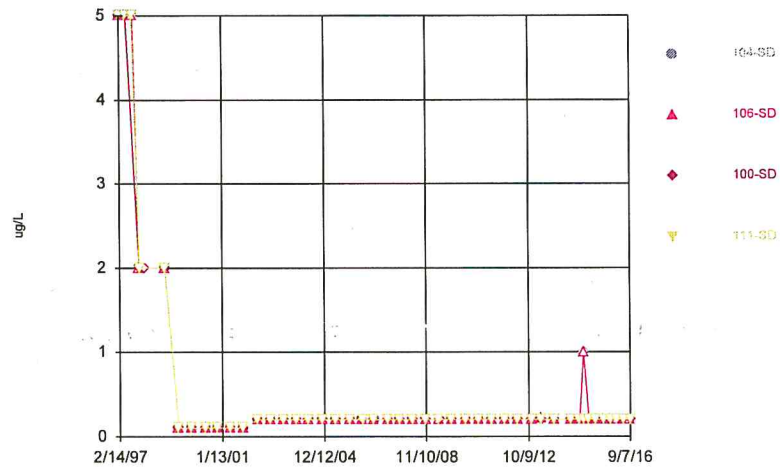
Hollow symbols indicate censored values.

Time Series




Constituent: Cadmium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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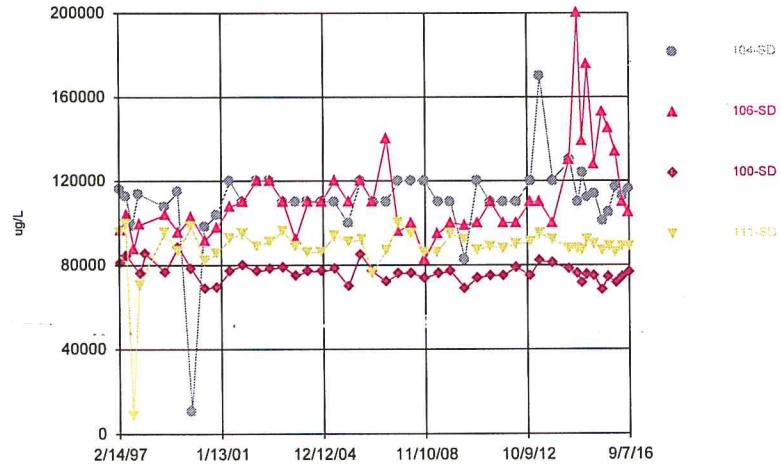
Time Series




Constituent: Calcium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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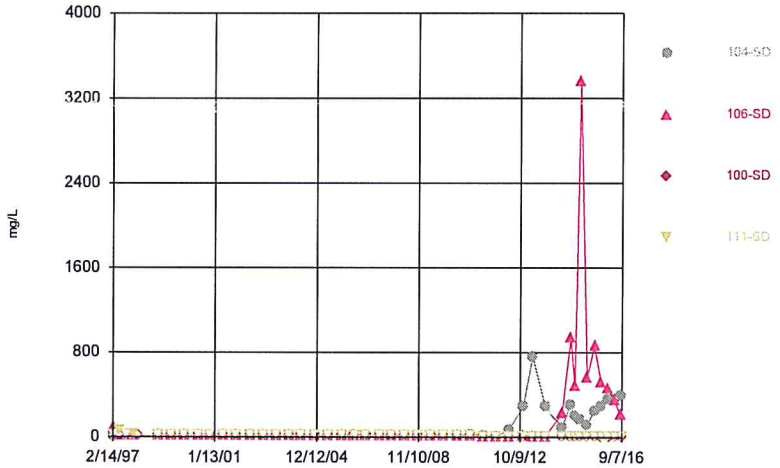
Hollow symbols indicate censored values.

Time Series




Constituent: Chemical Oxygen Demand [COD] Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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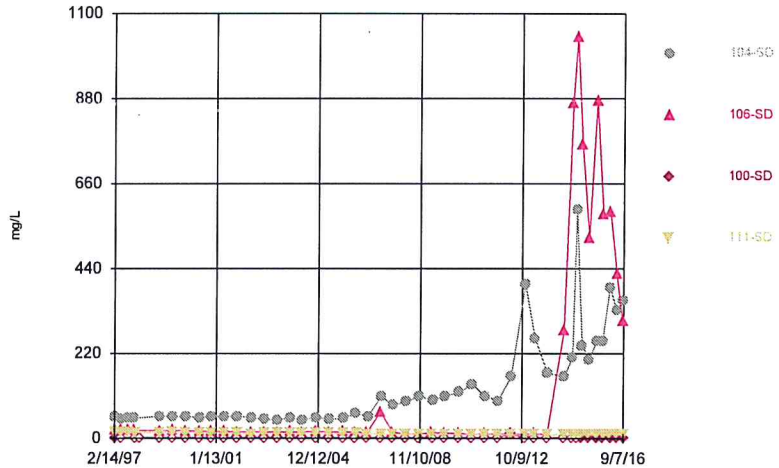
Hollow symbols indicate censored values.

Time Series




Constituent: Chloride Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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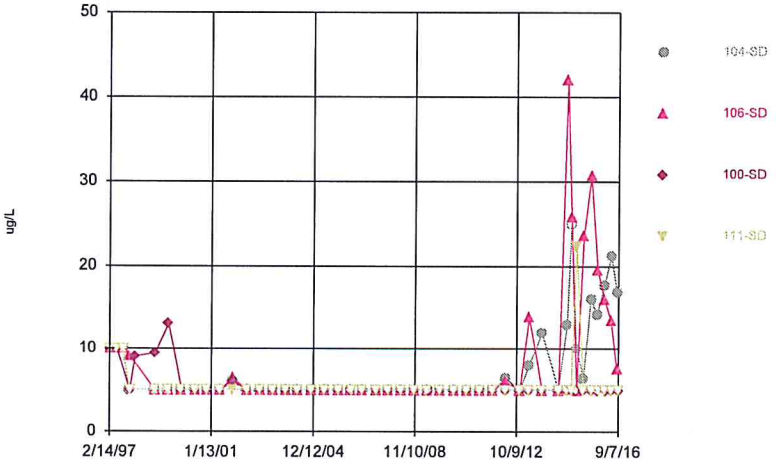
Time Series




Constituent: Chromium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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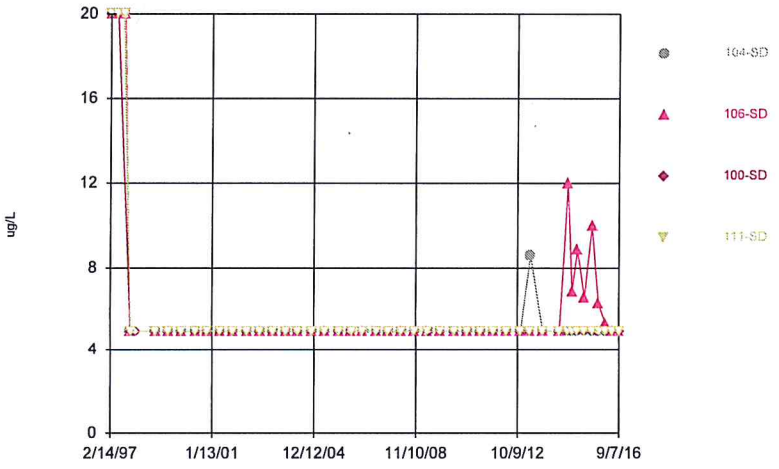
Hollow symbols indicate censored values.

Time Series




Constituent: Cobalt Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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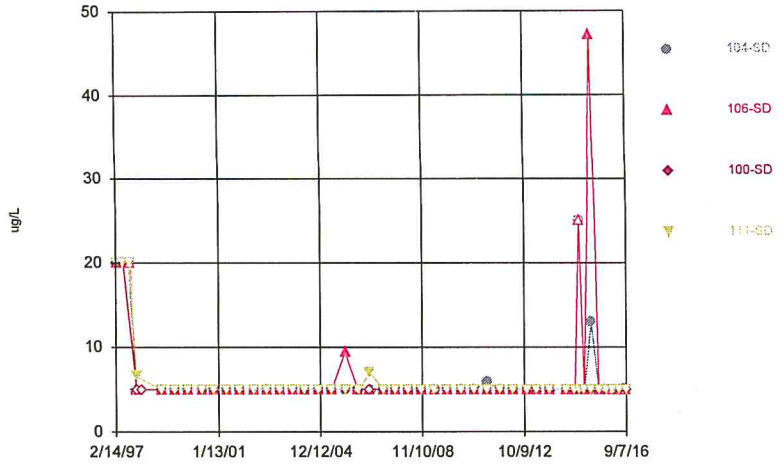
Hollow symbols indicate censored values.

Time Series




Constituent: Copper Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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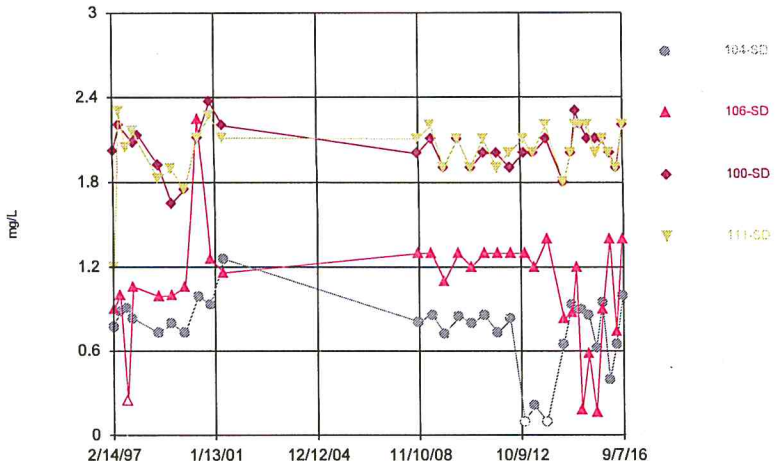
Hollow symbols indicate censored values.

Time Series




Constituent: Fluoride Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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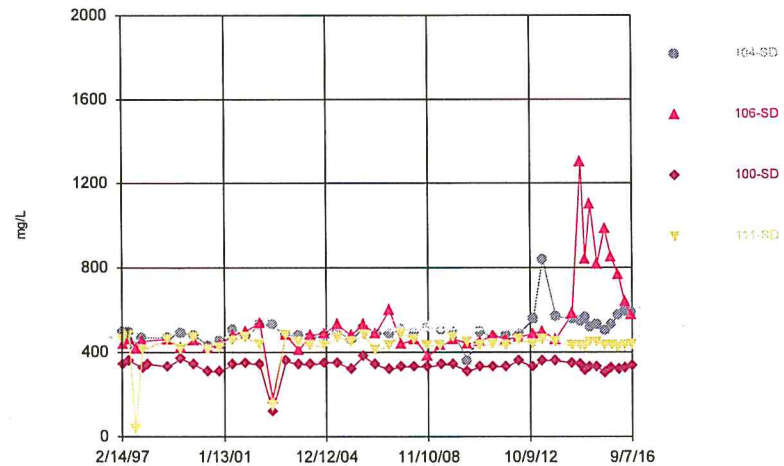
Time Series




Constituent: Hardness Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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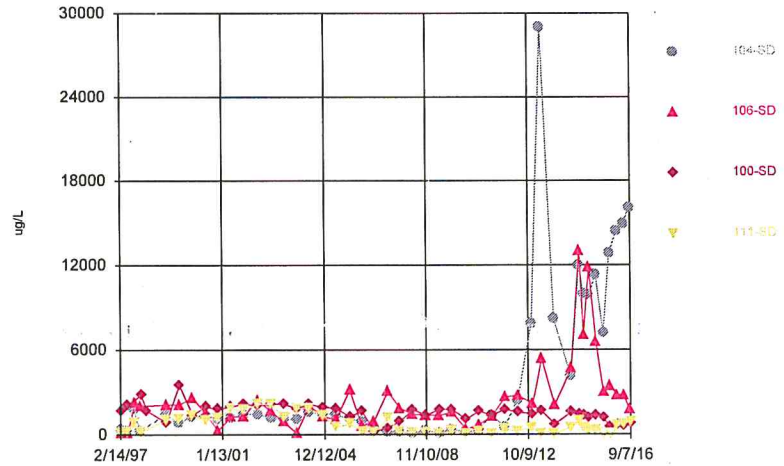
Hollow symbols indicate censored values.

Time Series




Constituent: Iron Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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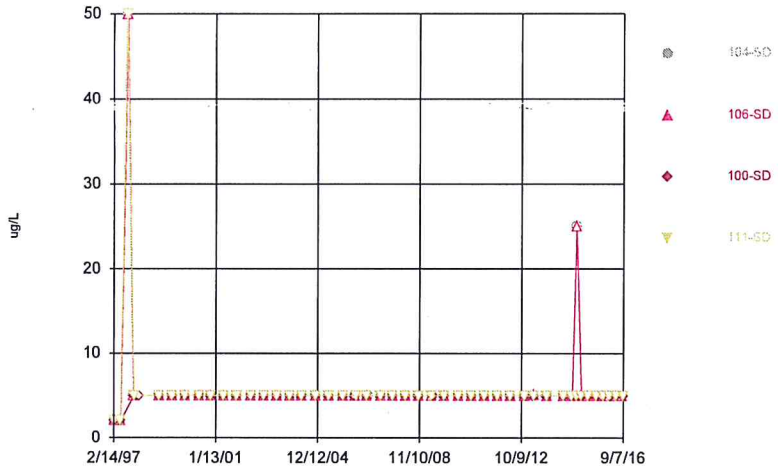
Hollow symbols indicate censored values.

Time Series




Constituent: Lead Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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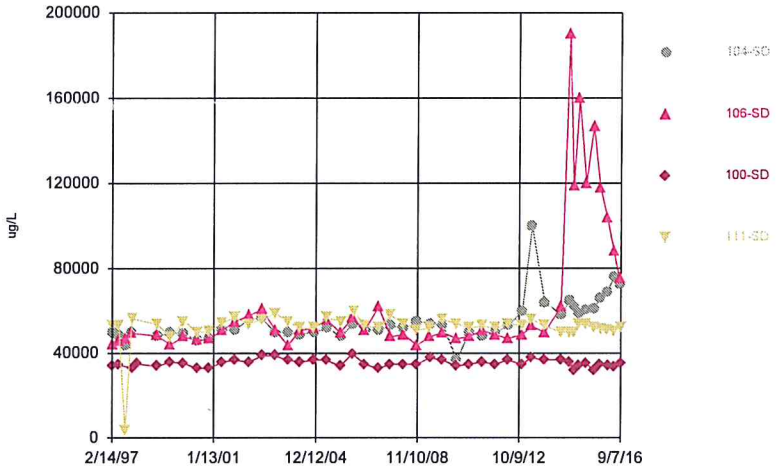
Time Series




Constituent: Magnesium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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Hollow symbols indicate censored values.

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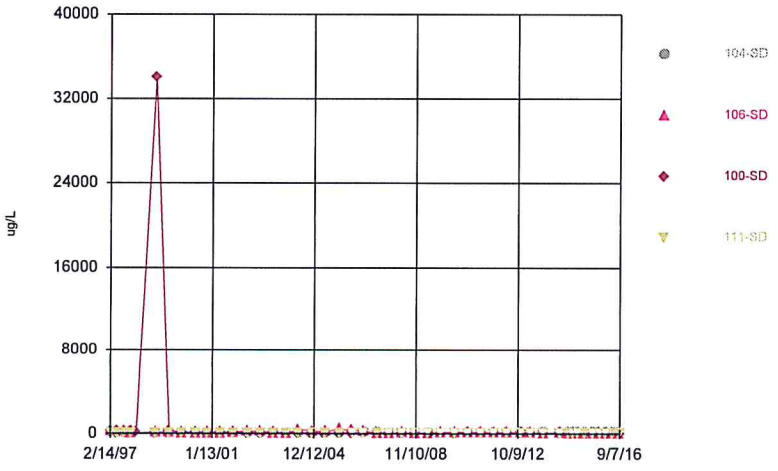


Constituent: Manganese Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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Hollow symbols indicate censored values.

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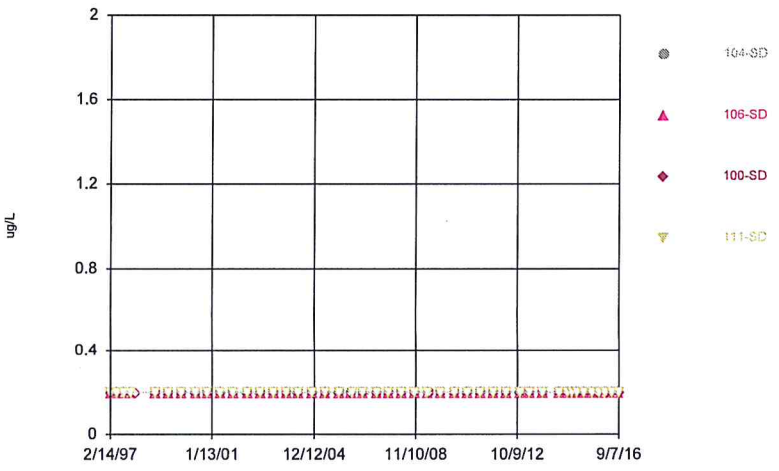


Constituent: Mercury Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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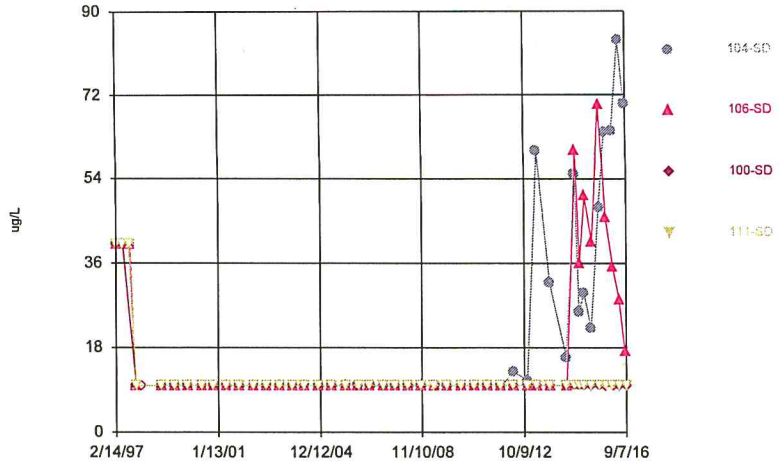
Hollow symbols indicate censored values.

Time Series




Constituent: Nickel Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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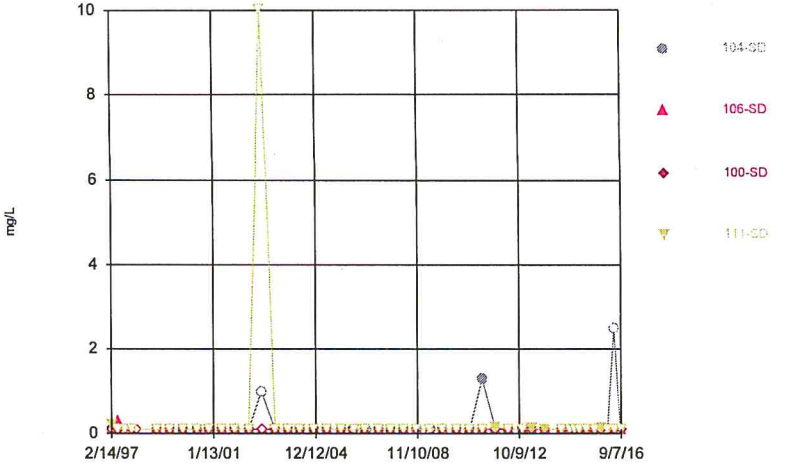
Hollow symbols indicate censored values.

Time Series




Constituent: Nitrate/Nitrite Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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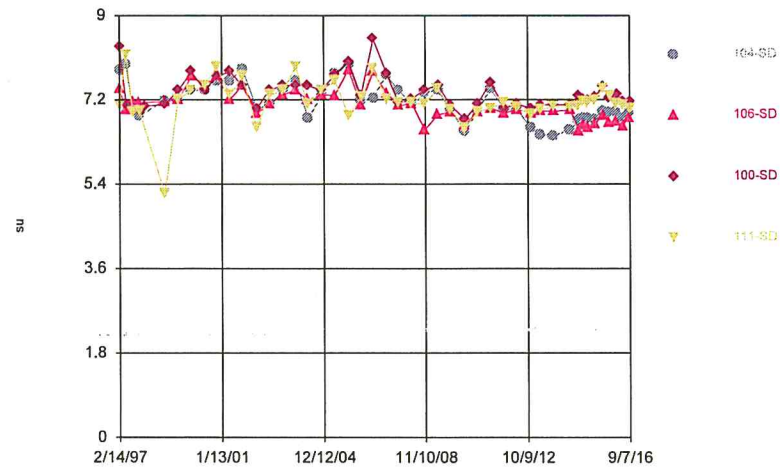
Time Series




Constituent: pH [Field] Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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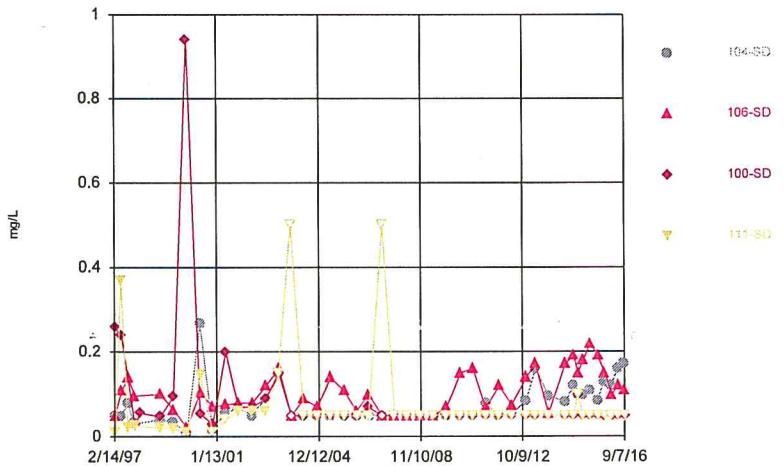
Hollow symbols indicate censored values.

Time Series




Constituent: Phosphorus Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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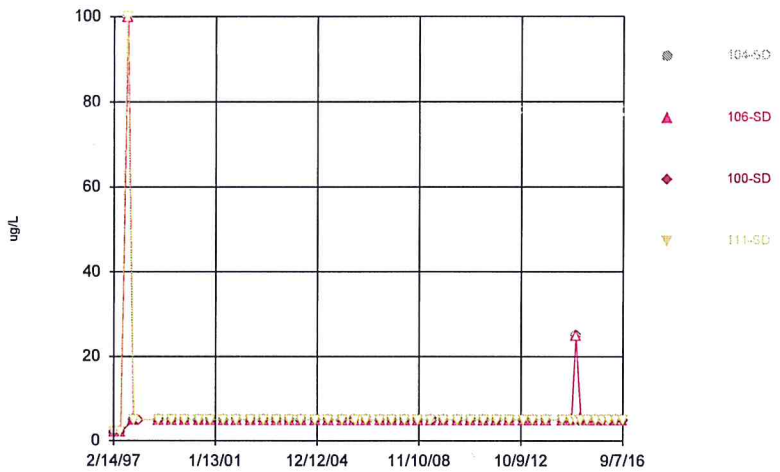
Hollow symbols indicate censored values.

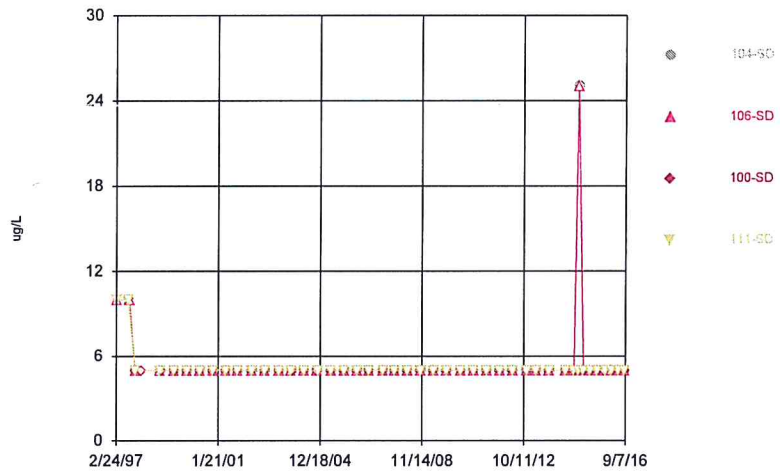
## Time Series




Constituent: Selenium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

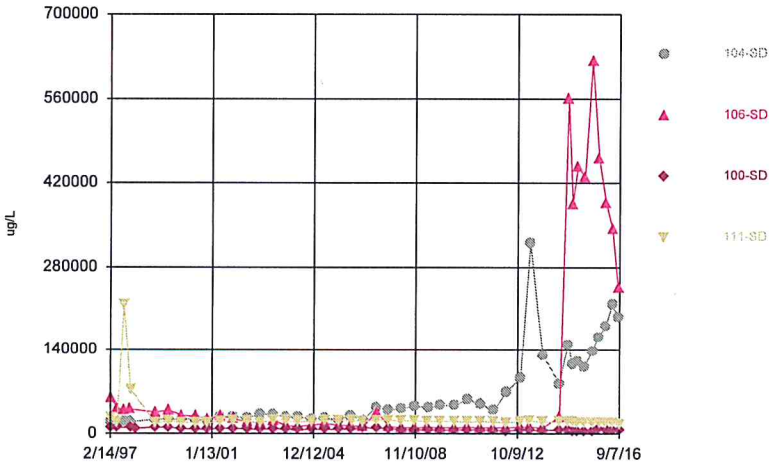
## Time Series




Constituent: Silver Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

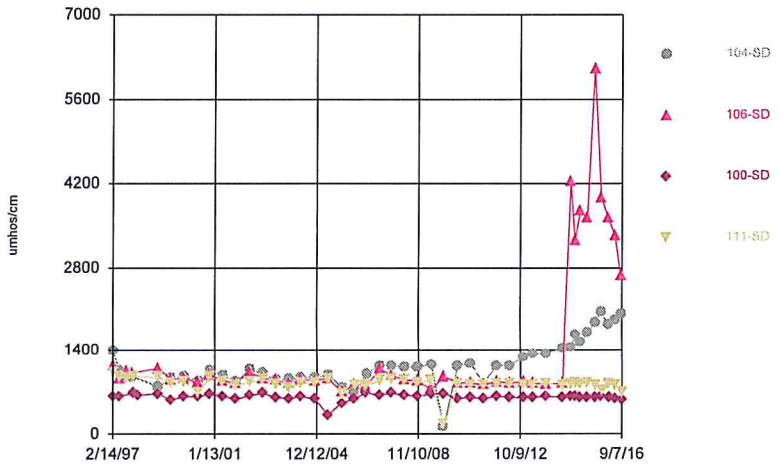
## Time Series




Constituent: Sodium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting, UG

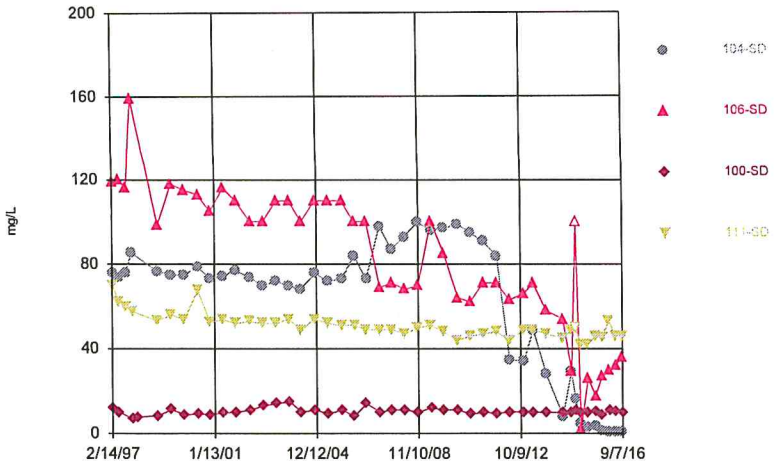
## Time Series




Constituent: Specific Conductance [Field] Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

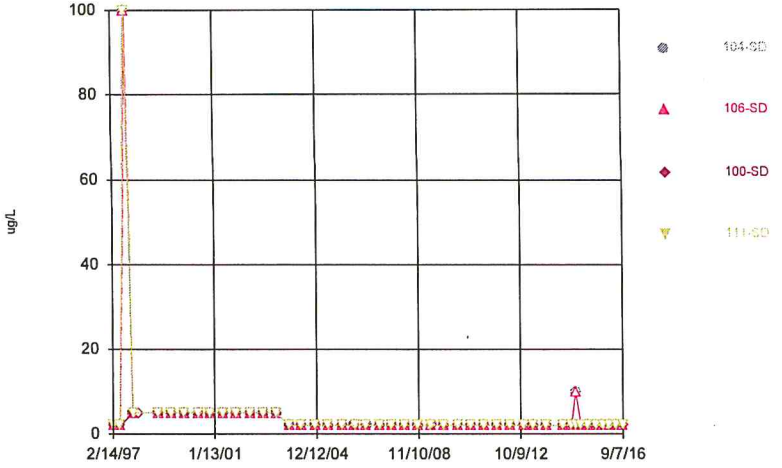
Time Series




Constituent: Sulfate Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series




Constituent: Thallium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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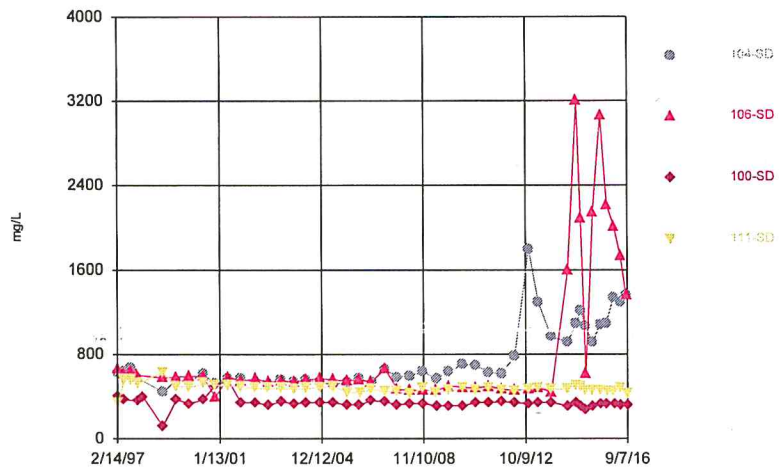
Time Series




Constituent: Total Dissolved Solids [TDS] Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

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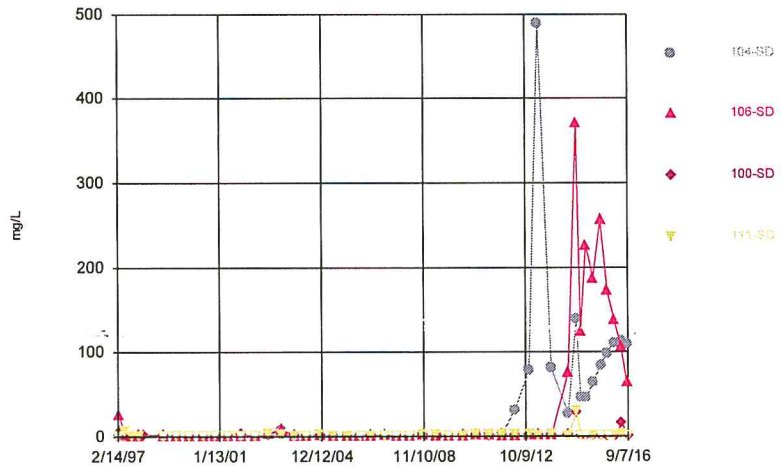
Hollow symbols indicate censored values.

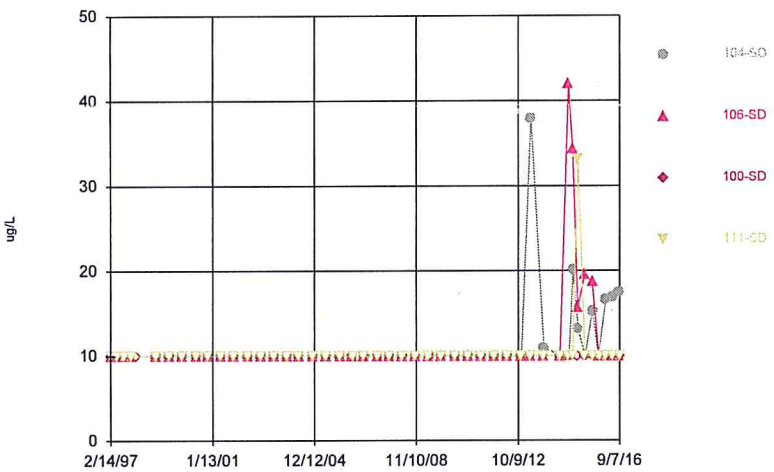
Time Series




Constituent: Total Organic Carbon [TOC] Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

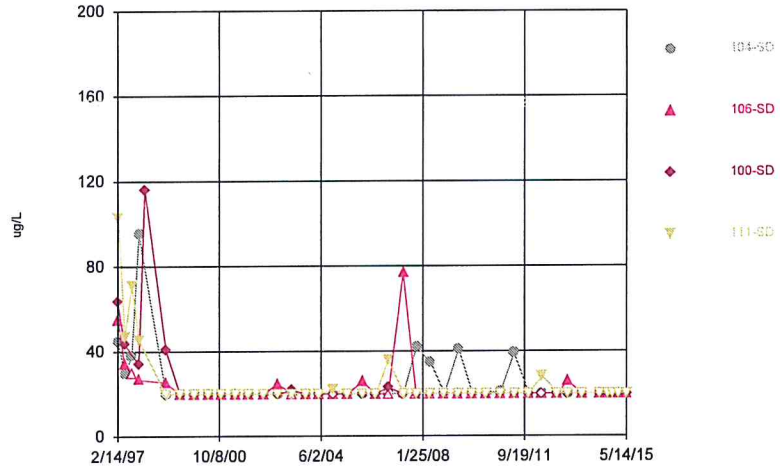
Time Series




Constituent: Vanadium Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

Sanitas™ v.9.5.26 Software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series




Constituent: Zinc Total Analysis Run 10/11/2016 6:34 AM
Bridgeton LF Client: RSI Data: Bridgeton LF

# APPENDIX F
# LABORATORY ANALYTICAL REPORT

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(317)228-3100

September 26, 2016

Environmental Manager
Bridgeton Landfill LLC
13570 Saint Charles Rock Road
Bridgeton, MO 63044

RE: Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

Dear Environmental Manager:
Enclosed are the analytical results for sample(s) received by the laboratory between August 25, 2016 and September 08, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Chris Sarkan
chris.sarkan@pacelabs.com
Project Manager

Enclosures

cc: Mr. Steve Jett, Jett Environmental Consulting
Ms Dana Sinnox, Republic Services, Inc
Mr. Jon Wilkinson, Feezor Engineering, Inc.



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# CERTIFICATIONS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Indiana Certification IDs**
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 0042
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL-0065
Oklahoma Certification #: 2014-148
Texas Certification #: T104704355-15-9
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-10-00128

## REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
(317)228-3100

## SAMPLE SUMMARY

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 50152744001 | PZ-110-SS | Water | 08/23/16 08:42 | 08/25/16 08:30 |
| 50152744002 | PZ-109-SS | Water | 08/23/16 09:45 | 08/25/16 08:30 |
| 50152744003 | PZ-106-SD | Water | 08/23/16 11:31 | 08/25/16 08:30 |
| 50152744004 | PZ-106-SS | Water | 08/23/16 12:26 | 08/25/16 08:30 |
| 50152744005 | PZ-105-SS | Water | 08/23/16 14:39 | 08/25/16 08:30 |
| 50152744006 | PZ-116-SS | Water | 08/23/16 15:55 | 08/25/16 08:30 |
| 50152744007 | PZ-202-SS | Water | 08/24/16 08:34 | 08/25/16 08:30 |
| 50152744008 | FB @ PZ-104-SS | Water | 08/24/16 09:25 | 08/25/16 08:30 |
| 50152744009 | PZ-104-SS | Water | 08/24/16 10:12 | 08/25/16 08:30 |
| 50152744010 | PZ-104-SD | Water | 08/24/16 10:54 | 08/25/16 08:30 |
| 50152744011 | PZ-104-SD DUP | Water | 08/24/16 10:54 | 08/25/16 08:30 |
| 50152744012 | PZ-212-SD | Water | 08/24/16 13:26 | 08/25/16 08:30 |
| 50152744013 | PZ-201A-SS | Water | 08/24/16 14:11 | 08/25/16 08:30 |
| 50152744014 | TRIP BLANK | Water | 08/24/16 08:00 | 08/25/16 08:30 |
| 50152744015 | PZ-207-AS | Water | 08/25/16 09:17 | 08/27/16 08:45 |
| 50152744016 | D-87 | Water | 08/25/16 10:17 | 08/27/16 08:45 |
| 50152744017 | LR-103 | Water | 08/25/16 11:41 | 08/27/16 08:45 |
| 50152744018 | PZ-101-SS | Water | 08/25/16 13:18 | 08/27/16 08:45 |
| 50152744019 | PZ-102R-SS | Water | 08/25/16 14:27 | 08/27/16 08:45 |
| 50152744020 | PZ-304-AS | Water | 08/26/16 08:33 | 08/27/16 08:45 |
| 50152744021 | PZ-304-AI | Water | 08/26/16 09:24 | 08/27/16 08:45 |
| 50152744022 | MW-104 | Water | 08/26/16 10:09 | 08/27/16 08:45 |
| 50152744023 | D-81 | Water | 08/26/16 10:58 | 08/27/16 08:45 |
| 50152744024 | PZ-302-AI | Water | 08/26/16 12:24 | 08/27/16 08:45 |
| 50152744025 | PZ-200-SS | Water | 08/26/16 14:27 | 08/27/16 08:45 |
| 50152744026 | TRIP BLANK | Water | 08/26/16 08:00 | 08/27/16 08:45 |
| 50152744027 | PZ-206-SS | Water | 08/29/16 08:51 | 08/31/16 08:25 |
| 50152744028 | PZ-113-SS | Water | 08/29/16 10:14 | 08/31/16 08:25 |
| 50152744029 | PZ-113-AD | Water | 08/29/16 11:23 | 08/31/16 08:25 |
| 50152744030 | PZ-113-AS | Water | 08/29/16 13:32 | 08/31/16 08:25 |
| 50152744031 | PZ-103-SS | Water | 08/29/16 14:48 | 08/31/16 08:25 |
| 50152744032 | PZ-203-SS | Water | 08/29/16 16:02 | 08/31/16 08:25 |
| 50152744033 | PZ-205-AS | Water | 08/30/16 08:45 | 08/31/16 08:25 |
| 50152744034 | PZ-107-SS | Water | 08/30/16 09:59 | 08/31/16 08:25 |
| 50152744035 | LR-100 | Water | 08/30/16 11:45 | 08/31/16 08:25 |
| 50152744036 | TRIP BLANK | Water | 08/30/16 08:00 | 08/31/16 08:25 |
| 50152744037 | S-5 | Water | 08/31/16 09:43 | 09/02/16 08:30 |



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Indianapolis, IN 46268
(317)228-3100

## SAMPLE SUMMARY

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 50152744038 | I-4 | Water | 08/31/16 10:50 | 09/02/16 08:30 |
| 50152744039 | D-3 | Water | 08/31/16 11:39 | 09/02/16 08:30 |
| 50152744040 | I-73 | Water | 08/31/16 13:34 | 09/02/16 08:30 |
| 50152744041 | MW-1204 | Water | 09/01/16 08:57 | 09/02/16 08:30 |
| 50152744042 | MW-1204 DUP | Water | 09/01/16 08:57 | 09/02/16 08:30 |
| 50152744043 | PZ-112-AS | Water | 09/01/16 10:16 | 09/02/16 08:30 |
| 50152744044 | I-68 | Water | 09/01/16 11:23 | 09/02/16 08:30 |
| 50152744045 | PZ-204A-SS | Water | 09/01/16 13:31 | 09/02/16 08:30 |
| 50152744046 | PZ-302-AS | Water | 09/01/16 13:55 | 09/02/16 08:30 |
| 50152744047 | S-53 | Water | 09/01/16 14:25 | 09/02/16 08:30 |
| 50152744048 | LCS-6B | Water | 09/01/16 15:15 | 09/02/16 08:30 |
| 50152744049 | TRIP BLANK | Water | 09/01/16 08:00 | 09/02/16 08:30 |
| 50152744050 | FB@PZ-104-KS | Water | 09/07/16 14:05 | 09/08/16 08:30 |
| 50152744051 | PZ-104-KS | Water | 09/07/16 15:10 | 09/08/16 08:30 |
| 50152744052 | Trip Blank | Water | 09/07/16 08:00 | 09/08/16 08:30 |
| 50152744053 | S-84 | Water | 09/06/16 08:36 | 09/08/16 08:30 |
| 50152744054 | D-85 | Water | 09/06/16 09:27 | 09/08/16 08:30 |
| 50152744055 | D-85 DUP | Water | 09/06/16 09:27 | 09/08/16 08:30 |
| 50152744056 | PZ-208-SS | Water | 09/06/16 10:49 | 09/08/16 08:30 |
| 50152744057 | PZ-303-AS | Water | 09/06/16 12:17 | 09/08/16 08:30 |
| 50152744058 | PZ-114-AS | Water | 09/06/16 15:30 | 09/08/16 08:30 |
| 50152744059 | PZ-115-SS | Water | 09/06/16 16:09 | 09/08/16 08:30 |
| 50152744060 | PZ-100-SD | Water | 09/07/16 08:58 | 09/08/16 08:30 |
| 50152744061 | PZ-100-SS | Water | 09/07/16 09:44 | 09/08/16 08:30 |
| 50152744062 | PZ-111-SD | Water | 09/07/16 11:09 | 09/08/16 08:30 |
| 50152744063 | PZ-205-SS | Water | 09/07/16 12:50 | 09/08/16 08:30 |
| 50152744064 | TRIP BLANK | Water | 09/07/16 08:00 | 09/08/16 08:30 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| 50152744001 | PZ-110-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | MLS | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744002 | PZ-109-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | MLS | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744003 | PZ-106-SD | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | MLS | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744004 | PZ-106-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | MLS | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744005 | PZ-105-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | MLS | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744006 | PZ-116-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | MLS | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744007 | PZ-202-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744008 | FB @ PZ-104-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744009 | PZ-104-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | TPD | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744010 | PZ-104-SD | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744011 | PZ-104-SD DUP | EPA 9056 | RID | 3 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744012 | PZ-212-SD | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744013 | PZ-201A-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | MJC | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | GRM | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744014 | TRIP BLANK | EPA 8260 | GRM | 50 |
| 50152744015 | PZ-207-AS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744016 | D-87 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744017 | LR-103 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744018 | PZ-101-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744019 | PZ-102R-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744020 | PZ-304-AS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | RSW | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744021 | PZ-304-AI | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744022 | MW-104 | EPA 9056 | RID | 3 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744023 | D-81 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744024 | PZ-302-AI | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744025 | PZ-200-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744026 | TRIP BLANK | EPA 8260 | CAP | 50 |
| 50152744027 | PZ-206-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744028 | PZ-113-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | GWA | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744029 | PZ-113-AD | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744030 | PZ-113-AS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744031 | PZ-103-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744032 | PZ-203-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744033 | PZ-205-AS | EPA 9056 | RID | 3 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744034 | PZ-107-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744035 | LR-100 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SLB | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744036 | TRIP BLANK | EPA 8260 | CAP | 50 |
| 50152744037 | S-5 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |

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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744038 | I-4 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744039 | D-3 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744040 | I-73 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744041 | MW-1204 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744042 | MW-1204 DUP | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744043 | PZ-112-AS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744044 | I-68 | EPA 9056 | RID | 3 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744045 | PZ-204A-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744046 | PZ-302-AS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744047 | S-53 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744048 | LCS-6B | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | CAP | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ZM | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744049 | TRIP BLANK | EPA 8260 | CAP | 50 |
| 50152744050 | FB@PZ-104-KS | EPA 9056 | RID | 1 |
| | | EPA 8260 | AMV | 7 |
| 50152744051 | PZ-104-KS | EPA 9056 | RID | 1 |
| | | EPA 8260 | AMV | 7 |
| 50152744052 | Trip Blank | EPA 8260 | AMV | 7 |
| 50152744053 | S-84 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744054 | D-85 | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |

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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744055 | D-85 DUP | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744056 | PZ-208-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744057 | PZ-303-AS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |



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## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744058 | PZ-114-AS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744059 | PZ-115-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744060 | PZ-100-SD | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |



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(317)228-3100

## SAMPLE ANALYTE COUNT

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| 50152744061 | PZ-100-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744062 | PZ-111-SD | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744063 | PZ-205-SS | EPA 9056 | RID | 3 |
| | | EPA 6010 | DMT | 11 |
| | | EPA 6020 | CAW | 11 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8260 | AMV | 50 |
| | | SM 2540C | SKK | 1 |
| | | EPA 410.4 | ESC | 1 |
| | | EPA 353.2 | JRB | 1 |
| | | EPA 365.1 | ZM | 1 |
| | | SM 4500-NH3 G | GWA | 1 |
| | | SM 5310C | CSA | 1 |
| 50152744064 | TRIP BLANK | EPA 8260 | AMV | 50 |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744001** | **PZ-110-SS** | | | | | |
| | Field pH | 6.73 | Std. Units | | 08/28/16 00:00 | |
| | Field Temperature | 16.6 | deg C | | 08/28/16 00:00 | |
| | Field Specific Conductance | 1915 | umhos/cm | | 08/28/16 00:00 | |
| | Field Turbidity | 5.23 | NTU | | 08/28/16 00:00 | |
| | Total Well Depth | 107.23 | feet | | 08/28/16 00:00 | |
| | Elevation Water Level | 432.82 | ft/msl | | 08/28/16 00:00 | |
| | Collar Elevation | 461.15 | ft/msl | | 08/28/16 00:00 | |
| | Depth to Water | 28.33 | feet | | 08/28/16 00:00 | |
| EPA 9056 | Chloride | 213 | mg/L | 25.0 | 08/30/16 20:04 | |
| EPA 9056 | Fluoride | 0.47 | mg/L | 0.10 | 08/30/16 19:31 | |
| EPA 9056 | Sulfate | 51.2 | mg/L | 2.5 | 08/30/16 19:47 | |
| EPA 6010 | Barium | 281 | ug/L | 10.0 | 08/31/16 09:03 | |
| EPA 6010 | Boron | 225 | ug/L | 100 | 08/31/16 09:03 | |
| EPA 6010 | Calcium | 210000 | ug/L | 5000 | 08/31/16 11:21 | |
| EPA 6010 | Iron | 6590 | ug/L | 50.0 | 08/31/16 09:03 | |
| EPA 6010 | Magnesium | 88000 | ug/L | 500 | 08/31/16 09:03 | |
| EPA 6010 | Manganese | 156 | ug/L | 5.0 | 08/31/16 09:03 | |
| EPA 6010 | Nickel | 12.7 | ug/L | 10.0 | 09/07/16 09:14 | |
| EPA 6010 | Sodium | 79500 | ug/L | 1000 | 08/31/16 09:03 | |
| EPA 6010 | Total Hardness by 2340B | 886000 | ug/L | 10000 | 08/31/16 11:21 | |
| EPA 8260 | Benzene | 5.2 | ug/L | 5.0 | 08/30/16 03:16 | |
| SM 2540C | Total Dissolved Solids | 1160 | mg/L | 10.0 | 08/28/16 08:53 | |
| EPA 410.4 | Chemical Oxygen Demand | 65.2 | mg/L | 10.0 | 09/08/16 11:19 | |
| EPA 365.1 | Phosphorus | 0.15 | mg/L | 0.050 | 09/02/16 13:56 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.40 | mg/L | 0.10 | 08/30/16 11:42 | |
| SM 5310C | Total Organic Carbon | 18.6 | mg/L | 10.0 | 08/29/16 22:14 | |
| **50152744002** | **PZ-109-SS** | | | | | |
| | Field pH | 7.11 | Std. Units | | 08/23/16 00:00 | |
| | Field Temperature | 21.1 | deg C | | 08/23/16 00:00 | |
| | Field Specific Conductance | 792 | umhos/cm | | 08/23/16 00:00 | |
| | Field Turbidity | 10.73 | NTU | | 08/23/16 00:00 | |
| | Total Well Depth | 130.99 | feet | | 08/23/16 00:00 | |
| | Elevation Water Level | 435.12 | ft/msl | | 08/23/16 00:00 | |
| | Collar Elevation | 460.19 | ft/msl | | 08/23/16 00:00 | |
| | Depth to Water | 25.07 | feet | | 08/23/16 00:00 | |
| EPA 9056 | Chloride | 3.9 | mg/L | 0.25 | 08/30/16 20:20 | |
| EPA 9056 | Fluoride | 2.5 | mg/L | 0.10 | 08/30/16 20:20 | |
| EPA 9056 | Sulfate | 23.6 | mg/L | 0.25 | 08/30/16 20:20 | |
| EPA 6010 | Barium | 57.9 | ug/L | 10.0 | 08/31/16 09:06 | |
| EPA 6010 | Boron | 178 | ug/L | 100 | 08/31/16 09:06 | |
| EPA 6010 | Calcium | 87200 | ug/L | 500 | 08/31/16 09:06 | |
| EPA 6010 | Magnesium | 51500 | ug/L | 500 | 08/31/16 09:06 | |
| EPA 6010 | Sodium | 10300 | ug/L | 1000 | 08/31/16 09:06 | |
| EPA 6010 | Total Hardness by 2340B | 430000 | ug/L | 1000 | 08/31/16 09:06 | |
| SM 2540C | Total Dissolved Solids | 417 | mg/L | 10.0 | 08/28/16 08:53 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744003** | **PZ-106-SD** | | | | | |
| | Field pH | 6.80 | Std. Units | | 08/23/16 00:00 | |
| | Field Temperature | 23.5 | deg C | | 08/23/16 00:00 | |
| | Field Specific Conductance | 2680 | umhos/cm | | 08/23/16 00:00 | |
| | Field Turbidity | 5.38 | NTU | | 08/23/16 00:00 | |
| | Total Well Depth | 196.29 | feet | | 08/23/16 00:00 | |
| | Elevation Water Level | 449.96 | ft/msl | | 08/23/16 00:00 | |
| | Collar Elevation | 463.36 | ft/msl | | 08/23/16 00:00 | |
| | Depth to Water | 13.40 | feet | | 08/23/16 00:00 | |
| EPA 9056 | Chloride | 306 | mg/L | 25.0 | 08/30/16 21:42 | |
| EPA 9056 | Fluoride | 1.4 | mg/L | 0.10 | 08/30/16 21:09 | |
| EPA 9056 | Sulfate | 35.8 | mg/L | 2.5 | 08/30/16 21:25 | |
| EPA 6010 | Barium | 664 | ug/L | 10.0 | 08/31/16 09:08 | |
| EPA 6010 | Boron | 1400 | ug/L | 100 | 08/31/16 09:08 | |
| EPA 6010 | Calcium | 105000 | ug/L | 500 | 08/31/16 09:08 | |
| EPA 6010 | Iron | 1780 | ug/L | 50.0 | 08/31/16 09:08 | |
| EPA 6010 | Magnesium | 75600 | ug/L | 500 | 08/31/16 09:08 | |
| EPA 6010 | Manganese | 29.1 | ug/L | 5.0 | 08/31/16 09:08 | |
| EPA 6010 | Nickel | 17.1 | ug/L | 10.0 | 09/07/16 09:17 | |
| EPA 6010 | Sodium | 246000 | ug/L | 10000 | 08/31/16 11:23 | |
| EPA 6010 | Total Hardness by 2340B | 574000 | ug/L | 1000 | 08/31/16 09:08 | |
| EPA 6020 | Chromium | 7.4 | ug/L | 5.0 | 08/31/16 18:56 | |
| SM 2540C | Total Dissolved Solids | 1360 | mg/L | 10.0 | 08/28/16 08:54 | |
| EPA 410.4 | Chemical Oxygen Demand | 214 | mg/L | 20.0 | 09/08/16 11:29 | |
| EPA 365.1 | Phosphorus | 0.11 | mg/L | 0.10 | 09/02/16 13:59 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 58.6 | mg/L | 1.0 | 08/30/16 12:43 | |
| SM 5310C | Total Organic Carbon | 64.1 | mg/L | 10.0 | 08/29/16 22:14 | |
| **50152744004** | **PZ-106-SS** | | | | | |
| | Field pH | 7.00 | Std. Units | | 08/23/16 00:00 | |
| | Field Temperature | 23.5 | deg C | | 08/23/16 00:00 | |
| | Field Specific Conductance | 939 | umhos/cm | | 08/23/16 00:00 | |
| | Field Turbidity | 4.79 | NTU | | 08/23/16 00:00 | |
| | Total Well Depth | 161.42 | feet | | 08/23/16 00:00 | |
| | Elevation Water Level | 448.76 | ft/msl | | 08/23/16 00:00 | |
| | Collar Elevation | 462.71 | ft/msl | | 08/23/16 00:00 | |
| | Depth to Water | 12.95 | feet | | 08/23/16 00:00 | |
| EPA 9056 | Chloride | 37.7 | mg/L | 2.5 | 08/30/16 22:47 | |
| EPA 9056 | Fluoride | 2.0 | mg/L | 0.10 | 08/30/16 22:30 | |
| EPA 9056 | Sulfate | 46.5 | mg/L | 2.5 | 08/30/16 22:47 | |
| EPA 6010 | Barium | 176 | ug/L | 10.0 | 08/31/16 09:10 | |
| EPA 6010 | Calcium | 103000 | ug/L | 500 | 08/31/16 09:10 | |
| EPA 6010 | Iron | 2310 | ug/L | 50.0 | 08/31/16 09:10 | |
| EPA 6010 | Magnesium | 51000 | ug/L | 500 | 08/31/16 09:10 | |
| EPA 6010 | Manganese | 14.5 | ug/L | 5.0 | 08/31/16 09:10 | |
| EPA 6010 | Sodium | 22600 | ug/L | 1000 | 08/31/16 09:10 | |
| EPA 6010 | Total Hardness by 2340B | 466000 | ug/L | 1000 | 08/31/16 09:10 | |
| EPA 6020 | Arsenic | 6.1 | ug/L | 5.0 | 08/31/16 19:59 | |
| SM 2540C | Total Dissolved Solids | 536 | mg/L | 10.0 | 08/28/16 08:54 | |

## REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744004** | **PZ-106-SS** | | | | | |
| EPA 410.4 | Chemical Oxygen Demand | 21.2 | mg/L | 10.0 | 09/08/16 11:29 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.24 | mg/L | 0.10 | 08/30/16 12:15 | |
| **50152744005** | **PZ-105-SS** | | | | | |
| | Field pH | 7.10 | Std. Units | | 08/23/16 00:00 | |
| | Field Temperature | 19.6 | deg C | | 08/23/16 00:00 | |
| | Field Specific Conductance | 1071 | umhos/cm | | 08/23/16 00:00 | |
| | Field Turbidity | 10.64 | NTU | | 08/23/16 00:00 | |
| | Total Well Depth | 144.93 | feet | | 08/23/16 00:00 | |
| | Elevation Water Level | 459.67 | ft/msl | | 08/23/16 00:00 | |
| | Collar Elevation | 483.51 | ft/msl | | 08/23/16 00:00 | |
| | Depth to Water | 23.84 | feet | | 08/23/16 00:00 | |
| EPA 9056 | Chloride | 65.0 | mg/L | 2.5 | 08/30/16 23:19 | |
| EPA 9056 | Fluoride | 0.56 | mg/L | 0.10 | 08/30/16 23:03 | |
| EPA 9056 | Sulfate | 49.5 | mg/L | 2.5 | 08/30/16 23:19 | |
| EPA 6010 | Barium | 187 | ug/L | 10.0 | 08/31/16 09:13 | |
| EPA 6010 | Calcium | 107000 | ug/L | 500 | 08/31/16 09:13 | |
| EPA 6010 | Iron | 5460 | ug/L | 50.0 | 08/31/16 09:13 | |
| EPA 6010 | Magnesium | 57500 | ug/L | 500 | 08/31/16 09:13 | |
| EPA 6010 | Manganese | 133 | ug/L | 5.0 | 08/31/16 09:13 | |
| EPA 6010 | Sodium | 41400 | ug/L | 1000 | 08/31/16 09:13 | |
| EPA 6010 | Total Hardness by 2340B | 503000 | ug/L | 1000 | 08/31/16 09:13 | |
| SM 2540C | Total Dissolved Solids | 608 | mg/L | 10.0 | 08/28/16 08:54 | |
| EPA 410.4 | Chemical Oxygen Demand | 12.3 | mg/L | 10.0 | 09/08/16 11:29 | |
| **50152744006** | **PZ-116-SS** | | | | | |
| | Field pH | 7.21 | Std. Units | | 08/23/16 00:00 | |
| | Field Temperature | 24.8 | deg C | | 08/23/16 00:00 | |
| | Field Specific Conductance | 551 | umhos/cm | | 08/23/16 00:00 | |
| | Field Turbidity | 4.54 | NTU | | 08/23/16 00:00 | |
| | Total Well Depth | 142.64 | feet | | 08/23/16 00:00 | |
| | Elevation Water Level | 467.86 | ft/msl | | 08/23/16 00:00 | |
| | Collar Elevation | 478.21 | ft/msl | | 08/23/16 00:00 | |
| | Depth to Water | 10.35 | feet | | 08/23/16 00:00 | |
| EPA 9056 | Chloride | 3.5 | mg/L | 0.25 | 08/30/16 23:36 | |
| EPA 9056 | Fluoride | 2.6 | mg/L | 0.10 | 08/30/16 23:36 | |
| EPA 9056 | Sulfate | 35.6 | mg/L | 2.5 | 08/30/16 23:52 | |
| EPA 6010 | Barium | 81.8 | ug/L | 10.0 | 08/31/16 09:15 | |
| EPA 6010 | Boron | 359 | ug/L | 100 | 08/31/16 09:15 | |
| EPA 6010 | Calcium | 48300 | ug/L | 500 | 08/31/16 09:15 | |
| EPA 6010 | Magnesium | 33800 | ug/L | 500 | 08/31/16 09:15 | |
| EPA 6010 | Manganese | 171 | ug/L | 5.0 | 08/31/16 09:15 | |
| EPA 6010 | Sodium | 40800 | ug/L | 1000 | 08/31/16 09:15 | |
| EPA 6010 | Total Hardness by 2340B | 260000 | ug/L | 1000 | 08/31/16 09:15 | |
| EPA 8260 | Benzene | 19.7 | ug/L | 5.0 | 08/30/16 07:05 | |
| EPA 8260 | 1,4-Dichlorobenzene | 8.1 | ug/L | 5.0 | 08/30/16 07:05 | |
| EPA 8260 | Ethylbenzene | 5.3 | ug/L | 5.0 | 08/30/16 07:05 | |
| EPA 8260 | Xylene (Total) | 8.3 | ug/L | 5.0 | 08/30/16 07:05 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744006** | **PZ-116-SS** | | | | | |
| SM 2540C | Total Dissolved Solids | 346 | mg/L | 10.0 | 08/29/16 08:06 | |
| EPA 365.1 | Phosphorus | 0.11 | mg/L | 0.050 | 09/02/16 14:00 | |
| **50152744007** | **PZ-202-SS** | | | | | |
| | Field pH | 6.60 | Std. Units | | 08/24/16 00:00 | |
| | Field Temperature | 17.4 | deg C | | 08/24/16 00:00 | |
| | Field Specific Conductance | 6270 | umhos/cm | | 08/24/16 00:00 | |
| | Field Turbidity | 14.67 | NTU | | 08/24/16 00:00 | |
| | Total Well Depth | 85.22 | feet | | 08/24/16 00:00 | |
| | Elevation Water Level | 469.60 | ft/msl | | 08/24/16 00:00 | |
| | Collar Elevation | 481.02 | ft/msl | | 08/24/16 00:00 | |
| | Depth to Water | 11.42 | feet | | 08/24/16 00:00 | |
| EPA 9056 | Chloride | 1430 | mg/L | 250 | 08/31/16 23:26 | |
| EPA 6010 | Barium | 2650 | ug/L | 10.0 | 08/31/16 09:21 | |
| EPA 6010 | Calcium | 612000 | ug/L | 5000 | 08/31/16 11:26 | |
| EPA 6010 | Cobalt | 14.1 | ug/L | 5.0 | 08/31/16 09:21 | |
| EPA 6010 | Iron | 82000 | ug/L | 50.0 | 08/31/16 09:21 | |
| EPA 6010 | Magnesium | 290000 | ug/L | 500 | 08/31/16 09:21 | |
| EPA 6010 | Manganese | 2130 | ug/L | 5.0 | 08/31/16 09:21 | |
| EPA 6010 | Nickel | 56.6 | ug/L | 10.0 | 09/07/16 09:19 | |
| EPA 6010 | Sodium | 196000 | ug/L | 1000 | 08/31/16 09:21 | |
| EPA 6010 | Total Hardness by 2340B | 2720000 | ug/L | 10000 | 08/31/16 11:26 | |
| EPA 6020 | Arsenic | 76.6 | ug/L | 5.0 | 08/31/16 21:39 | |
| EPA 8260 | Benzene | 210 | ug/L | 5.0 | 08/30/16 07:38 | |
| SM 2540C | Total Dissolved Solids | 4920 | mg/L | 20.0 | 08/31/16 07:18 | |
| EPA 410.4 | Chemical Oxygen Demand | 869 | mg/L | 10.0 | 09/09/16 09:08 | |
| EPA 365.1 | Phosphorus | 0.17 | mg/L | 0.10 | 09/02/16 14:02 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.39 | mg/L | 0.10 | 08/30/16 11:55 | |
| SM 5310C | Total Organic Carbon | 260 | mg/L | 40.0 | 09/03/16 09:00 | |
| **50152744008** | **FB @ PZ-104-SS** | | | | | |
| | Field pH | NA | Std. Units | | 08/24/16 00:00 | |
| | Field Temperature | NA | deg C | | 08/24/16 00:00 | |
| | Field Specific Conductance | NA | umhos/cm | | 08/24/16 00:00 | |
| | Field Turbidity | NA | NTU | | 08/24/16 00:00 | |
| | Total Well Depth | NA | feet | | 08/24/16 00:00 | |
| | Elevation Water Level | NA | ft/msl | | 08/24/16 00:00 | |
| | Collar Elevation | NA | ft/msl | | 08/24/16 00:00 | |
| | Depth to Water | NA | feet | | 08/24/16 00:00 | |
| EPA 6010 | Total Hardness by 2340B | 1430 | ug/L | 1000 | 08/31/16 09:24 | |
| EPA 8260 | Acetone | 11.0 | ug/L | 10.0 | 08/30/16 08:10 | |
| **50152744009** | **PZ-104-SS** | | | | | |
| | Field pH | 6.70 | Std. Units | | 08/24/16 00:00 | |
| | Field Temperature | 28.6 | deg C | | 08/24/16 00:00 | |
| | Field Specific Conductance | 791 | umhos/cm | | 08/24/16 00:00 | |
| | Field Turbidity | 4.68 | NTU | | 08/24/16 00:00 | |
| | Total Well Depth | 140.35 | feet | | 08/24/16 00:00 | |
| | Elevation Water Level | 463.97 | ft/msl | | 08/24/16 00:00 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744009** | **PZ-104-SS** | | | | | |
| | Collar Elevation | 483.45 | ft/msl | | 08/24/16 00:00 | |
| | Depth to Water | 19.48 | feet | | 08/24/16 00:00 | |
| EPA 9056 | Chloride | 4.2 | mg/L | 0.25 | 08/31/16 00:41 | |
| EPA 9056 | Fluoride | 0.79 | mg/L | 0.10 | 08/31/16 00:41 | |
| EPA 9056 | Sulfate | 12.2 | mg/L | 0.25 | 08/31/16 00:41 | |
| EPA 6010 | Barium | 102 | ug/L | 10.0 | 08/31/16 09:26 | |
| EPA 6010 | Boron | 132 | ug/L | 100 | 08/31/16 09:26 | |
| EPA 6010 | Calcium | 81900 | ug/L | 500 | 08/31/16 09:26 | |
| EPA 6010 | Iron | 310 | ug/L | 50.0 | 08/31/16 09:26 | |
| EPA 6010 | Magnesium | 49700 | ug/L | 500 | 08/31/16 09:26 | |
| EPA 6010 | Manganese | 22.7 | ug/L | 5.0 | 08/31/16 09:26 | |
| EPA 6010 | Sodium | 14600 | ug/L | 1000 | 08/31/16 09:26 | |
| EPA 6010 | Total Hardness by 2340B | 409000 | ug/L | 1000 | 08/31/16 09:26 | |
| EPA 8260 | Benzene | 221 | ug/L | 5.0 | 08/30/16 08:43 | |
| EPA 8260 | 1,4-Dichlorobenzene | 9.0 | ug/L | 5.0 | 08/30/16 08:43 | |
| EPA 8260 | Ethylbenzene | 7.8 | ug/L | 5.0 | 08/30/16 08:43 | |
| EPA 8260 | Toluene | 17.1 | ug/L | 5.0 | 08/30/16 08:43 | |
| EPA 8260 | Xylene (Total) | 22.1 | ug/L | 5.0 | 08/30/16 08:43 | |
| SM 2540C | Total Dissolved Solids | 410 | mg/L | 10.0 | 08/31/16 07:19 | |
| EPA 410.4 | Chemical Oxygen Demand | 31.7 | mg/L | 10.0 | 09/09/16 11:29 | |
| **50152744010** | **PZ-104-SD** | | | | | |
| | Field pH | 6.90 | Std. Units | | 08/24/16 00:00 | |
| | Field Temperature | 29.2 | deg C | | 08/24/16 00:00 | |
| | Field Specific Conductance | 2030 | umhos/cm | | 08/24/16 00:00 | |
| | Field Turbidity | 12.87 | NTU | | 08/24/16 00:00 | |
| | Total Well Depth | 120.66 | feet | | 08/24/16 00:00 | |
| | Elevation Water Level | 462.71 | ft/msl | | 08/24/16 00:00 | |
| | Collar Elevation | 483.51 | ft/msl | | 08/24/16 00:00 | |
| | Depth to Water | 20.80 | feet | | 08/24/16 00:00 | |
| EPA 9056 | Chloride | 356 | mg/L | 25.0 | 08/31/16 02:35 | |
| EPA 9056 | Fluoride | 1.0 | mg/L | 0.10 | 08/31/16 02:02 | |
| EPA 9056 | Sulfate | 0.69 | mg/L | 0.25 | 08/31/16 02:02 | |
| EPA 6010 | Barium | 628 | ug/L | 10.0 | 08/31/16 09:28 | |
| EPA 6010 | Boron | 1240 | ug/L | 100 | 08/31/16 09:28 | |
| EPA 6010 | Calcium | 116000 | ug/L | 500 | 08/31/16 09:28 | |
| EPA 6010 | Iron | 16100 | ug/L | 50.0 | 08/31/16 09:28 | |
| EPA 6010 | Magnesium | 72900 | ug/L | 500 | 08/31/16 09:28 | |
| EPA 6010 | Manganese | 137 | ug/L | 5.0 | 08/31/16 09:28 | |
| EPA 6010 | Nickel | 70.1 | ug/L | 10.0 | 09/07/16 09:21 | |
| EPA 6010 | Sodium | 197000 | ug/L | 10000 | 08/31/16 11:28 | |
| EPA 6010 | Total Hardness by 2340B | 590000 | ug/L | 1000 | 08/31/16 09:28 | |
| EPA 6020 | Arsenic | 17.9 | ug/L | 5.0 | 08/31/16 21:17 | |
| EPA 6020 | Chromium | 16.9 | ug/L | 5.0 | 08/31/16 21:17 | |
| EPA 6020 | Copper | 5.1 | ug/L | 5.0 | 08/31/16 21:17 | |
| EPA 6020 | Vanadium | 17.5 | ug/L | 10.0 | 08/31/16 21:17 | N2 |
| EPA 8260 | Benzene | 451 | ug/L | 50.0 | 08/30/16 15:06 | |
| EPA 8260 | 1,4-Dichlorobenzene | 8.9 | ug/L | 5.0 | 08/30/16 14:33 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744010** | **PZ-104-SD** | | | | | |
| EPA 8260 | Ethylbenzene | 7.3 | ug/L | 5.0 | 08/30/16 14:33 | |
| EPA 8260 | Toluene | 9.3 | ug/L | 5.0 | 08/30/16 14:33 | |
| EPA 8260 | Xylene (Total) | 33.7 | ug/L | 5.0 | 08/30/16 14:33 | |
| SM 2540C | Total Dissolved Solids | 1370 | mg/L | 20.0 | 08/31/16 07:20 | |
| EPA 410.4 | Chemical Oxygen Demand | 401 | mg/L | 10.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 0.17 | mg/L | 0.10 | 09/02/16 14:04 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 55.4 | mg/L | 1.0 | 08/30/16 12:17 | |
| SM 5310C | Total Organic Carbon | 110 | mg/L | 40.0 | 09/03/16 09:00 | |
| **50152744011** | **PZ-104-SD DUP** | | | | | |
| EPA 9056 | Chloride | 336 | mg/L | 25.0 | 08/31/16 03:24 | |
| EPA 9056 | Fluoride | 1.1 | mg/L | 0.10 | 08/31/16 02:51 | |
| EPA 9056 | Sulfate | 0.55 | mg/L | 0.25 | 08/31/16 02:51 | |
| EPA 6010 | Barium | 687 | ug/L | 10.0 | 08/31/16 09:31 | |
| EPA 6010 | Boron | 1380 | ug/L | 100 | 08/31/16 09:31 | |
| EPA 6010 | Calcium | 121000 | ug/L | 500 | 08/31/16 09:31 | |
| EPA 6010 | Iron | 17000 | ug/L | 50.0 | 08/31/16 09:31 | |
| EPA 6010 | Magnesium | 76700 | ug/L | 500 | 08/31/16 09:31 | |
| EPA 6010 | Manganese | 144 | ug/L | 5.0 | 08/31/16 09:31 | |
| EPA 6010 | Nickel | 81.9 | ug/L | 10.0 | 09/07/16 09:24 | |
| EPA 6010 | Sodium | 213000 | ug/L | 10000 | 08/31/16 11:30 | |
| EPA 6010 | Total Hardness by 2340B | 617000 | ug/L | 1000 | 08/31/16 09:31 | |
| EPA 6020 | Arsenic | 19.5 | ug/L | 5.0 | 08/31/16 21:21 | |
| EPA 6020 | Chromium | 20.0 | ug/L | 5.0 | 08/31/16 21:21 | |
| EPA 6020 | Vanadium | 19.3 | ug/L | 10.0 | 08/31/16 21:21 | N2 |
| EPA 8260 | Benzene | 521 | ug/L | 50.0 | 08/29/16 23:10 | |
| EPA 8260 | 1,4-Dichlorobenzene | 8.5 | ug/L | 5.0 | 08/29/16 22:37 | |
| EPA 8260 | Ethylbenzene | 7.5 | ug/L | 5.0 | 08/29/16 22:37 | |
| EPA 8260 | Toluene | 9.9 | ug/L | 5.0 | 08/29/16 22:37 | |
| EPA 8260 | Xylene (Total) | 33.6 | ug/L | 5.0 | 08/29/16 22:37 | |
| SM 2540C | Total Dissolved Solids | 1320 | mg/L | 20.0 | 08/31/16 07:20 | |
| EPA 410.4 | Chemical Oxygen Demand | 413 | mg/L | 10.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 0.18 | mg/L | 0.10 | 09/02/16 14:05 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 59.0 | mg/L | 1.0 | 08/30/16 12:20 | |
| SM 5310C | Total Organic Carbon | 107 | mg/L | 40.0 | 09/03/16 09:00 | |
| **50152744012** | **PZ-212-SD** | | | | | |
| | Field pH | 7.43 | Std. Units | | 08/24/16 00:00 | |
| | Field Temperature | 16.7 | deg C | | 08/24/16 00:00 | |
| | Field Specific Conductance | 1072 | umhos/cm | | 08/24/16 00:00 | |
| | Field Turbidity | 5.67 | NTU | | 08/24/16 00:00 | |
| | Total Well Depth | 92.80 | feet | | 08/24/16 00:00 | |
| | Elevation Water Level | 468.75 | ft/msl | | 08/24/16 00:00 | |
| | Collar Elevation | 482.72 | ft/msl | | 08/24/16 00:00 | |
| | Depth to Water | 13.97 | feet | | 08/24/16 00:00 | |
| EPA 9056 | Chloride | 119 | mg/L | 2.5 | 08/31/16 03:56 | |
| EPA 9056 | Fluoride | 0.26 | mg/L | 0.10 | 08/31/16 03:40 | |
| EPA 9056 | Sulfate | 73.7 | mg/L | 2.5 | 08/31/16 03:56 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744012** | **PZ-212-SD** | | | | | |
| EPA 6010 | Barium | 214 | ug/L | 10.0 | 08/31/16 09:33 | |
| EPA 6010 | Calcium | 105000 | ug/L | 500 | 08/31/16 09:33 | |
| EPA 6010 | Iron | 189 | ug/L | 50.0 | 08/31/16 09:33 | |
| EPA 6010 | Magnesium | 49700 | ug/L | 500 | 08/31/16 09:33 | |
| EPA 6010 | Manganese | 305 | ug/L | 5.0 | 08/31/16 09:33 | |
| EPA 6010 | Sodium | 49800 | ug/L | 1000 | 08/31/16 09:33 | |
| EPA 6010 | Total Hardness by 2340B | 468000 | ug/L | 1000 | 08/31/16 09:33 | |
| SM 2540C | Total Dissolved Solids | 634 | mg/L | 10.0 | 08/31/16 07:20 | |
| EPA 365.1 | Phosphorus | 0.36 | mg/L | 0.050 | 09/02/16 14:05 | |
| **50152744013** | **PZ-201A-SS** | | | | | |
| | Field pH | 7.20 | Std. Units | | 08/24/16 00:00 | |
| | Field Temperature | 18.4 | deg C | | 08/24/16 00:00 | |
| | Field Specific Conductance | 766 | umhos/cm | | 08/24/16 00:00 | |
| | Field Turbidity | 5.28 | NTU | | 08/24/16 00:00 | |
| | Total Well Depth | 86.34 | feet | | 08/24/16 00:00 | |
| | Elevation Water Level | 470.05 | ft/msl | | 08/24/16 00:00 | |
| | Collar Elevation | 480.20 | ft/msl | | 08/24/16 00:00 | |
| | Depth to Water | 10.51 | feet | | 08/24/16 00:00 | |
| EPA 9056 | Chloride | 3.7 | mg/L | 0.25 | 08/31/16 04:45 | |
| EPA 9056 | Fluoride | 0.36 | mg/L | 0.10 | 08/31/16 04:45 | |
| EPA 9056 | Sulfate | 61.2 | mg/L | 2.5 | 08/31/16 05:02 | |
| EPA 6010 | Barium | 131 | ug/L | 10.0 | 08/31/16 09:35 | |
| EPA 6010 | Calcium | 93200 | ug/L | 500 | 08/31/16 09:35 | |
| EPA 6010 | Iron | 102 | ug/L | 50.0 | 08/31/16 09:35 | |
| EPA 6010 | Magnesium | 46300 | ug/L | 500 | 08/31/16 09:35 | |
| EPA 6010 | Manganese | 23.4 | ug/L | 5.0 | 08/31/16 09:35 | |
| EPA 6010 | Sodium | 11500 | ug/L | 1000 | 08/31/16 09:35 | |
| EPA 6010 | Total Hardness by 2340B | 423000 | ug/L | 1000 | 08/31/16 09:35 | |
| SM 2540C | Total Dissolved Solids | 461 | mg/L | 10.0 | 08/31/16 07:21 | |
| EPA 353.2 | Nitrogen, NO2 plus NO3 | 0.31 | mg/L | 0.10 | 09/01/16 13:16 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.11 | mg/L | 0.10 | 08/30/16 12:01 | |
| **50152744015** | **PZ-207-AS** | | | | | |
| | Field pH | 6.60 | Std. Units | | 08/25/16 00:00 | |
| | Field Temperature | 21.1 | deg C | | 08/25/16 00:00 | |
| | Field Specific Conductance | 2440 | umhos/cm | | 08/25/16 00:00 | |
| | Field Turbidity | 0.95 | NTU | | 08/25/16 00:00 | |
| | Total Well Depth | 38.92 | feet | | 08/25/16 00:00 | |
| | Elevation Water Level | 433.26 | ft/msl | | 08/25/16 00:00 | |
| | Collar Elevation | 462.48 | ft/msl | | 08/25/16 00:00 | |
| | Depth to Water | 29.23 | feet | | 08/25/16 00:00 | |
| EPA 9056 | Chloride | 180 | mg/L | 25.0 | 09/07/16 10:51 | |
| EPA 9056 | Sulfate | 0.66 | mg/L | 0.25 | 08/31/16 19:54 | |
| EPA 6010 | Barium | 562 | ug/L | 10.0 | 09/08/16 17:37 | |
| EPA 6010 | Boron | 1040 | ug/L | 100 | 09/08/16 17:37 | |
| EPA 6010 | Calcium | 122000 | ug/L | 500 | 09/08/16 17:37 | |
| EPA 6010 | Iron | 20900 | ug/L | 50.0 | 09/08/16 17:37 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744015** | **PZ-207-AS** | | | | | |
| EPA 6010 | Magnesium | 59800 | ug/L | 500 | 09/08/16 17:37 | |
| EPA 6010 | Manganese | 86.4 | ug/L | 5.0 | 09/08/16 17:37 | |
| EPA 6010 | Nickel | 20.1 | ug/L | 10.0 | 09/08/16 17:37 | |
| EPA 6010 | Sodium | 187000 | ug/L | 1000 | 09/08/16 17:37 | |
| EPA 6010 | Total Hardness by 2340B | 550000 | ug/L | 1000 | 09/08/16 17:37 | |
| EPA 6010 | Zinc | 90.0 | ug/L | 20.0 | 09/08/16 17:37 | |
| EPA 6020 | Arsenic | 18.5 | ug/L | 5.0 | 09/02/16 03:42 | |
| EPA 6020 | Copper | 23.0 | ug/L | 5.0 | 09/02/16 03:42 | |
| EPA 6020 | Lead | 6.5 | ug/L | 5.0 | 09/02/16 03:42 | |
| EPA 8260 | Chlorobenzene | 15.9 | ug/L | 5.0 | 09/02/16 17:57 | |
| SM 2540C | Total Dissolved Solids | 1110 | mg/L | 20.0 | 08/31/16 09:07 | |
| EPA 410.4 | Chemical Oxygen Demand | 107 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 353.2 | Nitrogen, NO2 plus NO3 | 0.44 | mg/L | 0.10 | 09/02/16 11:18 | |
| EPA 365.1 | Phosphorus | 0.65 | mg/L | 0.050 | 09/08/16 11:08 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 78.7 | mg/L | 1.0 | 08/30/16 13:04 | |
| SM 5310C | Total Organic Carbon | 22.0 | mg/L | 20.0 | 09/08/16 14:37 | |
| **50152744016** | **D-87** | | | | | |
| | Field pH | 6.99 | Std. Units | | 08/25/16 00:00 | |
| | Field Temperature | 18.5 | deg C | | 08/25/16 00:00 | |
| | Field Specific Conductance | 3650 | umhos/cm | | 08/25/16 00:00 | |
| | Field Turbidity | 60.78 | NTU | | 08/25/16 00:00 | |
| | Total Well Depth | 114.61 | feet | | 08/25/16 00:00 | |
| | Elevation Water Level | 432.67 | ft/msl | | 08/25/16 00:00 | |
| | Collar Elevation | 464.41 | ft/msl | | 08/25/16 00:00 | |
| | Depth to Water | 31.74 | feet | | 08/25/16 00:00 | |
| EPA 9056 | Chloride | 375 | mg/L | 25.0 | 08/31/16 12:26 | |
| EPA 9056 | Sulfate | 0.38 | mg/L | 0.25 | 08/31/16 11:54 | |
| EPA 6010 | Barium | 2610 | ug/L | 10.0 | 09/08/16 17:51 | |
| EPA 6010 | Boron | 1720 | ug/L | 100 | 09/08/16 17:51 | |
| EPA 6010 | Calcium | 337000 | ug/L | 2500 | 09/08/16 20:15 | |
| EPA 6010 | Cobalt | 8.4 | ug/L | 5.0 | 09/08/16 17:51 | |
| EPA 6010 | Iron | 59900 | ug/L | 50.0 | 09/08/16 17:51 | |
| EPA 6010 | Magnesium | 81900 | ug/L | 500 | 09/08/16 17:51 | |
| EPA 6010 | Manganese | 703 | ug/L | 5.0 | 09/08/16 17:51 | |
| EPA 6010 | Nickel | 33.7 | ug/L | 10.0 | 09/08/16 17:51 | |
| EPA 6010 | Sodium | 358000 | ug/L | 5000 | 09/08/16 20:15 | |
| EPA 6010 | Total Hardness by 2340B | 1180000 | ug/L | 5000 | 09/08/16 20:15 | |
| EPA 6010 | Zinc | 166 | ug/L | 20.0 | 09/08/16 17:51 | |
| EPA 6020 | Cadmium | 1.2 | ug/L | 0.20 | 09/02/16 05:12 | |
| EPA 6020 | Chromium | 9.8 | ug/L | 5.0 | 09/02/16 05:12 | |
| EPA 6020 | Copper | 91.5 | ug/L | 5.0 | 09/02/16 05:12 | |
| EPA 6020 | Lead | 48.6 | ug/L | 5.0 | 09/02/16 05:12 | |
| EPA 6020 | Vanadium | 16.3 | ug/L | 10.0 | 09/02/16 05:12 | N2 |
| SM 2540C | Total Dissolved Solids | 1710 | mg/L | 20.0 | 08/31/16 09:07 | |
| EPA 410.4 | Chemical Oxygen Demand | 133 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 365.1 | Phosphorus | 0.91 | mg/L | 0.050 | 09/08/16 11:08 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 13.2 | mg/L | 0.20 | 08/30/16 12:31 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744016** | **D-87** | | | | | |
| SM 5310C | Total Organic Carbon | 22.3 | mg/L | 20.0 | 09/08/16 14:37 | |
| **50152744017** | **LR-103** | | | | | |
| | Field pH | 6.81 | Std. Units | | 08/25/16 00:00 | |
| | Field Temperature | 18.8 | deg C | | 08/25/16 00:00 | |
| | Field Specific Conductance | 1191 | umhos/cm | | 08/25/16 00:00 | |
| | Field Turbidity | 13.80 | NTU | | 08/25/16 00:00 | |
| | Total Well Depth | 49.82 | feet | | 08/25/16 00:00 | |
| | Elevation Water Level | 432.69 | ft/msl | | 08/25/16 00:00 | |
| | Collar Elevation | 470.54 | ft/msl | | 08/25/16 00:00 | |
| | Depth to Water | 37.85 | feet | | 08/25/16 00:00 | |
| EPA 9056 | Chloride | 132 | mg/L | 25.0 | 08/31/16 22:04 | |
| EPA 9056 | Fluoride | 0.20 | mg/L | 0.10 | 08/31/16 13:30 | |
| EPA 9056 | Sulfate | 0.40 | mg/L | 0.25 | 08/31/16 13:30 | |
| EPA 6010 | Barium | 1180 | ug/L | 10.0 | 09/08/16 17:54 | |
| EPA 6010 | Boron | 266 | ug/L | 100 | 09/08/16 17:54 | |
| EPA 6010 | Calcium | 281000 | ug/L | 2500 | 09/08/16 20:18 | |
| EPA 6010 | Iron | 42200 | ug/L | 50.0 | 09/08/16 17:54 | |
| EPA 6010 | Magnesium | 70600 | ug/L | 500 | 09/08/16 17:54 | |
| EPA 6010 | Manganese | 780 | ug/L | 5.0 | 09/08/16 17:54 | |
| EPA 6010 | Nickel | 15.3 | ug/L | 10.0 | 09/08/16 17:54 | |
| EPA 6010 | Sodium | 67300 | ug/L | 1000 | 09/08/16 17:54 | |
| EPA 6010 | Total Hardness by 2340B | 993000 | ug/L | 5000 | 09/08/16 20:18 | |
| EPA 6020 | Arsenic | 119 | ug/L | 5.0 | 09/02/16 03:46 | |
| SM 2540C | Total Dissolved Solids | 1100 | mg/L | 20.0 | 08/31/16 09:08 | |
| EPA 410.4 | Chemical Oxygen Demand | 45.5 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 365.1 | Phosphorus | 0.50 | mg/L | 0.050 | 09/08/16 11:09 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 1.8 | mg/L | 0.10 | 08/30/16 12:07 | |
| SM 5310C | Total Organic Carbon | 9.6 | mg/L | 4.0 | 09/08/16 14:37 | |
| **50152744018** | **PZ-101-SS** | | | | | |
| | Field pH | 6.51 | Std. Units | | 08/25/16 00:00 | |
| | Field Temperature | 29.0 | deg C | | 08/25/16 00:00 | |
| | Field Specific Conductance | 1975 | umhos/cm | | 08/25/16 00:00 | |
| | Field Turbidity | 9.65 | NTU | | 08/25/16 00:00 | |
| | Total Well Depth | 153.49 | feet | | 08/25/16 00:00 | |
| | Elevation Water Level | 453.61 | ft/msl | | 08/25/16 00:00 | |
| | Collar Elevation | 491.26 | ft/msl | | 08/25/16 00:00 | |
| | Depth to Water | 37.65 | feet | | 08/25/16 00:00 | |
| EPA 9056 | Chloride | 209 | mg/L | 25.0 | 09/01/16 00:31 | |
| EPA 9056 | Fluoride | 1.3 | mg/L | 0.10 | 08/31/16 14:00 | |
| EPA 9056 | Sulfate | 1.7 | mg/L | 0.25 | 08/31/16 14:00 | |
| EPA 6010 | Barium | 579 | ug/L | 10.0 | 09/08/16 17:57 | |
| EPA 6010 | Boron | 792 | ug/L | 100 | 09/08/16 17:57 | |
| EPA 6010 | Calcium | 175000 | ug/L | 500 | 09/08/16 17:57 | |
| EPA 6010 | Iron | 4830 | ug/L | 50.0 | 09/08/16 17:57 | |
| EPA 6010 | Magnesium | 97800 | ug/L | 500 | 09/08/16 17:57 | |
| EPA 6010 | Manganese | 132 | ug/L | 5.0 | 09/08/16 17:57 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744018** | **PZ-101-SS** | | | | | |
| EPA 6010 | Nickel | 14.8 | ug/L | 10.0 | 09/08/16 17:57 | |
| EPA 6010 | Sodium | 94400 | ug/L | 1000 | 09/08/16 17:57 | |
| EPA 6010 | Total Hardness by 2340B | 840000 | ug/L | 1000 | 09/08/16 17:57 | |
| EPA 6020 | Arsenic | 73.2 | ug/L | 5.0 | 09/02/16 03:55 | |
| EPA 8260 | Chlorobenzene | 11.2 | ug/L | 5.0 | 09/02/16 19:06 | |
| SM 2540C | Total Dissolved Solids | 1170 | mg/L | 10.0 | 08/31/16 09:08 | |
| EPA 410.4 | Chemical Oxygen Demand | 105 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 365.1 | Phosphorus | 0.14 | mg/L | 0.050 | 09/08/16 11:09 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 11.6 | mg/L | 0.20 | 08/30/16 12:34 | |
| SM 5310C | Total Organic Carbon | 26.8 | mg/L | 20.0 | 09/08/16 14:37 | |
| **50152744019** | **PZ-102R-SS** | | | | | |
| | Field pH | 6.99 | Std. Units | | 08/25/16 00:00 | |
| | Field Temperature | 21.8 | deg C | | 08/25/16 00:00 | |
| | Field Specific Conductance | 856 | umhos/cm | | 08/25/16 00:00 | |
| | Field Turbidity | 46.20 | NTU | | 08/25/16 00:00 | |
| | Total Well Depth | 91.10 | feet | | 08/25/16 00:00 | |
| | Elevation Water Level | 464.98 | ft/msl | | 08/25/16 00:00 | |
| | Collar Elevation | 485.62 | ft/msl | | 08/25/16 00:00 | |
| | Depth to Water | 20.64 | feet | | 08/25/16 00:00 | |
| EPA 9056 | Chloride | 6.8 | mg/L | 0.25 | 08/31/16 14:31 | |
| EPA 9056 | Fluoride | 0.60 | mg/L | 0.10 | 08/31/16 14:31 | |
| EPA 9056 | Sulfate | 56.8 | mg/L | 2.5 | 08/31/16 14:46 | |
| EPA 6010 | Barium | 88.0 | ug/L | 10.0 | 09/08/16 18:00 | |
| EPA 6010 | Boron | 176 | ug/L | 100 | 09/08/16 18:00 | |
| EPA 6010 | Calcium | 120000 | ug/L | 500 | 09/08/16 18:00 | |
| EPA 6010 | Iron | 5790 | ug/L | 50.0 | 09/08/16 18:00 | |
| EPA 6010 | Magnesium | 43900 | ug/L | 500 | 09/08/16 18:00 | |
| EPA 6010 | Manganese | 114 | ug/L | 5.0 | 09/08/16 18:00 | |
| EPA 6010 | Sodium | 21900 | ug/L | 1000 | 09/08/16 18:00 | |
| EPA 6010 | Total Hardness by 2340B | 480000 | ug/L | 1000 | 09/08/16 18:00 | |
| EPA 6010 | Zinc | 22.7 | ug/L | 20.0 | 09/08/16 18:00 | |
| SM 2540C | Total Dissolved Solids | 510 | mg/L | 10.0 | 08/31/16 09:08 | |
| EPA 365.1 | Phosphorus | 0.052 | mg/L | 0.050 | 09/08/16 11:10 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.18 | mg/L | 0.10 | 08/30/16 12:35 | |
| **50152744020** | **PZ-304-AS** | | | | | |
| | Field pH | 6.76 | Std. Units | | 08/26/16 00:00 | |
| | Field Temperature | 18.5 | deg C | | 08/26/16 00:00 | |
| | Field Specific Conductance | 4030 | umhos/cm | | 08/26/16 00:00 | |
| | Field Turbidity | 57.58 | NTU | | 08/26/16 00:00 | |
| | Total Well Depth | 29.20 | feet | | 08/26/16 00:00 | |
| | Elevation Water Level | 432.36 | ft/msl | | 08/26/16 00:00 | |
| | Collar Elevation | 453.61 | ft/msl | | 08/26/16 00:00 | |
| | Depth to Water | 21.25 | feet | | 08/26/16 00:00 | |
| EPA 9056 | Chloride | 391 | mg/L | 25.0 | 08/31/16 15:33 | |
| EPA 9056 | Fluoride | 0.28 | mg/L | 0.10 | 08/31/16 15:01 | |
| EPA 9056 | Sulfate | 0.55 | mg/L | 0.25 | 08/31/16 15:01 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744020** | **PZ-304-AS** | | | | | |
| EPA 6010 | Barium | 3640 | ug/L | 10.0 | 09/08/16 18:08 | |
| EPA 6010 | Boron | 2520 | ug/L | 100 | 09/08/16 18:08 | |
| EPA 6010 | Calcium | 112000 | ug/L | 500 | 09/08/16 18:08 | |
| EPA 6010 | Cobalt | 6.2 | ug/L | 5.0 | 09/08/16 18:08 | |
| EPA 6010 | Iron | 28700 | ug/L | 50.0 | 09/08/16 18:08 | |
| EPA 6010 | Magnesium | 65500 | ug/L | 500 | 09/08/16 18:08 | |
| EPA 6010 | Manganese | 116 | ug/L | 5.0 | 09/08/16 18:08 | |
| EPA 6010 | Nickel | 66.6 | ug/L | 10.0 | 09/08/16 18:08 | |
| EPA 6010 | Sodium | 478000 | ug/L | 5000 | 09/08/16 20:21 | |
| EPA 6010 | Total Hardness by 2340B | 549000 | ug/L | 1000 | 09/08/16 18:08 | |
| EPA 6020 | Arsenic | 265 | ug/L | 50.0 | 09/07/16 14:20 | |
| EPA 6020 | Chromium | 5.2 | ug/L | 5.0 | 09/02/16 04:09 | |
| EPA 6020 | Vanadium | 11.6 | ug/L | 10.0 | 09/02/16 04:09 | N2 |
| EPA 8260 | Benzene | 7.3 | ug/L | 5.0 | 09/01/16 12:28 | |
| EPA 8260 | Chlorobenzene | 57.2 | ug/L | 5.0 | 09/01/16 12:28 | |
| EPA 8260 | 1,4-Dichlorobenzene | 16.9 | ug/L | 5.0 | 09/01/16 12:28 | |
| SM 2540C | Total Dissolved Solids | 1940 | mg/L | 20.0 | 09/01/16 07:01 | |
| EPA 410.4 | Chemical Oxygen Demand | 260 | mg/L | 20.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 2.6 | mg/L | 0.25 | 09/08/16 11:33 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 126 | mg/L | 2.0 | 08/30/16 12:38 | |
| SM 5310C | Total Organic Carbon | 69.7 | mg/L | 40.0 | 09/08/16 14:37 | |
| **50152744021** | **PZ-304-AI** | | | | | |
| | Field pH | 6.83 | Std. Units | | 08/26/16 00:00 | |
| | Field Temperature | 18.4 | deg C | | 08/26/16 00:00 | |
| | Field Specific Conductance | 2940 | umhos/cm | | 08/26/16 00:00 | |
| | Field Turbidity | 15.94 | NTU | | 08/26/16 00:00 | |
| | Total Well Depth | 51.99 | feet | | 08/26/16 00:00 | |
| | Elevation Water Level | 432.36 | ft/msl | | 08/26/16 00:00 | |
| | Collar Elevation | 453.86 | ft/msl | | 08/26/16 00:00 | |
| | Depth to Water | 21.50 | feet | | 08/26/16 00:00 | |
| EPA 9056 | Chloride | 321 | mg/L | 25.0 | 09/07/16 11:08 | |
| EPA 9056 | Fluoride | 0.14 | mg/L | 0.10 | 08/31/16 16:22 | |
| EPA 9056 | Sulfate | 2.4 | mg/L | 0.25 | 08/31/16 16:22 | |
| EPA 6010 | Barium | 1560 | ug/L | 10.0 | 09/08/16 18:11 | |
| EPA 6010 | Boron | 1470 | ug/L | 100 | 09/08/16 18:11 | |
| EPA 6010 | Calcium | 237000 | ug/L | 2500 | 09/08/16 20:30 | |
| EPA 6010 | Iron | 24200 | ug/L | 50.0 | 09/08/16 18:11 | |
| EPA 6010 | Magnesium | 79100 | ug/L | 500 | 09/08/16 18:11 | |
| EPA 6010 | Manganese | 1040 | ug/L | 5.0 | 09/08/16 18:11 | |
| EPA 6010 | Nickel | 22.8 | ug/L | 10.0 | 09/08/16 18:11 | |
| EPA 6010 | Sodium | 278000 | ug/L | 5000 | 09/08/16 20:30 | |
| EPA 6010 | Total Hardness by 2340B | 916000 | ug/L | 5000 | 09/08/16 20:30 | |
| EPA 6020 | Arsenic | 9.3 | ug/L | 5.0 | 09/02/16 04:23 | |
| EPA 8260 | Benzene | 5.1 | ug/L | 5.0 | 09/02/16 21:22 | |
| EPA 8260 | Chlorobenzene | 47.5 | ug/L | 5.0 | 09/02/16 21:22 | |
| SM 2540C | Total Dissolved Solids | 1560 | mg/L | 20.0 | 09/01/16 07:01 | |
| EPA 410.4 | Chemical Oxygen Demand | 129 | mg/L | 10.0 | 09/14/16 10:21 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744021** | **PZ-304-AI** | | | | | |
| EPA 365.1 | Phosphorus | 0.33 | mg/L | 0.050 | 09/08/16 11:11 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 35.3 | mg/L | 0.50 | 08/30/16 12:40 | |
| SM 5310C | Total Organic Carbon | 37.5 | mg/L | 10.0 | 09/08/16 14:37 | |
| **50152744022** | **MW-104** | | | | | |
| | Field pH | 6.78 | Std. Units | | 08/26/16 00:00 | |
| | Field Temperature | 19.3 | deg C | | 08/26/16 00:00 | |
| | Field Specific Conductance | 1896 | umhos/cm | | 08/26/16 00:00 | |
| | Field Turbidity | 249.3 | NTU | | 08/26/16 00:00 | |
| | Total Well Depth | 19.15 | feet | | 08/26/16 00:00 | |
| | Elevation Water Level | 432.41 | ft/msl | | 08/26/16 00:00 | |
| | Collar Elevation | 440.91 | ft/msl | | 08/26/16 00:00 | |
| | Depth to Water | 8.50 | feet | | 08/26/16 00:00 | |
| EPA 9056 | Chloride | 5.5 | mg/L | 0.25 | 08/31/16 16:54 | |
| EPA 9056 | Fluoride | 0.46 | mg/L | 0.10 | 08/31/16 16:54 | |
| EPA 6010 | Barium | 854 | ug/L | 10.0 | 09/08/16 18:14 | |
| EPA 6010 | Boron | 197 | ug/L | 100 | 09/08/16 18:14 | |
| EPA 6010 | Calcium | 318000 | ug/L | 2500 | 09/08/16 20:32 | |
| EPA 6010 | Cobalt | 7.7 | ug/L | 5.0 | 09/08/16 18:14 | |
| EPA 6010 | Iron | 88000 | ug/L | 50.0 | 09/08/16 18:14 | |
| EPA 6010 | Magnesium | 104000 | ug/L | 500 | 09/08/16 18:14 | |
| EPA 6010 | Manganese | 4360 | ug/L | 5.0 | 09/08/16 18:14 | |
| EPA 6010 | Nickel | 25.7 | ug/L | 10.0 | 09/08/16 18:14 | |
| EPA 6010 | Sodium | 14600 | ug/L | 1000 | 09/08/16 18:14 | |
| EPA 6010 | Total Hardness by 2340B | 1220000 | ug/L | 5000 | 09/08/16 20:32 | |
| EPA 6010 | Zinc | 147 | ug/L | 20.0 | 09/08/16 18:14 | |
| EPA 6020 | Arsenic | 116 | ug/L | 50.0 | 09/02/16 04:59 | |
| EPA 6020 | Cadmium | 1.2 | ug/L | 0.20 | 09/02/16 05:22 | |
| EPA 6020 | Chromium | 14.0 | ug/L | 5.0 | 09/02/16 05:22 | |
| EPA 6020 | Copper | 22.0 | ug/L | 5.0 | 09/02/16 05:22 | |
| EPA 6020 | Lead | 21.9 | ug/L | 5.0 | 09/02/16 05:22 | |
| EPA 6020 | Vanadium | 33.6 | ug/L | 10.0 | 09/02/16 05:22 | N2 |
| SM 2540C | Total Dissolved Solids | 1060 | mg/L | 20.0 | 09/01/16 07:01 | |
| EPA 410.4 | Chemical Oxygen Demand | 64.8 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 365.1 | Phosphorus | 1.4 | mg/L | 0.25 | 09/08/16 11:34 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.47 | mg/L | 0.10 | 09/01/16 14:39 | |
| SM 5310C | Total Organic Carbon | 8.3 | mg/L | 4.0 | 09/08/16 14:37 | |
| **50152744023** | **D-81** | | | | | |
| | Field pH | 6.59 | Std. Units | | 08/26/16 00:00 | |
| | Field Temperature | 17.9 | deg C | | 08/26/16 00:00 | |
| | Field Specific Conductance | 1371 | umhos/cm | | 08/26/16 00:00 | |
| | Field Turbidity | 37.19 | NTU | | 08/26/16 00:00 | |
| | Total Well Depth | 62.53 | feet | | 08/26/16 00:00 | |
| | Elevation Water Level | 432.47 | ft/msl | | 08/26/16 00:00 | |
| | Collar Elevation | 450.87 | ft/msl | | 08/26/16 00:00 | |
| | Depth to Water | 18.40 | feet | | 08/26/16 00:00 | |
| EPA 9056 | Chloride | 6.4 | mg/L | 0.25 | 08/31/16 17:27 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744023** | **D-81** | | | | | |
| EPA 9056 | Fluoride | 0.19 | mg/L | 0.10 | 08/31/16 17:27 | |
| EPA 9056 | Sulfate | 21.6 | mg/L | 0.25 | 08/31/16 17:27 | |
| EPA 6010 | Barium | 482 | ug/L | 10.0 | 09/08/16 18:17 | |
| EPA 6010 | Boron | 162 | ug/L | 100 | 09/08/16 18:17 | |
| EPA 6010 | Calcium | 270000 | ug/L | 2500 | 09/08/16 20:35 | |
| EPA 6010 | Iron | 21800 | ug/L | 50.0 | 09/08/16 18:17 | |
| EPA 6010 | Magnesium | 60600 | ug/L | 500 | 09/08/16 18:17 | |
| EPA 6010 | Manganese | 969 | ug/L | 5.0 | 09/08/16 18:17 | |
| EPA 6010 | Nickel | 16.0 | ug/L | 10.0 | 09/08/16 18:17 | |
| EPA 6010 | Sodium | 15200 | ug/L | 1000 | 09/08/16 18:17 | |
| EPA 6010 | Total Hardness by 2340B | 925000 | ug/L | 5000 | 09/08/16 20:35 | |
| EPA 6010 | Zinc | 29.4 | ug/L | 20.0 | 09/08/16 18:17 | |
| EPA 6020 | Arsenic | 10.9 | ug/L | 5.0 | 09/02/16 04:27 | |
| EPA 6020 | Cadmium | 0.65 | ug/L | 0.20 | 09/02/16 04:27 | |
| SM 2540C | Total Dissolved Solids | 863 | mg/L | 10.0 | 09/01/16 07:02 | |
| EPA 365.1 | Phosphorus | 0.29 | mg/L | 0.050 | 09/08/16 11:14 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.34 | mg/L | 0.10 | 09/01/16 14:07 | |
| SM 5310C | Total Organic Carbon | 2.3 | mg/L | 1.0 | 09/08/16 14:37 | |
| **50152744024** | **PZ-302-AI** | | | | | |
| | Field pH | 6.65 | Std. Units | | 08/26/16 00:00 | |
| | Field Temperature | 18.5 | deg C | | 08/26/16 00:00 | |
| | Field Specific Conductance | 1479 | umhos/cm | | 08/26/16 00:00 | |
| | Field Turbidity | 20.11 | NTU | | 08/26/16 00:00 | |
| | Total Well Depth | 44.09 | feet | | 08/26/16 00:00 | |
| | Elevation Water Level | 432.43 | ft/msl | | 08/26/16 00:00 | |
| | Collar Elevation | 451.02 | ft/msl | | 08/26/16 00:00 | |
| | Depth to Water | 18.59 | feet | | 08/26/16 00:00 | |
| EPA 9056 | Chloride | 32.6 | mg/L | 2.5 | 08/31/16 18:16 | |
| EPA 9056 | Fluoride | 0.23 | mg/L | 0.10 | 08/31/16 18:00 | |
| EPA 9056 | Sulfate | 21.3 | mg/L | 0.25 | 08/31/16 18:00 | |
| EPA 6010 | Barium | 448 | ug/L | 10.0 | 09/08/16 18:20 | |
| EPA 6010 | Boron | 403 | ug/L | 100 | 09/08/16 18:20 | |
| EPA 6010 | Calcium | 237000 | ug/L | 2500 | 09/08/16 20:38 | |
| EPA 6010 | Cobalt | 9.8 | ug/L | 5.0 | 09/08/16 18:20 | |
| EPA 6010 | Iron | 3400 | ug/L | 50.0 | 09/08/16 18:20 | |
| EPA 6010 | Magnesium | 61700 | ug/L | 500 | 09/08/16 18:20 | |
| EPA 6010 | Manganese | 401 | ug/L | 5.0 | 09/08/16 18:20 | |
| EPA 6010 | Nickel | 26.8 | ug/L | 10.0 | 09/08/16 18:20 | |
| EPA 6010 | Sodium | 63900 | ug/L | 1000 | 09/08/16 18:20 | |
| EPA 6010 | Total Hardness by 2340B | 846000 | ug/L | 5000 | 09/08/16 20:38 | |
| SM 2540C | Total Dissolved Solids | 917 | mg/L | 10.0 | 09/01/16 07:02 | |
| EPA 410.4 | Chemical Oxygen Demand | 17.4 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 365.1 | Phosphorus | 0.071 | mg/L | 0.050 | 09/08/16 11:15 | |
| SM 5310C | Total Organic Carbon | 5.3 | mg/L | 1.0 | 09/08/16 14:37 | |
| **50152744025** | **PZ-200-SS** | | | | | |
| | Field pH | 6.29 | Std. Units | | 08/26/16 00:00 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744025** | **PZ-200-SS** | | | | | |
| | Field Temperature | 19.2 | deg C | | 08/26/16 00:00 | |
| | Field Specific Conductance | 2770 | umhos/cm | | 08/26/16 00:00 | |
| | Field Turbidity | 51.64 | NTU | | 08/26/16 00:00 | |
| | Total Well Depth | 99.30 | feet | | 08/26/16 00:00 | |
| | Elevation Water Level | 464.82 | ft/msl | | 08/26/16 00:00 | |
| | Collar Elevation | 485.57 | ft/msl | | 08/26/16 00:00 | |
| | Depth to Water | 20.75 | feet | | 08/26/16 00:00 | |
| EPA 9056 | Chloride | 696 | mg/L | 25.0 | 09/07/16 11:24 | |
| EPA 9056 | Sulfate | 42.4 | mg/L | 2.5 | 08/31/16 18:49 | |
| EPA 6010 | Barium | 324 | ug/L | 10.0 | 09/08/16 18:23 | |
| EPA 6010 | Calcium | 288000 | ug/L | 2500 | 09/08/16 20:41 | |
| EPA 6010 | Cobalt | 41.6 | ug/L | 5.0 | 09/08/16 18:23 | |
| EPA 6010 | Iron | 53500 | ug/L | 50.0 | 09/08/16 18:23 | |
| EPA 6010 | Magnesium | 97700 | ug/L | 500 | 09/08/16 18:23 | |
| EPA 6010 | Manganese | 3230 | ug/L | 5.0 | 09/08/16 18:23 | |
| EPA 6010 | Nickel | 96.0 | ug/L | 10.0 | 09/08/16 18:23 | |
| EPA 6010 | Sodium | 130000 | ug/L | 1000 | 09/08/16 18:23 | |
| EPA 6010 | Total Hardness by 2340B | 1120000 | ug/L | 5000 | 09/08/16 20:41 | |
| EPA 6020 | Arsenic | 87.0 | ug/L | 5.0 | 09/02/16 04:41 | |
| SM 2540C | Total Dissolved Solids | 1910 | mg/L | 10.0 | 09/01/16 07:02 | |
| EPA 410.4 | Chemical Oxygen Demand | 58.5 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 365.1 | Phosphorus | 1.2 | mg/L | 0.25 | 09/08/16 11:36 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.80 | mg/L | 0.10 | 09/01/16 14:09 | |
| **50152744027** | **PZ-206-SS** | | | | | |
| | Field pH | 6.93 | Std. Units | | 08/29/16 00:00 | |
| | Field Temperature | 21.2 | deg C | | 08/29/16 00:00 | |
| | Field Specific Conductance | 1397 | umhos/cm | | 08/29/16 00:00 | |
| | Field Turbidity | 73.43 | NTU | | 08/29/16 00:00 | |
| | Total Well Depth | 129.74 | feet | | 08/29/16 00:00 | |
| | Elevation Water Level | 435.23 | ft/msl | | 08/29/16 00:00 | |
| | Collar Elevation | 463.42 | ft/msl | | 08/29/16 00:00 | |
| | Depth to Water | 28.19 | feet | | 08/29/16 00:00 | |
| EPA 9056 | Chloride | 130 | mg/L | 25.0 | 09/02/16 13:11 | |
| EPA 9056 | Fluoride | 1.6 | mg/L | 0.10 | 09/02/16 11:33 | |
| EPA 9056 | Sulfate | 50.6 | mg/L | 2.5 | 09/02/16 12:22 | |
| EPA 6010 | Barium | 102 | ug/L | 10.0 | 09/08/16 18:26 | |
| EPA 6010 | Boron | 192 | ug/L | 100 | 09/08/16 18:26 | |
| EPA 6010 | Calcium | 147000 | ug/L | 500 | 09/08/16 18:26 | |
| EPA 6010 | Iron | 5310 | ug/L | 50.0 | 09/08/16 18:26 | |
| EPA 6010 | Magnesium | 94900 | ug/L | 500 | 09/08/16 18:26 | |
| EPA 6010 | Manganese | 102 | ug/L | 5.0 | 09/08/16 18:26 | |
| EPA 6010 | Sodium | 25300 | ug/L | 1000 | 09/08/16 18:26 | |
| EPA 6010 | Total Hardness by 2340B | 757000 | ug/L | 1000 | 09/08/16 18:26 | |
| SM 2540C | Total Dissolved Solids | 829 | mg/L | 10.0 | 09/01/16 08:51 | |
| EPA 410.4 | Chemical Oxygen Demand | 70.1 | mg/L | 10.0 | 09/14/16 10:21 | |
| EPA 365.1 | Phosphorus | 0.14 | mg/L | 0.050 | 09/12/16 09:30 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.26 | mg/L | 0.10 | 09/01/16 14:14 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744027** | **PZ-206-SS** | | | | | |
| SM 5310C | Total Organic Carbon | 20.0 | mg/L | 10.0 | 09/08/16 14:37 | |
| **50152744028** | **PZ-113-SS** | | | | | |
| | Field pH | 7.48 | Std. Units | | 08/29/16 00:00 | |
| | Field Temperature | 23.7 | deg C | | 08/29/16 00:00 | |
| | Field Specific Conductance | 535 | umhos/cm | | 08/29/16 00:00 | |
| | Field Turbidity | 353.6 | NTU | | 08/29/16 00:00 | |
| | Total Well Depth | 160.21 | feet | | 08/29/16 00:00 | |
| | Elevation Water Level | 432.64 | ft/msl | | 08/29/16 00:00 | |
| | Collar Elevation | 461.77 | ft/msl | | 08/29/16 00:00 | |
| | Depth to Water | 29.13 | feet | | 08/29/16 00:00 | |
| EPA 9056 | Chloride | 11.5 | mg/L | 0.25 | 09/02/16 17:32 | |
| EPA 9056 | Fluoride | 2.8 | mg/L | 0.10 | 09/02/16 17:32 | |
| EPA 9056 | Sulfate | 18.3 | mg/L | 0.25 | 09/02/16 17:32 | |
| EPA 6010 | Barium | 214 | ug/L | 10.0 | 09/08/16 18:29 | |
| EPA 6010 | Calcium | 119000 | ug/L | 500 | 09/08/16 18:29 | |
| EPA 6010 | Iron | 4300 | ug/L | 50.0 | 09/08/16 18:29 | |
| EPA 6010 | Magnesium | 48900 | ug/L | 500 | 09/08/16 18:29 | |
| EPA 6010 | Manganese | 78.1 | ug/L | 5.0 | 09/08/16 18:29 | |
| EPA 6010 | Sodium | 19300 | ug/L | 1000 | 09/08/16 18:29 | |
| EPA 6010 | Total Hardness by 2340B | 498000 | ug/L | 1000 | 09/08/16 18:29 | |
| EPA 6010 | Zinc | 20.2 | ug/L | 20.0 | 09/08/16 18:29 | |
| EPA 6020 | Cadmium | 0.21 | ug/L | 0.20 | 09/07/16 16:32 | |
| EPA 6020 | Chromium | 12.3 | ug/L | 5.0 | 09/07/16 16:32 | |
| EPA 6020 | Vanadium | 12.9 | ug/L | 10.0 | 09/07/16 16:32 | N2 |
| SM 2540C | Total Dissolved Solids | 282 | mg/L | 20.0 | 09/01/16 08:51 | |
| EPA 365.1 | Phosphorus | 0.35 | mg/L | 0.050 | 09/12/16 09:31 | |
| **50152744029** | **PZ-113-AD** | | | | | |
| | Field pH | 6.96 | Std. Units | | 08/29/16 00:00 | |
| | Field Temperature | 24.0 | deg C | | 08/29/16 00:00 | |
| | Field Specific Conductance | 4500 | umhos/cm | | 08/29/16 00:00 | |
| | Field Turbidity | 16.02 | NTU | | 08/29/16 00:00 | |
| | Total Well Depth | 110.11 | feet | | 08/29/16 00:00 | |
| | Elevation Water Level | 432.64 | ft/msl | | 08/29/16 00:00 | |
| | Collar Elevation | 461.54 | ft/msl | | 08/29/16 00:00 | |
| | Depth to Water | 28.90 | feet | | 08/29/16 00:00 | |
| EPA 9056 | Chloride | 793 | mg/L | 25.0 | 09/02/16 18:53 | |
| EPA 9056 | Fluoride | 0.24 | mg/L | 0.10 | 09/02/16 18:21 | |
| EPA 6010 | Barium | 2820 | ug/L | 10.0 | 09/08/16 18:32 | |
| EPA 6010 | Boron | 1630 | ug/L | 100 | 09/08/16 18:32 | |
| EPA 6010 | Calcium | 333000 | ug/L | 2500 | 09/08/16 20:44 | |
| EPA 6010 | Cobalt | 7.2 | ug/L | 5.0 | 09/08/16 18:32 | |
| EPA 6010 | Iron | 39900 | ug/L | 50.0 | 09/08/16 18:32 | |
| EPA 6010 | Magnesium | 95400 | ug/L | 500 | 09/08/16 18:32 | |
| EPA 6010 | Manganese | 717 | ug/L | 5.0 | 09/08/16 18:32 | |
| EPA 6010 | Nickel | 29.0 | ug/L | 10.0 | 09/08/16 18:32 | |
| EPA 6010 | Sodium | 523000 | ug/L | 5000 | 09/08/16 20:44 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744029** | **PZ-113-AD** | | | | | |
| EPA 6010 | Total Hardness by 2340B | 1220000 | ug/L | 5000 | 09/08/16 20:44 | |
| EPA 6020 | Arsenic | 5.5 | ug/L | 5.0 | 09/07/16 16:41 | |
| SM 2540C | Total Dissolved Solids | 2480 | mg/L | 20.0 | 09/01/16 08:52 | |
| EPA 410.4 | Chemical Oxygen Demand | 175 | mg/L | 20.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 0.62 | mg/L | 0.050 | 09/12/16 09:31 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 36.2 | mg/L | 0.50 | 09/01/16 14:41 | |
| **50152744030** | **PZ-113-AS** | | | | | |
| | Field pH | 6.85 | Std. Units | | 08/29/16 00:00 | |
| | Field Temperature | 21.3 | deg C | | 08/29/16 00:00 | |
| | Field Specific Conductance | 1394 | umhos/cm | | 08/29/16 00:00 | |
| | Field Turbidity | 16.44 | NTU | | 08/29/16 00:00 | |
| | Total Well Depth | 39.17 | feet | | 08/29/16 00:00 | |
| | Elevation Water Level | 432.57 | ft/msl | | 08/29/16 00:00 | |
| | Collar Elevation | 461.40 | ft/msl | | 08/29/16 00:00 | |
| | Depth to Water | 28.83 | feet | | 08/29/16 00:00 | |
| EPA 9056 | Chloride | 109 | mg/L | 2.5 | 09/02/16 20:31 | |
| EPA 9056 | Fluoride | 0.36 | mg/L | 0.10 | 09/02/16 20:15 | |
| EPA 9056 | Sulfate | 12.2 | mg/L | 0.25 | 09/02/16 20:15 | |
| EPA 6010 | Barium | 805 | ug/L | 10.0 | 09/08/16 18:35 | |
| EPA 6010 | Boron | 374 | ug/L | 100 | 09/08/16 18:35 | |
| EPA 6010 | Calcium | 186000 | ug/L | 500 | 09/08/16 18:35 | |
| EPA 6010 | Cobalt | 10.4 | ug/L | 5.0 | 09/08/16 18:35 | |
| EPA 6010 | Iron | 9340 | ug/L | 50.0 | 09/08/16 18:35 | |
| EPA 6010 | Magnesium | 50800 | ug/L | 500 | 09/08/16 18:35 | |
| EPA 6010 | Manganese | 5460 | ug/L | 5.0 | 09/08/16 18:35 | |
| EPA 6010 | Nickel | 27.9 | ug/L | 10.0 | 09/08/16 18:35 | |
| EPA 6010 | Sodium | 67000 | ug/L | 1000 | 09/08/16 18:35 | |
| EPA 6010 | Total Hardness by 2340B | 674000 | ug/L | 1000 | 09/08/16 18:35 | |
| EPA 6020 | Arsenic | 23.2 | ug/L | 5.0 | 09/07/16 16:50 | |
| SM 2540C | Total Dissolved Solids | 831 | mg/L | 10.0 | 09/01/16 08:52 | |
| EPA 410.4 | Chemical Oxygen Demand | 19.7 | mg/L | 10.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 0.23 | mg/L | 0.050 | 09/12/16 09:32 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 1.6 | mg/L | 0.10 | 09/01/16 14:43 | |
| SM 5310C | Total Organic Carbon | 5.6 | mg/L | 4.0 | 09/12/16 18:47 | |
| **50152744031** | **PZ-103-SS** | | | | | |
| | Field pH | 6.36 | Std. Units | | 08/29/16 00:00 | |
| | Field Temperature | 29.4 | deg C | | 08/29/16 00:00 | |
| | Field Specific Conductance | 2050 | umhos/cm | | 08/29/16 00:00 | |
| | Field Turbidity | 35.74 | NTU | | 08/29/16 00:00 | |
| | Total Well Depth | 149.66 | feet | | 08/29/16 00:00 | |
| | Elevation Water Level | 469.43 | ft/msl | | 08/29/16 00:00 | |
| | Collar Elevation | 483.56 | ft/msl | | 08/29/16 00:00 | |
| | Depth to Water | 14.13 | feet | | 08/29/16 00:00 | |
| EPA 9056 | Chloride | 17.9 | mg/L | 2.5 | 09/02/16 21:20 | |
| EPA 9056 | Fluoride | 0.90 | mg/L | 0.10 | 09/02/16 21:04 | |
| EPA 9056 | Sulfate | 0.97 | mg/L | 0.25 | 09/02/16 21:04 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744031** | **PZ-103-SS** | | | | | |
| EPA 6010 | Barium | 778 | ug/L | 10.0 | 09/08/16 18:44 | |
| EPA 6010 | Boron | 368 | ug/L | 100 | 09/08/16 18:44 | |
| EPA 6010 | Calcium | 306000 | ug/L | 2500 | 09/08/16 20:47 | |
| EPA 6010 | Iron | 23900 | ug/L | 50.0 | 09/08/16 18:44 | |
| EPA 6010 | Magnesium | 105000 | ug/L | 500 | 09/08/16 18:44 | |
| EPA 6010 | Manganese | 676 | ug/L | 5.0 | 09/08/16 18:44 | |
| EPA 6010 | Nickel | 11.8 | ug/L | 10.0 | 09/08/16 18:44 | |
| EPA 6010 | Sodium | 78000 | ug/L | 1000 | 09/08/16 18:44 | |
| EPA 6010 | Total Hardness by 2340B | 1200000 | ug/L | 5000 | 09/08/16 20:47 | |
| EPA 6010 | Zinc | 33.2 | ug/L | 20.0 | 09/08/16 18:44 | |
| EPA 6020 | Cadmium | 0.47 | ug/L | 0.20 | 09/07/16 16:59 | |
| EPA 6020 | Chromium | 7.8 | ug/L | 5.0 | 09/07/16 16:59 | |
| EPA 6020 | Copper | 5.0 | ug/L | 5.0 | 09/07/16 16:59 | |
| EPA 6020 | Vanadium | 13.2 | ug/L | 10.0 | 09/07/16 16:59 | N2 |
| EPA 8260 | Benzene | 66.3 | ug/L | 5.0 | 09/03/16 10:30 | |
| EPA 8260 | 1,4-Dichlorobenzene | 5.3 | ug/L | 5.0 | 09/03/16 10:30 | |
| EPA 8260 | Ethylbenzene | 7.1 | ug/L | 5.0 | 09/03/16 10:30 | |
| EPA 8260 | Toluene | 14.0 | ug/L | 5.0 | 09/03/16 10:30 | |
| EPA 8260 | Xylene (Total) | 5.7 | ug/L | 5.0 | 09/03/16 10:30 | |
| SM 2540C | Total Dissolved Solids | 1240 | mg/L | 10.0 | 09/01/16 08:52 | |
| EPA 410.4 | Chemical Oxygen Demand | 27.0 | mg/L | 10.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 0.69 | mg/L | 0.050 | 09/12/16 09:33 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.37 | mg/L | 0.10 | 09/01/16 14:22 | |
| **50152744032** | **PZ-203-SS** | | | | | |
| | Field pH | 7.21 | Std. Units | | 08/29/16 00:00 | |
| | Field Temperature | 19.1 | deg C | | 08/29/16 00:00 | |
| | Field Specific Conductance | 742 | umhos/cm | | 08/29/16 00:00 | |
| | Field Turbidity | 11.26 | NTU | | 08/29/16 00:00 | |
| | Total Well Depth | 111.10 | feet | | 08/29/16 00:00 | |
| | Elevation Water Level | 461.34 | ft/msl | | 08/29/16 00:00 | |
| | Collar Elevation | 486.44 | ft/msl | | 08/29/16 00:00 | |
| | Depth to Water | 25.10 | feet | | 08/29/16 00:00 | |
| EPA 9056 | Chloride | 9.0 | mg/L | 0.25 | 09/02/16 21:53 | |
| EPA 9056 | Fluoride | 0.55 | mg/L | 0.10 | 09/02/16 21:53 | |
| EPA 9056 | Sulfate | 52.6 | mg/L | 2.5 | 09/02/16 22:09 | |
| EPA 6010 | Barium | 102 | ug/L | 10.0 | 09/08/16 18:46 | |
| EPA 6010 | Boron | 123 | ug/L | 100 | 09/08/16 18:46 | |
| EPA 6010 | Calcium | 103000 | ug/L | 500 | 09/08/16 18:46 | |
| EPA 6010 | Iron | 1750 | ug/L | 50.0 | 09/08/16 18:46 | |
| EPA 6010 | Magnesium | 45300 | ug/L | 500 | 09/08/16 18:46 | |
| EPA 6010 | Manganese | 17.4 | ug/L | 5.0 | 09/08/16 18:46 | |
| EPA 6010 | Sodium | 8800 | ug/L | 1000 | 09/08/16 18:46 | |
| EPA 6010 | Total Hardness by 2340B | 443000 | ug/L | 1000 | 09/08/16 18:46 | |
| SM 2540C | Total Dissolved Solids | 443 | mg/L | 10.0 | 09/01/16 08:53 | |
| EPA 410.4 | Chemical Oxygen Demand | 22.7 | mg/L | 10.0 | 09/15/16 11:23 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.11 | mg/L | 0.10 | 09/01/16 14:23 | |
| SM 5310C | Total Organic Carbon | 5.9 | mg/L | 1.0 | 09/12/16 18:47 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744033** | **PZ-205-AS** | | | | | |
| | Field pH | 6.68 | Std. Units | | 08/30/16 00:00 | |
| | Field Temperature | 21.7 | deg C | | 08/30/16 00:00 | |
| | Field Specific Conductance | 4500 | umhos/cm | | 08/30/16 00:00 | |
| | Field Turbidity | 278.7 | NTU | | 08/30/16 00:00 | |
| | Total Well Depth | 53.88 | feet | | 08/30/16 00:00 | |
| | Elevation Water Level | 433.88 | ft/msl | | 08/30/16 00:00 | |
| | Collar Elevation | 464.77 | ft/msl | | 08/30/16 00:00 | |
| | Depth to Water | 30.89 | feet | | 08/30/16 00:00 | |
| EPA 9056 | Chloride | 973 | mg/L | 25.0 | 09/03/16 00:03 | |
| EPA 9056 | Fluoride | 0.28 | mg/L | 0.10 | 09/02/16 23:30 | |
| EPA 9056 | Sulfate | 0.30 | mg/L | 0.25 | 09/02/16 23:30 | |
| EPA 6010 | Barium | 3640 | ug/L | 10.0 | 09/08/16 18:49 | |
| EPA 6010 | Boron | 1430 | ug/L | 100 | 09/08/16 18:49 | |
| EPA 6010 | Calcium | 484000 | ug/L | 2500 | 09/08/16 20:50 | |
| EPA 6010 | Cobalt | 7.2 | ug/L | 5.0 | 09/08/16 18:49 | |
| EPA 6010 | Iron | 78400 | ug/L | 50.0 | 09/08/16 18:49 | |
| EPA 6010 | Magnesium | 138000 | ug/L | 500 | 09/08/16 18:49 | |
| EPA 6010 | Manganese | 1080 | ug/L | 5.0 | 09/08/16 18:49 | |
| EPA 6010 | Nickel | 40.1 | ug/L | 10.0 | 09/08/16 18:49 | |
| EPA 6010 | Sodium | 294000 | ug/L | 5000 | 09/08/16 20:50 | |
| EPA 6010 | Total Hardness by 2340B | 1780000 | ug/L | 5000 | 09/08/16 20:50 | |
| EPA 6010 | Zinc | 69.0 | ug/L | 20.0 | 09/08/16 18:49 | |
| EPA 6020 | Arsenic | 53.1 | ug/L | 5.0 | 09/07/16 18:21 | |
| EPA 6020 | Cadmium | 0.38 | ug/L | 0.20 | 09/07/16 18:21 | |
| EPA 6020 | Chromium | 22.2 | ug/L | 5.0 | 09/07/16 18:21 | |
| EPA 6020 | Copper | 25.2 | ug/L | 5.0 | 09/07/16 18:21 | |
| EPA 6020 | Lead | 22.5 | ug/L | 5.0 | 09/07/16 18:21 | |
| EPA 6020 | Vanadium | 31.5 | ug/L | 10.0 | 09/07/16 18:21 | N2 |
| EPA 8260 | Benzene | 547 | ug/L | 100 | 09/07/16 19:40 | |
| EPA 8260 | Chlorobenzene | 7.8 | ug/L | 5.0 | 09/06/16 15:04 | |
| EPA 8260 | 1,4-Dichlorobenzene | 22.9 | ug/L | 5.0 | 09/06/16 15:04 | |
| EPA 8260 | Ethylbenzene | 23.2 | ug/L | 5.0 | 09/06/16 15:04 | |
| EPA 8260 | Toluene | 89.6 | ug/L | 5.0 | 09/06/16 15:04 | |
| EPA 8260 | Xylene (Total) | 63.1 | ug/L | 5.0 | 09/06/16 15:04 | |
| SM 2540C | Total Dissolved Solids | 3340 | mg/L | 40.0 | 09/01/16 11:03 | |
| EPA 410.4 | Chemical Oxygen Demand | 597 | mg/L | 10.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 1.5 | mg/L | 0.10 | 09/12/16 09:35 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 24.8 | mg/L | 0.50 | 09/01/16 14:45 | |
| SM 5310C | Total Organic Carbon | 103 | mg/L | 100 | 09/12/16 18:47 | |
| **50152744034** | **PZ-107-SS** | | | | | |
| | Field pH | 6.70 | Std. Units | | 08/30/16 00:00 | |
| | Field Temperature | 21.6 | deg C | | 08/30/16 00:00 | |
| | Field Specific Conductance | 2980 | umhos/cm | | 08/30/16 00:00 | |
| | Field Turbidity | 9.73 | NTU | | 08/30/16 00:00 | |
| | Total Well Depth | 103.78 | feet | | 08/30/16 00:00 | |
| | Elevation Water Level | 432.83 | ft/msl | | 08/30/16 00:00 | |
| | Collar Elevation | 464.56 | ft/msl | | 08/30/16 00:00 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744034** | **PZ-107-SS** | | | | | |
| | Depth to Water | 31.73 | feet | | 08/30/16 00:00 | |
| EPA 9056 | Chloride | 460 | mg/L | 25.0 | 09/03/16 00:52 | |
| EPA 9056 | Fluoride | 0.54 | mg/L | 0.10 | 09/03/16 00:19 | |
| EPA 9056 | Sulfate | 35.7 | mg/L | 2.5 | 09/03/16 00:36 | |
| EPA 6010 | Barium | 950 | ug/L | 10.0 | 09/08/16 18:52 | |
| EPA 6010 | Boron | 1080 | ug/L | 100 | 09/08/16 18:52 | |
| EPA 6010 | Calcium | 266000 | ug/L | 2500 | 09/08/16 20:53 | |
| EPA 6010 | Iron | 8730 | ug/L | 50.0 | 09/08/16 18:52 | |
| EPA 6010 | Magnesium | 136000 | ug/L | 500 | 09/08/16 18:52 | |
| EPA 6010 | Manganese | 140 | ug/L | 5.0 | 09/08/16 18:52 | |
| EPA 6010 | Nickel | 46.1 | ug/L | 10.0 | 09/08/16 18:52 | |
| EPA 6010 | Sodium | 190000 | ug/L | 1000 | 09/08/16 18:52 | |
| EPA 6010 | Total Hardness by 2340B | 1220000 | ug/L | 5000 | 09/08/16 20:53 | |
| EPA 6020 | Arsenic | 8.2 | ug/L | 5.0 | 09/07/16 18:31 | |
| EPA 6020 | Chromium | 8.8 | ug/L | 5.0 | 09/07/16 18:31 | |
| SM 2540C | Total Dissolved Solids | 1970 | mg/L | 10.0 | 09/01/16 11:04 | |
| EPA 410.4 | Chemical Oxygen Demand | 229 | mg/L | 10.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 0.40 | mg/L | 0.10 | 09/12/16 09:36 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 26.2 | mg/L | 0.50 | 09/01/16 14:48 | |
| SM 5310C | Total Organic Carbon | 47.9 | mg/L | 40.0 | 09/12/16 18:47 | |
| **50152744035** | **LR-100** | | | | | |
| | Field pH | 6.69 | Std. Units | | 08/30/16 00:00 | |
| | Field Temperature | 19.0 | deg C | | 08/30/16 00:00 | |
| | Field Specific Conductance | 2310 | umhos/cm | | 08/30/16 00:00 | |
| | Field Turbidity | 8.82 | NTU | | 08/30/16 00:00 | |
| | Total Well Depth | 26.99 | feet | | 08/30/16 00:00 | |
| | Elevation Water Level | 452.42 | ft/msl | | 08/30/16 00:00 | |
| | Collar Elevation | 468.14 | ft/msl | | 08/30/16 00:00 | |
| | Depth to Water | 15.72 | feet | | 08/30/16 00:00 | |
| EPA 9056 | Chloride | 119 | mg/L | 25.0 | 09/03/16 01:41 | |
| EPA 9056 | Fluoride | 0.32 | mg/L | 0.10 | 09/03/16 01:08 | |
| EPA 6010 | Barium | 432 | ug/L | 10.0 | 09/08/16 18:55 | |
| EPA 6010 | Boron | 1800 | ug/L | 100 | 09/08/16 18:55 | |
| EPA 6010 | Calcium | 126000 | ug/L | 500 | 09/08/16 18:55 | |
| EPA 6010 | Iron | 21500 | ug/L | 50.0 | 09/08/16 18:55 | |
| EPA 6010 | Magnesium | 61000 | ug/L | 500 | 09/08/16 18:55 | |
| EPA 6010 | Manganese | 207 | ug/L | 5.0 | 09/08/16 18:55 | |
| EPA 6010 | Nickel | 15.6 | ug/L | 10.0 | 09/08/16 18:55 | |
| EPA 6010 | Sodium | 138000 | ug/L | 1000 | 09/08/16 18:55 | |
| EPA 6010 | Total Hardness by 2340B | 566000 | ug/L | 1000 | 09/08/16 18:55 | |
| EPA 6020 | Lead | 5.2 | ug/L | 5.0 | 09/07/16 17:50 | |
| EPA 8260 | Benzene | 9.4 | ug/L | 5.0 | 09/06/16 13:56 | |
| EPA 8260 | Chlorobenzene | 47.1 | ug/L | 5.0 | 09/06/16 13:56 | |
| EPA 8260 | 1,4-Dichlorobenzene | 6.6 | ug/L | 5.0 | 09/06/16 13:56 | |
| SM 2540C | Total Dissolved Solids | 981 | mg/L | 10.0 | 09/01/16 11:04 | |
| EPA 410.4 | Chemical Oxygen Demand | 88.6 | mg/L | 10.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 0.35 | mg/L | 0.050 | 09/12/16 09:36 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744035** | **LR-100** | | | | | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 90.2 | mg/L | 2.0 | 09/01/16 14:51 | |
| SM 5310C | Total Organic Carbon | 24.4 | mg/L | 10.0 | 09/12/16 18:47 | |
| **50152744037** | **S-5** | | | | | |
| | Field pH | 6.96 | Std. Units | | 08/31/16 00:00 | |
| | Field Temperature | 19.4 | deg C | | 08/31/16 00:00 | |
| | Field Specific Conductance | 4780 | umhos/cm | | 08/31/16 00:00 | |
| | Field Turbidity | 86.56 | NTU | | 08/31/16 00:00 | |
| | Total Well Depth | 43.54 | feet | | 08/31/16 00:00 | |
| | Elevation Water Level | 433.31 | ft/msl | | 08/31/16 00:00 | |
| | Collar Elevation | 465.75 | ft/msl | | 08/31/16 00:00 | |
| | Depth to Water | 32.44 | feet | | 08/31/16 00:00 | |
| EPA 9056 | Chloride | 331 | mg/L | 25.0 | 09/07/16 19:36 | |
| EPA 9056 | Sulfate | 0.30 | mg/L | 0.25 | 09/07/16 19:03 | |
| EPA 6010 | Barium | 596 | ug/L | 10.0 | 09/09/16 15:20 | |
| EPA 6010 | Boron | 2850 | ug/L | 100 | 09/09/16 15:20 | |
| EPA 6010 | Calcium | 55900 | ug/L | 500 | 09/09/16 15:20 | |
| EPA 6010 | Cobalt | 9.5 | ug/L | 5.0 | 09/09/16 15:20 | |
| EPA 6010 | Iron | 20100 | ug/L | 50.0 | 09/09/16 15:20 | |
| EPA 6010 | Magnesium | 64300 | ug/L | 500 | 09/09/16 15:20 | |
| EPA 6010 | Manganese | 144 | ug/L | 5.0 | 09/09/16 15:20 | |
| EPA 6010 | Nickel | 58.2 | ug/L | 10.0 | 09/09/16 15:20 | |
| EPA 6010 | Sodium | 480000 | ug/L | 5000 | 09/09/16 16:13 | |
| EPA 6010 | Total Hardness by 2340B | 404000 | ug/L | 1000 | 09/09/16 15:20 | |
| EPA 6010 | Zinc | 59.6 | ug/L | 20.0 | 09/09/16 15:20 | |
| EPA 6020 | Arsenic | 14.5 | ug/L | 5.0 | 09/15/16 13:19 | |
| EPA 6020 | Cadmium | 0.77 | ug/L | 0.20 | 09/15/16 13:19 | |
| EPA 6020 | Chromium | 6.5 | ug/L | 5.0 | 09/15/16 13:19 | |
| EPA 6020 | Copper | 10.8 | ug/L | 5.0 | 09/15/16 13:19 | |
| EPA 6020 | Lead | 14.9 | ug/L | 5.0 | 09/15/16 13:19 | |
| EPA 8260 | 1,4-Dichlorobenzene | 7.5 | ug/L | 5.0 | 09/07/16 22:15 | |
| SM 2540C | Total Dissolved Solids | 2060 | mg/L | 20.0 | 09/06/16 10:26 | |
| EPA 410.4 | Chemical Oxygen Demand | 413 | mg/L | 10.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 4.3 | mg/L | 0.25 | 09/12/16 10:01 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 237 | mg/L | 4.0 | 09/12/16 17:58 | |
| SM 5310C | Total Organic Carbon | 70.5 | mg/L | 40.0 | 09/12/16 18:47 | |
| **50152744038** | **I-4** | | | | | |
| | Field pH | 6.88 | Std. Units | | 08/31/16 00:00 | |
| | Field Temperature | 20.2 | deg C | | 08/31/16 00:00 | |
| | Field Specific Conductance | 3140 | umhos/cm | | 08/31/16 00:00 | |
| | Field Turbidity | 21.40 | NTU | | 08/31/16 00:00 | |
| | Total Well Depth | 35.95 | feet | | 08/31/16 00:00 | |
| | Elevation Water Level | 432.65 | ft/msl | | 08/31/16 00:00 | |
| | Collar Elevation | 465.32 | ft/msl | | 08/31/16 00:00 | |
| | Depth to Water | 32.67 | feet | | 08/31/16 00:00 | |
| EPA 9056 | Chloride | 157 | mg/L | 25.0 | 09/07/16 20:57 | |
| EPA 9056 | Sulfate | 0.36 | mg/L | 0.25 | 09/07/16 20:24 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744038** | **I-4** | | | | | |
| EPA 6010 | Barium | 657 | ug/L | 10.0 | 09/09/16 15:29 | |
| EPA 6010 | Boron | 1860 | ug/L | 100 | 09/09/16 15:29 | |
| EPA 6010 | Calcium | 98700 | ug/L | 500 | 09/09/16 15:29 | |
| EPA 6010 | Iron | 22100 | ug/L | 50.0 | 09/09/16 15:29 | |
| EPA 6010 | Magnesium | 61100 | ug/L | 500 | 09/09/16 15:29 | |
| EPA 6010 | Manganese | 442 | ug/L | 5.0 | 09/09/16 15:29 | |
| EPA 6010 | Nickel | 16.9 | ug/L | 10.0 | 09/09/16 15:29 | |
| EPA 6010 | Sodium | 269000 | ug/L | 5000 | 09/09/16 16:16 | |
| EPA 6010 | Total Hardness by 2340B | 498000 | ug/L | 1000 | 09/09/16 15:29 | |
| EPA 6020 | Arsenic | 7.7 | ug/L | 5.0 | 09/15/16 13:28 | |
| EPA 6020 | Cadmium | 0.22 | ug/L | 0.20 | 09/15/16 13:28 | |
| EPA 8260 | Chlorobenzene | 10.9 | ug/L | 5.0 | 09/07/16 22:32 | |
| SM 2540C | Total Dissolved Solids | 1460 | mg/L | 10.0 | 09/06/16 10:27 | |
| EPA 410.4 | Chemical Oxygen Demand | 246 | mg/L | 10.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 2.6 | mg/L | 0.25 | 09/12/16 10:02 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 126 | mg/L | 2.0 | 09/12/16 15:22 | |
| SM 5310C | Total Organic Carbon | 40.3 | mg/L | 40.0 | 09/12/16 18:47 | |
| **50152744039** | **D-3** | | | | | |
| | Field pH | 6.99 | Std. Units | | 08/31/16 00:00 | |
| | Field Temperature | 20.1 | deg C | | 08/31/16 00:00 | |
| | Field Specific Conductance | 4180 | umhos/cm | | 08/31/16 00:00 | |
| | Field Turbidity | 109.2 | NTU | | 08/31/16 00:00 | |
| | Total Well Depth | 107.70 | feet | | 08/31/16 00:00 | |
| | Elevation Water Level | 432.62 | ft/msl | | 08/31/16 00:00 | |
| | Collar Elevation | 467.92 | ft/msl | | 08/31/16 00:00 | |
| | Depth to Water | 35.30 | feet | | 08/31/16 00:00 | |
| EPA 9056 | Chloride | 643 | mg/L | 25.0 | 09/07/16 22:02 | |
| EPA 9056 | Fluoride | 0.23 | mg/L | 0.10 | 09/07/16 21:30 | |
| EPA 6010 | Barium | 2560 | ug/L | 10.0 | 09/09/16 15:32 | |
| EPA 6010 | Boron | 1830 | ug/L | 100 | 09/09/16 15:32 | |
| EPA 6010 | Calcium | 263000 | ug/L | 2500 | 09/09/16 16:18 | |
| EPA 6010 | Cobalt | 6.4 | ug/L | 5.0 | 09/09/16 15:32 | |
| EPA 6010 | Iron | 28700 | ug/L | 50.0 | 09/09/16 15:32 | |
| EPA 6010 | Magnesium | 78600 | ug/L | 500 | 09/09/16 15:32 | |
| EPA 6010 | Manganese | 330 | ug/L | 5.0 | 09/09/16 15:32 | |
| EPA 6010 | Nickel | 25.9 | ug/L | 10.0 | 09/09/16 15:32 | |
| EPA 6010 | Sodium | 496000 | ug/L | 5000 | 09/09/16 16:18 | |
| EPA 6010 | Total Hardness by 2340B | 980000 | ug/L | 5000 | 09/09/16 16:18 | |
| EPA 6020 | Arsenic | 6.3 | ug/L | 5.0 | 09/15/16 13:33 | |
| EPA 8260 | Chlorobenzene | 5.6 | ug/L | 5.0 | 09/08/16 01:41 | |
| SM 2540C | Total Dissolved Solids | 2270 | mg/L | 10.0 | 09/06/16 10:28 | |
| EPA 410.4 | Chemical Oxygen Demand | 255 | mg/L | 10.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 0.74 | mg/L | 0.050 | 09/14/16 14:16 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 43.1 | mg/L | 1.0 | 09/12/16 15:25 | |
| SM 5310C | Total Organic Carbon | 47.1 | mg/L | 20.0 | 09/12/16 18:47 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744040** | **I-73** | | | | | |
| | Field pH | 7.08 | Std. Units | | 08/31/16 00:00 | |
| | Field Temperature | 20.3 | deg C | | 08/31/16 00:00 | |
| | Field Specific Conductance | 3850 | umhos/cm | | 08/31/16 00:00 | |
| | Total Well Depth | 50.75 | feet | | 08/31/16 00:00 | |
| | Elevation Water Level | 432.61 | ft/msl | | 08/31/16 00:00 | |
| | Collar Elevation | 461.96 | ft/msl | | 08/31/16 00:00 | |
| | Depth to Water | 29.35 | feet | | 08/31/16 00:00 | |
| EPA 9056 | Chloride | 553 | mg/L | 25.0 | 09/07/16 22:51 | |
| EPA 9056 | Fluoride | 0.42 | mg/L | 0.10 | 09/07/16 22:19 | |
| EPA 6010 | Barium | 1380 | ug/L | 10.0 | 09/09/16 15:35 | |
| EPA 6010 | Boron | 3260 | ug/L | 100 | 09/09/16 15:35 | |
| EPA 6010 | Calcium | 98300 | ug/L | 500 | 09/09/16 15:35 | |
| EPA 6010 | Cobalt | 12.3 | ug/L | 5.0 | 09/09/16 15:35 | |
| EPA 6010 | Iron | 49200 | ug/L | 50.0 | 09/09/16 15:35 | |
| EPA 6010 | Magnesium | 47300 | ug/L | 500 | 09/09/16 15:35 | |
| EPA 6010 | Manganese | 404 | ug/L | 5.0 | 09/09/16 15:35 | |
| EPA 6010 | Nickel | 89.5 | ug/L | 10.0 | 09/09/16 15:35 | |
| EPA 6010 | Sodium | 362000 | ug/L | 5000 | 09/09/16 16:21 | |
| EPA 6010 | Total Hardness by 2340B | 440000 | ug/L | 1000 | 09/09/16 15:35 | |
| EPA 6010 | Zinc | 1390 | ug/L | 20.0 | 09/09/16 15:35 | |
| EPA 6020 | Arsenic | 143 | ug/L | 5.0 | 09/15/16 13:15 | |
| EPA 6020 | Cadmium | 2.2 | ug/L | 0.20 | 09/15/16 13:15 | |
| EPA 6020 | Chromium | 32.1 | ug/L | 5.0 | 09/15/16 13:15 | |
| EPA 6020 | Copper | 9.9 | ug/L | 5.0 | 09/15/16 13:15 | |
| EPA 6020 | Lead | 83.7 | ug/L | 5.0 | 09/15/16 13:15 | |
| EPA 6020 | Vanadium | 24.6 | ug/L | 10.0 | 09/15/16 13:15 | N2 |
| EPA 8260 | Benzene | 69.7 | ug/L | 5.0 | 09/08/16 02:16 | |
| EPA 8260 | Chlorobenzene | 22.3 | ug/L | 5.0 | 09/08/16 02:16 | |
| SM 2540C | Total Dissolved Solids | 1550 | mg/L | 10.0 | 09/06/16 10:28 | |
| EPA 410.4 | Chemical Oxygen Demand | 233 | mg/L | 20.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 1.3 | mg/L | 0.25 | 09/14/16 14:43 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 170 | mg/L | 2.0 | 09/12/16 15:28 | |
| SM 5310C | Total Organic Carbon | 49.2 | mg/L | 40.0 | 09/12/16 18:47 | |
| **50152744041** | **MW-1204** | | | | | |
| | Field pH | 6.57 | Std. Units | | 09/01/16 00:00 | |
| | Field Temperature | 26.1 | deg C | | 09/01/16 00:00 | |
| | Field Specific Conductance | 3200 | umhos/cm | | 09/01/16 00:00 | |
| | Field Turbidity | 61.56 | NTU | | 09/01/16 00:00 | |
| | Total Well Depth | 215.19 | feet | | 09/01/16 00:00 | |
| | Elevation Water Level | 470.49 | ft/msl | | 09/01/16 00:00 | |
| | Collar Elevation | 478.04 | ft/msl | | 09/01/16 00:00 | |
| | Depth to Water | 7.55 | feet | | 09/01/16 00:00 | |
| EPA 9056 | Chloride | 837 | mg/L | 25.0 | 09/07/16 23:56 | |
| EPA 6010 | Barium | 5400 | ug/L | 10.0 | 09/09/16 15:38 | |
| EPA 6010 | Boron | 2590 | ug/L | 100 | 09/09/16 15:38 | |
| EPA 6010 | Calcium | 418000 | ug/L | 2500 | 09/09/16 16:24 | |
| EPA 6010 | Iron | 15800 | ug/L | 50.0 | 09/09/16 15:38 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744041** | **MW-1204** | | | | | |
| EPA 6010 | Magnesium | 132000 | ug/L | 500 | 09/09/16 15:38 | |
| EPA 6010 | Manganese | 790 | ug/L | 5.0 | 09/09/16 15:38 | |
| EPA 6010 | Nickel | 14.3 | ug/L | 10.0 | 09/09/16 15:38 | |
| EPA 6010 | Sodium | 389000 | ug/L | 5000 | 09/09/16 16:24 | |
| EPA 6010 | Total Hardness by 2340B | 1580000 | ug/L | 5000 | 09/09/16 16:24 | |
| EPA 6020 | Arsenic | 16.0 | ug/L | 5.0 | 09/15/16 14:05 | D3 |
| EPA 6020 | Chromium | 51.4 | ug/L | 25.0 | 09/15/16 14:05 | |
| EPA 6020 | Vanadium | 12.3 | ug/L | 5.0 | 09/15/16 14:05 | D3,N2 |
| EPA 8260 | Acetone | 1780 | ug/L | 100 | 09/08/16 15:51 | |
| EPA 8260 | Benzene | 11.7 | ug/L | 5.0 | 09/08/16 02:50 | |
| EPA 8260 | 2-Butanone (MEK) | 1320 | ug/L | 10.0 | 09/08/16 02:50 | |
| EPA 8260 | 2-Hexanone | 19.1 | ug/L | 10.0 | 09/08/16 02:50 | |
| EPA 8260 | 4-Methyl-2-pentanone (MIBK) | 25.6 | ug/L | 10.0 | 09/08/16 02:50 | |
| EPA 8260 | Toluene | 70.5 | ug/L | 5.0 | 09/08/16 02:50 | |
| SM 2540C | Total Dissolved Solids | 3710 | mg/L | 20.0 | 09/06/16 10:48 | |
| EPA 410.4 | Chemical Oxygen Demand | 1780 | mg/L | 50.0 | 09/21/16 11:51 | |
| EPA 365.1 | Phosphorus | 0.17 | mg/L | 0.050 | 09/14/16 14:18 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 75.9 | mg/L | 1.0 | 09/12/16 15:31 | |
| SM 5310C | Total Organic Carbon | 473 | mg/L | 100 | 09/12/16 18:47 | |
| **50152744042** | **MW-1204 DUP** | | | | | |
| EPA 9056 | Chloride | 774 | mg/L | 25.0 | 09/08/16 00:45 | |
| EPA 6010 | Barium | 5490 | ug/L | 10.0 | 09/09/16 15:41 | |
| EPA 6010 | Boron | 2600 | ug/L | 100 | 09/09/16 15:41 | |
| EPA 6010 | Calcium | 415000 | ug/L | 2500 | 09/09/16 16:27 | |
| EPA 6010 | Iron | 15900 | ug/L | 50.0 | 09/09/16 15:41 | |
| EPA 6010 | Magnesium | 133000 | ug/L | 500 | 09/09/16 15:41 | |
| EPA 6010 | Manganese | 796 | ug/L | 5.0 | 09/09/16 15:41 | |
| EPA 6010 | Nickel | 14.6 | ug/L | 10.0 | 09/09/16 15:41 | |
| EPA 6010 | Sodium | 387000 | ug/L | 5000 | 09/09/16 16:27 | |
| EPA 6010 | Total Hardness by 2340B | 1580000 | ug/L | 5000 | 09/09/16 16:27 | |
| EPA 6020 | Arsenic | 15.5 | ug/L | 5.0 | 09/15/16 14:14 | D3 |
| EPA 6020 | Chromium | 49.4 | ug/L | 25.0 | 09/15/16 14:14 | |
| EPA 6020 | Vanadium | 11.7 | ug/L | 5.0 | 09/15/16 14:14 | D3,N2 |
| EPA 8260 | Acetone | 1450 | ug/L | 10.0 | 09/08/16 03:24 | |
| EPA 8260 | Benzene | 10.8 | ug/L | 5.0 | 09/08/16 03:24 | |
| EPA 8260 | 2-Butanone (MEK) | 1080 | ug/L | 10.0 | 09/08/16 03:24 | |
| EPA 8260 | 2-Hexanone | 16.5 | ug/L | 10.0 | 09/08/16 03:24 | |
| EPA 8260 | 4-Methyl-2-pentanone (MIBK) | 22.9 | ug/L | 10.0 | 09/08/16 03:24 | |
| EPA 8260 | Toluene | 62.9 | ug/L | 5.0 | 09/08/16 03:24 | |
| SM 2540C | Total Dissolved Solids | 3740 | mg/L | 20.0 | 09/06/16 10:48 | |
| EPA 410.4 | Chemical Oxygen Demand | 1810 | mg/L | 50.0 | 09/21/16 11:51 | |
| EPA 365.1 | Phosphorus | 0.17 | mg/L | 0.050 | 09/14/16 14:18 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 73.7 | mg/L | 2.0 | 09/12/16 15:33 | |
| SM 5310C | Total Organic Carbon | 482 | mg/L | 100 | 09/12/16 18:47 | |
| **50152744043** | **PZ-112-AS** | | | | | |
| | Field pH | 6.71 | Std. Units | | 09/01/16 00:00 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744043** | **PZ-112-AS** | | | | | |
| | Field Temperature | 18.8 | deg C | | 09/01/16 00:00 | |
| | Field Specific Conductance | 2250 | umhos/cm | | 09/01/16 00:00 | |
| | Field Turbidity | 9.63 | NTU | | 09/01/16 00:00 | |
| | Total Well Depth | 38.41 | feet | | 09/01/16 00:00 | |
| | Elevation Water Level | 432.61 | ft/msl | | 09/01/16 00:00 | |
| | Collar Elevation | 462.50 | ft/msl | | 09/01/16 00:00 | |
| | Depth to Water | 29.89 | feet | | 09/01/16 00:00 | |
| EPA 9056 | Chloride | 107 | mg/L | 2.5 | 09/08/16 01:34 | |
| EPA 9056 | Fluoride | 0.48 | mg/L | 0.10 | 09/08/16 01:18 | |
| EPA 6010 | Barium | 1610 | ug/L | 10.0 | 09/09/16 15:44 | |
| EPA 6010 | Boron | 918 | ug/L | 100 | 09/09/16 15:44 | |
| EPA 6010 | Calcium | 95900 | ug/L | 500 | 09/09/16 15:44 | |
| EPA 6010 | Iron | 25800 | ug/L | 50.0 | 09/09/16 15:44 | |
| EPA 6010 | Magnesium | 55500 | ug/L | 500 | 09/09/16 15:44 | |
| EPA 6010 | Manganese | 116 | ug/L | 5.0 | 09/09/16 15:44 | |
| EPA 6010 | Sodium | 87200 | ug/L | 1000 | 09/09/16 15:44 | |
| EPA 6010 | Total Hardness by 2340B | 468000 | ug/L | 1000 | 09/09/16 15:44 | |
| EPA 6020 | Arsenic | 217 | ug/L | 50.0 | 09/15/16 17:23 | |
| EPA 8260 | Benzene | 15.8 | ug/L | 5.0 | 09/08/16 03:59 | |
| EPA 8260 | Chlorobenzene | 1000 | ug/L | 50.0 | 09/08/16 17:00 | |
| EPA 8260 | 1,4-Dichlorobenzene | 10.9 | ug/L | 5.0 | 09/08/16 03:59 | |
| SM 2540C | Total Dissolved Solids | 786 | mg/L | 10.0 | 09/06/16 10:48 | |
| EPA 410.4 | Chemical Oxygen Demand | 48.1 | mg/L | 10.0 | 09/15/16 11:23 | |
| EPA 353.2 | Nitrogen, NO2 plus NO3 | 0.16 | mg/L | 0.10 | 09/13/16 14:22 | |
| EPA 365.1 | Phosphorus | 1.5 | mg/L | 0.25 | 09/14/16 14:44 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 114 | mg/L | 2.0 | 09/12/16 15:36 | |
| SM 5310C | Total Organic Carbon | 11.5 | mg/L | 4.0 | 09/12/16 18:47 | |
| **50152744044** | **I-68** | | | | | |
| | Field pH | 6.88 | Std. Units | | 09/01/16 00:00 | |
| | Field Temperature | 19.0 | deg C | | 09/01/16 00:00 | |
| | Field Specific Conductance | 1621 | umhos/cm | | 09/01/16 00:00 | |
| | Field Turbidity | 70.90 | NTU | | 09/01/16 00:00 | |
| | Total Well Depth | 40.45 | feet | | 09/01/16 00:00 | |
| | Elevation Water Level | 432.79 | ft/msl | | 09/01/16 00:00 | |
| | Collar Elevation | 450.39 | ft/msl | | 09/01/16 00:00 | |
| | Depth to Water | 17.60 | feet | | 09/01/16 00:00 | |
| EPA 9056 | Chloride | 292 | mg/L | 25.0 | 09/08/16 03:12 | |
| EPA 9056 | Fluoride | 0.19 | mg/L | 0.10 | 09/08/16 02:39 | |
| EPA 9056 | Sulfate | 54.5 | mg/L | 2.5 | 09/08/16 02:56 | |
| EPA 6010 | Barium | 365 | ug/L | 10.0 | 09/09/16 15:47 | |
| EPA 6010 | Calcium | 187000 | ug/L | 500 | 09/09/16 15:47 | |
| EPA 6010 | Cobalt | 18.7 | ug/L | 5.0 | 09/09/16 15:47 | |
| EPA 6010 | Iron | 4070 | ug/L | 50.0 | 09/09/16 15:47 | |
| EPA 6010 | Magnesium | 39500 | ug/L | 500 | 09/09/16 15:47 | |
| EPA 6010 | Manganese | 3410 | ug/L | 5.0 | 09/09/16 15:47 | |
| EPA 6010 | Nickel | 23.1 | ug/L | 10.0 | 09/09/16 15:47 | |
| EPA 6010 | Sodium | 87700 | ug/L | 1000 | 09/09/16 15:47 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744044** | **I-68** | | | | | |
| EPA 6010 | Total Hardness by 2340B | 630000 | ug/L | 1000 | 09/09/16 15:47 | |
| EPA 6010 | Zinc | 25.1 | ug/L | 20.0 | 09/09/16 15:47 | |
| EPA 6020 | Arsenic | 7.0 | ug/L | 5.0 | 09/15/16 06:41 | |
| EPA 6020 | Cadmium | 0.75 | ug/L | 0.20 | 09/15/16 06:41 | |
| EPA 6020 | Lead | 5.2 | ug/L | 5.0 | 09/15/16 06:41 | |
| SM 2540C | Total Dissolved Solids | 1100 | mg/L | 10.0 | 09/06/16 10:49 | |
| EPA 410.4 | Chemical Oxygen Demand | 10.1 | mg/L | 10.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 0.28 | mg/L | 0.050 | 09/14/16 14:20 | |
| **50152744045** | **PZ-204A-SS** | | | | | |
| | Field pH | 6.37 | Std. Units | | 09/01/16 00:00 | |
| | Field Temperature | 19.2 | deg C | | 09/01/16 00:00 | |
| | Field Specific Conductance | 4840 | umhos/cm | | 09/01/16 00:00 | |
| | Field Turbidity | 14.69 | NTU | | 09/01/16 00:00 | |
| | Total Well Depth | 84.33 | feet | | 09/01/16 00:00 | |
| | Elevation Water Level | 458.15 | ft/msl | | 09/01/16 00:00 | |
| | Collar Elevation | 462.60 | ft/msl | | 09/01/16 00:00 | |
| | Depth to Water | 4.45 | feet | | 09/01/16 00:00 | |
| EPA 9056 | Chloride | 900 | mg/L | 25.0 | 09/08/16 04:01 | |
| EPA 9056 | Fluoride | 0.17 | mg/L | 0.10 | 09/08/16 03:28 | |
| EPA 9056 | Sulfate | 646 | mg/L | 25.0 | 09/08/16 04:01 | |
| EPA 6010 | Barium | 213 | ug/L | 10.0 | 09/09/16 15:50 | |
| EPA 6010 | Boron | 151 | ug/L | 100 | 09/09/16 15:50 | |
| EPA 6010 | Calcium | 546000 | ug/L | 2500 | 09/09/16 16:30 | |
| EPA 6010 | Cobalt | 18.2 | ug/L | 5.0 | 09/09/16 15:50 | |
| EPA 6010 | Iron | 45000 | ug/L | 50.0 | 09/09/16 15:50 | |
| EPA 6010 | Magnesium | 206000 | ug/L | 500 | 09/09/16 15:50 | |
| EPA 6010 | Manganese | 4270 | ug/L | 5.0 | 09/09/16 15:50 | |
| EPA 6010 | Nickel | 53.6 | ug/L | 10.0 | 09/09/16 15:50 | |
| EPA 6010 | Sodium | 300000 | ug/L | 5000 | 09/09/16 16:30 | |
| EPA 6010 | Total Hardness by 2340B | 2210000 | ug/L | 5000 | 09/09/16 16:30 | |
| EPA 6020 | Arsenic | 39.4 | ug/L | 5.0 | 09/15/16 13:42 | |
| EPA 6020 | Chromium | 5.7 | ug/L | 5.0 | 09/15/16 13:42 | |
| SM 2540C | Total Dissolved Solids | 3330 | mg/L | 20.0 | 09/06/16 10:49 | |
| EPA 410.4 | Chemical Oxygen Demand | 212 | mg/L | 20.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 0.29 | mg/L | 0.050 | 09/14/16 14:22 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.50 | mg/L | 0.10 | 09/12/16 15:38 | |
| SM 5310C | Total Organic Carbon | 51.4 | mg/L | 40.0 | 09/12/16 18:47 | |
| **50152744046** | **PZ-302-AS** | | | | | |
| | Field pH | 6.58 | Std. Units | | 09/01/16 00:00 | |
| | Field Temperature | 24.4 | deg C | | 09/01/16 00:00 | |
| | Field Specific Conductance | 1652 | umhos/cm | | 09/01/16 00:00 | |
| | Field Turbidity | 580.1 | NTU | | 09/01/16 00:00 | |
| | Total Well Depth | 24.51 | feet | | 09/01/16 00:00 | |
| | Elevation Water Level | 432.57 | ft/msl | | 09/01/16 00:00 | |
| | Collar Elevation | 451.33 | ft/msl | | 09/01/16 00:00 | |
| | Depth to Water | 18.76 | feet | | 09/01/16 00:00 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744046** | **PZ-302-AS** | | | | | |
| EPA 9056 | Chloride | 31.6 | mg/L | 2.5 | 09/08/16 04:33 | |
| EPA 9056 | Fluoride | 0.53 | mg/L | 0.10 | 09/08/16 04:17 | |
| EPA 6010 | Barium | 656 | ug/L | 10.0 | 09/09/16 15:52 | |
| EPA 6010 | Boron | 555 | ug/L | 100 | 09/09/16 15:52 | |
| EPA 6010 | Calcium | 197000 | ug/L | 500 | 09/09/16 15:52 | |
| EPA 6010 | Cobalt | 12.5 | ug/L | 5.0 | 09/09/16 15:52 | |
| EPA 6010 | Iron | 96200 | ug/L | 50.0 | 09/09/16 15:52 | |
| EPA 6010 | Magnesium | 75900 | ug/L | 500 | 09/09/16 15:52 | |
| EPA 6010 | Manganese | 6190 | ug/L | 5.0 | 09/09/16 15:52 | |
| EPA 6010 | Nickel | 38.8 | ug/L | 10.0 | 09/09/16 15:52 | |
| EPA 6010 | Sodium | 51100 | ug/L | 1000 | 09/09/16 15:52 | |
| EPA 6010 | Total Hardness by 2340B | 804000 | ug/L | 1000 | 09/09/16 15:52 | |
| EPA 6010 | Zinc | 90.5 | ug/L | 20.0 | 09/09/16 15:52 | |
| EPA 6020 | Arsenic | 270 | ug/L | 100 | 09/15/16 12:52 | |
| EPA 6020 | Cadmium | 0.28 | ug/L | 0.20 | 09/15/16 13:51 | |
| EPA 6020 | Chromium | 12.0 | ug/L | 5.0 | 09/15/16 13:51 | |
| EPA 6020 | Copper | 13.9 | ug/L | 5.0 | 09/15/16 13:51 | |
| EPA 6020 | Lead | 10.8 | ug/L | 5.0 | 09/15/16 13:51 | |
| EPA 6020 | Vanadium | 27.1 | ug/L | 10.0 | 09/15/16 13:51 | N2 |
| EPA 8260 | Benzene | 2590 | ug/L | 125 | 09/08/16 14:59 | |
| EPA 8260 | Chlorobenzene | 160 | ug/L | 5.0 | 09/08/16 05:42 | |
| EPA 8260 | 1,4-Dichlorobenzene | 22.4 | ug/L | 5.0 | 09/08/16 05:42 | |
| EPA 8260 | Ethylbenzene | 106 | ug/L | 5.0 | 09/08/16 05:42 | |
| EPA 8260 | Toluene | 182 | ug/L | 5.0 | 09/08/16 05:42 | |
| EPA 8260 | Xylene (Total) | 106 | ug/L | 5.0 | 09/08/16 05:42 | |
| SM 2540C | Total Dissolved Solids | 1030 | mg/L | 10.0 | 09/06/16 10:49 | |
| EPA 410.4 | Chemical Oxygen Demand | 62.1 | mg/L | 10.0 | 09/15/16 11:23 | |
| EPA 365.1 | Phosphorus | 2.3 | mg/L | 0.25 | 09/14/16 14:46 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 2.5 | mg/L | 0.10 | 09/12/16 17:56 | |
| **50152744047** | **S-53** | | | | | |
| | Field pH | 7.24 | Std. Units | | 09/01/16 00:00 | |
| | Field Temperature | 25.5 | deg C | | 09/01/16 00:00 | |
| | Field Specific Conductance | 965 | umhos/cm | | 09/01/16 00:00 | |
| | Field Turbidity | 51.76 | NTU | | 09/01/16 00:00 | |
| | Total Well Depth | 18.00 | feet | | 09/01/16 00:00 | |
| | Elevation Water Level | 432.33 | ft/msl | | 09/01/16 00:00 | |
| | Collar Elevation | 444.18 | ft/msl | | 09/01/16 00:00 | |
| | Depth to Water | 11.85 | feet | | 09/01/16 00:00 | |
| EPA 9056 | Chloride | 32.8 | mg/L | 2.5 | 09/08/16 06:27 | |
| EPA 9056 | Fluoride | 0.26 | mg/L | 0.10 | 09/08/16 06:11 | |
| EPA 9056 | Sulfate | 67.4 | mg/L | 2.5 | 09/08/16 06:27 | |
| EPA 6010 | Barium | 233 | ug/L | 10.0 | 09/09/16 15:55 | |
| EPA 6010 | Calcium | 138000 | ug/L | 500 | 09/09/16 15:55 | |
| EPA 6010 | Iron | 241 | ug/L | 50.0 | 09/09/16 15:55 | |
| EPA 6010 | Magnesium | 40600 | ug/L | 500 | 09/09/16 15:55 | |
| EPA 6010 | Manganese | 16.8 | ug/L | 5.0 | 09/09/16 15:55 | |
| EPA 6010 | Sodium | 21700 | ug/L | 1000 | 09/09/16 15:55 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744047** | **S-53** | | | | | |
| EPA 6010 | Total Hardness by 2340B | 512000 | ug/L | 1000 | 09/09/16 15:55 | |
| SM 2540C | Total Dissolved Solids | 605 | mg/L | 10.0 | 09/06/16 10:49 | |
| EPA 365.1 | Phosphorus | 0.066 | mg/L | 0.050 | 09/14/16 14:23 | |
| **50152744048** | **LCS-6B** | | | | | |
| | Field pH | 7.25 | Std. Units | | 09/01/16 00:00 | |
| | Field Temperature | 39.7 | deg C | | 09/01/16 00:00 | |
| | Field Specific Conductance | 15700 | umhos/cm | | 09/01/16 00:00 | |
| | Field Turbidity | 25.03 | NTU | | 09/01/16 00:00 | |
| EPA 9056 | Chloride | 2330 | mg/L | 250 | 09/09/16 07:02 | |
| EPA 6010 | Barium | 1090 | ug/L | 10.0 | 09/09/16 16:04 | |
| EPA 6010 | Boron | 11200 | ug/L | 100 | 09/09/16 16:04 | |
| EPA 6010 | Calcium | 47100 | ug/L | 500 | 09/09/16 16:04 | |
| EPA 6010 | Cobalt | 74.4 | ug/L | 5.0 | 09/09/16 16:04 | |
| EPA 6010 | Iron | 4810 | ug/L | 50.0 | 09/09/16 16:04 | |
| EPA 6010 | Magnesium | 41000 | ug/L | 500 | 09/09/16 16:04 | |
| EPA 6010 | Manganese | 273 | ug/L | 5.0 | 09/09/16 16:04 | |
| EPA 6010 | Nickel | 184 | ug/L | 10.0 | 09/09/16 16:04 | |
| EPA 6010 | Sodium | 1920000 | ug/L | 20000 | 09/09/16 16:39 | |
| EPA 6010 | Total Hardness by 2340B | 286000 | ug/L | 1000 | 09/09/16 16:04 | |
| EPA 6010 | Zinc | 291 | ug/L | 20.0 | 09/09/16 16:04 | |
| EPA 6020 | Antimony | 66.7 | ug/L | 25.0 | 09/15/16 14:23 | |
| EPA 6020 | Arsenic | 775 | ug/L | 25.0 | 09/15/16 14:23 | |
| EPA 6020 | Cadmium | 5.6 | ug/L | 1.0 | 09/15/16 14:23 | |
| EPA 6020 | Chromium | 149 | ug/L | 25.0 | 09/15/16 14:23 | |
| EPA 6020 | Copper | 174 | ug/L | 25.0 | 09/15/16 14:23 | |
| EPA 6020 | Lead | 11.0 | ug/L | 5.0 | 09/15/16 14:23 | D3 |
| EPA 6020 | Selenium | 5.1 | ug/L | 5.0 | 09/15/16 14:23 | D3 |
| EPA 6020 | Vanadium | 39.4 | ug/L | 5.0 | 09/15/16 14:23 | D3,N2 |
| EPA 8260 | Acetone | 667 | ug/L | 10.0 | 09/07/16 20:15 | |
| EPA 8260 | Benzene | 13.1 | ug/L | 5.0 | 09/07/16 20:15 | |
| EPA 8260 | 2-Butanone (MEK) | 481 | ug/L | 10.0 | 09/07/16 20:15 | |
| EPA 8260 | Chlorobenzene | 5.2 | ug/L | 5.0 | 09/07/16 20:15 | |
| EPA 8260 | 1,4-Dichlorobenzene | 15.5 | ug/L | 5.0 | 09/07/16 20:15 | |
| EPA 8260 | Ethylbenzene | 24.7 | ug/L | 5.0 | 09/07/16 20:15 | |
| EPA 8260 | 4-Methyl-2-pentanone (MIBK) | 30.1 | ug/L | 10.0 | 09/07/16 20:15 | |
| EPA 8260 | Toluene | 56.8 | ug/L | 5.0 | 09/07/16 20:15 | |
| EPA 8260 | Xylene (Total) | 67.5 | ug/L | 5.0 | 09/07/16 20:15 | |
| SM 2540C | Total Dissolved Solids | 8720 | mg/L | 100 | 09/06/16 10:50 | |
| EPA 410.4 | Chemical Oxygen Demand | 4630 | mg/L | 50.0 | 09/19/16 14:13 | |
| EPA 365.1 | Phosphorus | 6.2 | mg/L | 0.50 | 09/14/16 14:23 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 973 | mg/L | 30.0 | 09/19/16 12:42 | |
| SM 5310C | Total Organic Carbon | 1310 | mg/L | 100 | 09/12/16 18:47 | |
| **50152744050** | **FB@PZ-104-KS** | | | | | |
| EPA 9056 | Chloride | 10.1 | mg/L | 0.25 | 09/10/16 02:44 | |
| **50152744051** | **PZ-104-KS** | | | | | |
| | Field pH | 7.10 | Std. Units | | 09/07/16 00:00 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744051** | **PZ-104-KS** | | | | | |
| | Field Temperature | 26.8 | deg C | | 09/07/16 00:00 | |
| | Field Specific Conductance | 712 | umhos/cm | | 09/07/16 00:00 | |
| | Field Turbidity | 3.81 | NTU | | 09/07/16 00:00 | |
| | Total Well Depth | 93.09 | feet | | 09/07/16 00:00 | |
| | Elevation Water Level | 467.22 | ft/msl | | 09/07/16 00:00 | |
| | Collar Elevation | 483.95 | ft/msl | | 09/07/16 00:00 | |
| | Depth to Water | 16.73 | feet | | 09/07/16 00:00 | |
| EPA 9056 | Chloride | 38.4 | mg/L | 2.5 | 09/10/16 04:06 | |
| **50152744053** | **S-84** | | | | | |
| | Field pH | 6.75 | Std. Units | | 09/06/16 00:00 | |
| | Field Temperature | 19.1 | deg C | | 09/06/16 00:00 | |
| | Field Specific Conductance | 1288 | umhos/cm | | 09/06/16 00:00 | |
| | Field Turbidity | 290.9 | NTU | | 09/06/16 00:00 | |
| | Total Well Depth | 32.90 | feet | | 09/06/16 00:00 | |
| | Elevation Water Level | 432.49 | ft/msl | | 09/06/16 00:00 | |
| | Collar Elevation | 456.78 | ft/msl | | 09/06/16 00:00 | |
| | Depth to Water | 24.29 | feet | | 09/06/16 00:00 | |
| EPA 9056 | Chloride | 73.6 | mg/L | 2.5 | 09/13/16 19:44 | |
| EPA 9056 | Fluoride | 0.27 | mg/L | 0.10 | 09/09/16 15:52 | |
| EPA 6010 | Barium | 1480 | ug/L | 10.0 | 09/16/16 12:21 | |
| EPA 6010 | Boron | 239 | ug/L | 100 | 09/16/16 12:21 | |
| EPA 6010 | Calcium | 253000 | ug/L | 2500 | 09/16/16 14:29 | |
| EPA 6010 | Cobalt | 68.9 | ug/L | 5.0 | 09/16/16 12:21 | |
| EPA 6010 | Iron | 98900 | ug/L | 50.0 | 09/16/16 12:21 | |
| EPA 6010 | Magnesium | 93600 | ug/L | 500 | 09/16/16 12:21 | |
| EPA 6010 | Manganese | 2060 | ug/L | 5.0 | 09/16/16 12:21 | |
| EPA 6010 | Nickel | 110 | ug/L | 10.0 | 09/16/16 12:21 | |
| EPA 6010 | Sodium | 50700 | ug/L | 1000 | 09/16/16 12:21 | |
| EPA 6010 | Total Hardness by 2340B | 1020000 | ug/L | 5000 | 09/16/16 14:29 | |
| EPA 6010 | Zinc | 212 | ug/L | 20.0 | 09/16/16 12:21 | |
| EPA 6020 | Arsenic | 362 | ug/L | 50.0 | 09/16/16 10:41 | |
| EPA 6020 | Cadmium | 1.3 | ug/L | 0.20 | 09/16/16 12:00 | |
| EPA 6020 | Chromium | 26.2 | ug/L | 5.0 | 09/16/16 12:00 | |
| EPA 6020 | Copper | 22.1 | ug/L | 5.0 | 09/16/16 12:00 | |
| EPA 6020 | Lead | 44.0 | ug/L | 5.0 | 09/16/16 12:00 | |
| EPA 6020 | Vanadium | 64.2 | ug/L | 10.0 | 09/16/16 12:00 | N2 |
| EPA 8260 | Chlorobenzene | 6.8 | ug/L | 5.0 | 09/15/16 03:08 | |
| SM 2540C | Total Dissolved Solids | 644 | mg/L | 10.0 | 09/09/16 10:26 | |
| EPA 410.4 | Chemical Oxygen Demand | 66.4 | mg/L | 10.0 | 09/21/16 16:26 | |
| EPA 365.1 | Phosphorus | 2.4 | mg/L | 0.25 | 09/15/16 09:50 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 1.4 | mg/L | 0.10 | 09/19/16 16:21 | |
| SM 5310C | Total Organic Carbon | 9.6 | mg/L | 4.0 | 09/14/16 23:17 | |
| **50152744054** | **D-85** | | | | | |
| | Field pH | 6.87 | Std. Units | | 09/06/16 00:00 | |
| | Field Temperature | 18.8 | deg C | | 09/06/16 00:00 | |
| | Field Specific Conductance | 2390 | umhos/cm | | 09/06/16 00:00 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744054** | **D-85** | | | | | |
| | Field Turbidity | 389.1 | NTU | | 09/06/16 00:00 | |
| | Total Well Depth | 77.19 | feet | | 09/06/16 00:00 | |
| | Elevation Water Level | 432.51 | ft/msl | | 09/06/16 00:00 | |
| | Collar Elevation | 457.06 | ft/msl | | 09/06/16 00:00 | |
| | Depth to Water | 24.55 | feet | | 09/06/16 00:00 | |
| EPA 9056 | Chloride | 410 | mg/L | 25.0 | 09/09/16 17:14 | |
| EPA 9056 | Fluoride | 0.22 | mg/L | 0.10 | 09/09/16 16:41 | |
| EPA 9056 | Sulfate | 72.5 | mg/L | 2.5 | 09/09/16 16:57 | |
| EPA 6010 | Barium | 3750 | ug/L | 10.0 | 09/16/16 12:23 | |
| EPA 6010 | Boron | 241 | ug/L | 100 | 09/16/16 12:23 | |
| EPA 6010 | Calcium | 407000 | ug/L | 2500 | 09/16/16 14:31 | |
| EPA 6010 | Cobalt | 47.7 | ug/L | 5.0 | 09/16/16 12:23 | |
| EPA 6010 | Iron | 142000 | ug/L | 50.0 | 09/16/16 12:23 | |
| EPA 6010 | Magnesium | 103000 | ug/L | 500 | 09/16/16 12:23 | |
| EPA 6010 | Manganese | 3780 | ug/L | 5.0 | 09/16/16 12:23 | |
| EPA 6010 | Nickel | 117 | ug/L | 10.0 | 09/16/16 12:23 | |
| EPA 6010 | Sodium | 141000 | ug/L | 1000 | 09/16/16 12:23 | |
| EPA 6010 | Total Hardness by 2340B | 1440000 | ug/L | 5000 | 09/16/16 14:31 | |
| EPA 6010 | Zinc | 248 | ug/L | 20.0 | 09/16/16 12:23 | |
| EPA 6020 | Arsenic | 50.7 | ug/L | 50.0 | 09/16/16 10:46 | |
| EPA 6020 | Beryllium | 2.3 | ug/L | 2.0 | 09/15/16 20:38 | |
| EPA 6020 | Cadmium | 1.6 | ug/L | 0.20 | 09/16/16 12:05 | |
| EPA 6020 | Chromium | 30.7 | ug/L | 5.0 | 09/16/16 12:05 | |
| EPA 6020 | Copper | 36.2 | ug/L | 5.0 | 09/16/16 12:05 | |
| EPA 6020 | Lead | 70.1 | ug/L | 5.0 | 09/16/16 12:05 | |
| EPA 6020 | Vanadium | 64.2 | ug/L | 10.0 | 09/16/16 12:05 | N2 |
| EPA 8260 | Chlorobenzene | 51.7 | ug/L | 5.0 | 09/15/16 03:33 | |
| SM 2540C | Total Dissolved Solids | 1450 | mg/L | 16.7 | 09/09/16 10:27 | |
| EPA 410.4 | Chemical Oxygen Demand | 40.9 | mg/L | 10.0 | 09/21/16 16:26 | |
| EPA 365.1 | Phosphorus | 8.7 | mg/L | 0.50 | 09/15/16 10:07 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 3.3 | mg/L | 0.10 | 09/19/16 16:24 | |
| **50152744055** | **D-85 DUP** | | | | | |
| EPA 9056 | Chloride | 398 | mg/L | 25.0 | 09/09/16 19:08 | |
| EPA 9056 | Fluoride | 0.23 | mg/L | 0.10 | 09/09/16 18:35 | |
| EPA 9056 | Sulfate | 71.6 | mg/L | 2.5 | 09/09/16 18:52 | |
| EPA 6010 | Barium | 3810 | ug/L | 10.0 | 09/16/16 12:26 | |
| EPA 6010 | Boron | 246 | ug/L | 100 | 09/16/16 12:26 | |
| EPA 6010 | Calcium | 406000 | ug/L | 2500 | 09/16/16 14:33 | |
| EPA 6010 | Cobalt | 46.4 | ug/L | 5.0 | 09/16/16 12:26 | |
| EPA 6010 | Iron | 141000 | ug/L | 50.0 | 09/16/16 12:26 | |
| EPA 6010 | Magnesium | 101000 | ug/L | 500 | 09/16/16 12:26 | |
| EPA 6010 | Manganese | 3720 | ug/L | 5.0 | 09/16/16 12:26 | |
| EPA 6010 | Nickel | 113 | ug/L | 10.0 | 09/16/16 12:26 | |
| EPA 6010 | Sodium | 142000 | ug/L | 1000 | 09/16/16 12:26 | |
| EPA 6010 | Total Hardness by 2340B | 1430000 | ug/L | 5000 | 09/16/16 14:33 | |
| EPA 6010 | Zinc | 256 | ug/L | 20.0 | 09/16/16 12:26 | |
| EPA 6020 | Arsenic | 47.0 | ug/L | 5.0 | 09/16/16 10:51 | D3 |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744055** | **D-85 DUP** | | | | | |
| EPA 6020 | Cadmium | 1.5 | ug/L | 0.20 | 09/16/16 12:14 | |
| EPA 6020 | Chromium | 29.2 | ug/L | 5.0 | 09/16/16 12:14 | |
| EPA 6020 | Copper | 36.3 | ug/L | 5.0 | 09/16/16 12:14 | |
| EPA 6020 | Lead | 65.4 | ug/L | 5.0 | 09/16/16 12:14 | |
| EPA 6020 | Vanadium | 58.4 | ug/L | 10.0 | 09/16/16 12:14 | N2 |
| EPA 8260 | Chlorobenzene | 50.6 | ug/L | 5.0 | 09/15/16 03:58 | |
| SM 2540C | Total Dissolved Solids | 1390 | mg/L | 20.0 | 09/09/16 10:27 | |
| EPA 410.4 | Chemical Oxygen Demand | 40.3 | mg/L | 10.0 | 09/21/16 16:26 | |
| EPA 365.1 | Phosphorus | 9.7 | mg/L | 0.50 | 09/15/16 10:09 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 3.3 | mg/L | 0.10 | 09/19/16 16:25 | |
| **50152744056** | **PZ-208-SS** | | | | | |
| | Field pH | 6.93 | Std. Units | | 09/06/16 00:00 | |
| | Field Temperature | 20.6 | deg C | | 09/06/16 00:00 | |
| | Field Specific Conductance | 1106 | umhos/cm | | 09/06/16 00:00 | |
| | Field Turbidity | 6.87 | NTU | | 09/06/16 00:00 | |
| | Total Well Depth | 100.38 | feet | | 09/06/16 00:00 | |
| | Elevation Water Level | 454.39 | ft/msl | | 09/06/16 00:00 | |
| | Collar Elevation | 474.19 | ft/msl | | 09/06/16 00:00 | |
| | Depth to Water | 19.80 | feet | | 09/06/16 00:00 | |
| EPA 9056 | Chloride | 111 | mg/L | 2.5 | 09/09/16 19:40 | |
| EPA 9056 | Fluoride | 0.44 | mg/L | 0.10 | 09/09/16 19:24 | |
| EPA 9056 | Sulfate | 32.1 | mg/L | 2.5 | 09/09/16 19:40 | |
| EPA 6010 | Barium | 165 | ug/L | 10.0 | 09/16/16 12:28 | |
| EPA 6010 | Calcium | 104000 | ug/L | 500 | 09/16/16 12:28 | |
| EPA 6010 | Iron | 1430 | ug/L | 50.0 | 09/16/16 12:28 | |
| EPA 6010 | Magnesium | 53900 | ug/L | 500 | 09/16/16 12:28 | |
| EPA 6010 | Manganese | 23.4 | ug/L | 5.0 | 09/16/16 12:28 | |
| EPA 6010 | Sodium | 45800 | ug/L | 1000 | 09/16/16 12:28 | |
| EPA 6010 | Total Hardness by 2340B | 482000 | ug/L | 1000 | 09/16/16 12:28 | |
| SM 2540C | Total Dissolved Solids | 598 | mg/L | 10.0 | 09/09/16 10:28 | |
| **50152744057** | **PZ-303-AS** | | | | | |
| | Field pH | 6.70 | Std. Units | | 09/06/16 00:00 | |
| | Field Temperature | 20.8 | deg C | | 09/06/16 00:00 | |
| | Field Specific Conductance | 2110 | umhos/cm | | 09/06/16 00:00 | |
| | Field Turbidity | 37.73 | NTU | | 09/06/16 00:00 | |
| | Total Well Depth | 23.80 | feet | | 09/06/16 00:00 | |
| | Elevation Water Level | 431.18 | ft/msl | | 09/06/16 00:00 | |
| | Collar Elevation | 453.08 | ft/msl | | 09/06/16 00:00 | |
| | Depth to Water | 21.90 | feet | | 09/06/16 00:00 | |
| EPA 9056 | Chloride | 109 | mg/L | 2.5 | 09/09/16 21:02 | |
| EPA 9056 | Fluoride | 0.35 | mg/L | 0.10 | 09/09/16 20:46 | |
| EPA 6010 | Barium | 762 | ug/L | 10.0 | 09/16/16 12:30 | |
| EPA 6010 | Boron | 272 | ug/L | 100 | 09/16/16 12:30 | |
| EPA 6010 | Calcium | 296000 | ug/L | 2500 | 09/16/16 14:35 | |
| EPA 6010 | Iron | 81000 | ug/L | 50.0 | 09/16/16 12:30 | |
| EPA 6010 | Magnesium | 69200 | ug/L | 500 | 09/16/16 12:30 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744057** | **PZ-303-AS** | | | | | |
| EPA 6010 | Manganese | 2080 | ug/L | 5.0 | 09/16/16 12:30 | |
| EPA 6010 | Nickel | 11.7 | ug/L | 10.0 | 09/16/16 12:30 | |
| EPA 6010 | Sodium | 59200 | ug/L | 1000 | 09/16/16 12:30 | |
| EPA 6010 | Total Hardness by 2340B | 1020000 | ug/L | 5000 | 09/16/16 14:35 | |
| EPA 6020 | Arsenic | 100 | ug/L | 25.0 | 09/16/16 12:27 | |
| EPA 8260 | Benzene | 39.7 | ug/L | 5.0 | 09/15/16 04:48 | |
| EPA 8260 | Ethylbenzene | 18.0 | ug/L | 5.0 | 09/15/16 04:48 | |
| EPA 8260 | Toluene | 306 | ug/L | 50.0 | 09/17/16 01:18 | |
| EPA 8260 | Vinyl chloride | 2.2 | ug/L | 2.0 | 09/17/16 00:53 | |
| EPA 8260 | Xylene (Total) | 389 | ug/L | 5.0 | 09/15/16 04:48 | |
| SM 2540C | Total Dissolved Solids | 1260 | mg/L | 10.0 | 09/09/16 10:28 | |
| EPA 410.4 | Chemical Oxygen Demand | 502 | mg/L | 10.0 | 09/21/16 11:51 | |
| EPA 365.1 | Phosphorus | 1.7 | mg/L | 0.25 | 09/15/16 09:53 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.36 | mg/L | 0.10 | 09/19/16 16:27 | |
| **50152744058** | **PZ-114-AS** | | | | | |
| | Field pH | 6.72 | Std. Units | | 09/06/16 00:00 | |
| | Field Temperature | 17.6 | deg C | | 09/06/16 00:00 | |
| | Field Specific Conductance | 2060 | umhos/cm | | 09/06/16 00:00 | |
| | Field Turbidity | 9.02 | NTU | | 09/06/16 00:00 | |
| | Total Well Depth | 26.32 | feet | | 09/06/16 00:00 | |
| | Elevation Water Level | 432.93 | ft/msl | | 09/06/16 00:00 | |
| | Collar Elevation | 451.26 | ft/msl | | 09/06/16 00:00 | |
| | Depth to Water | 18.33 | feet | | 09/06/16 00:00 | |
| EPA 9056 | Chloride | 466 | mg/L | 25.0 | 09/09/16 22:07 | |
| EPA 9056 | Fluoride | 0.28 | mg/L | 0.10 | 09/09/16 21:35 | |
| EPA 6010 | Barium | 922 | ug/L | 10.0 | 09/16/16 12:32 | |
| EPA 6010 | Boron | 326 | ug/L | 100 | 09/16/16 12:32 | |
| EPA 6010 | Calcium | 198000 | ug/L | 500 | 09/16/16 12:32 | |
| EPA 6010 | Iron | 66600 | ug/L | 50.0 | 09/16/16 12:32 | |
| EPA 6010 | Magnesium | 49400 | ug/L | 500 | 09/16/16 12:32 | |
| EPA 6010 | Manganese | 3850 | ug/L | 5.0 | 09/16/16 12:32 | |
| EPA 6010 | Sodium | 176000 | ug/L | 1000 | 09/16/16 12:32 | |
| EPA 6010 | Total Hardness by 2340B | 697000 | ug/L | 1000 | 09/16/16 12:32 | |
| EPA 6020 | Arsenic | 108 | ug/L | 5.0 | 09/16/16 11:15 | |
| EPA 8260 | Benzene | 5.2 | ug/L | 5.0 | 09/15/16 05:13 | |
| EPA 8260 | Chlorobenzene | 44.9 | ug/L | 5.0 | 09/15/16 05:13 | |
| EPA 8260 | 1,4-Dichlorobenzene | 6.3 | ug/L | 5.0 | 09/15/16 05:13 | |
| SM 2540C | Total Dissolved Solids | 1500 | mg/L | 10.0 | 09/09/16 10:28 | |
| EPA 410.4 | Chemical Oxygen Demand | 37.9 | mg/L | 10.0 | 09/21/16 16:26 | |
| EPA 365.1 | Phosphorus | 1.6 | mg/L | 0.25 | 09/15/16 09:55 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 5.6 | mg/L | 0.10 | 09/19/16 16:28 | |
| **50152744059** | **PZ-115-SS** | | | | | |
| | Field pH | 6.68 | Std. Units | | 09/06/16 00:00 | |
| | Field Temperature | 17.3 | deg C | | 09/06/16 00:00 | |
| | Field Specific Conductance | 1920 | umhos/cm | | 09/06/16 00:00 | |
| | Field Turbidity | 5.22 | NTU | | 09/06/16 00:00 | |



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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744059** | **PZ-115-SS** | | | | | |
| | Total Well Depth | 81.04 | feet | | 09/06/16 00:00 | |
| | Elevation Water Level | 436.97 | ft/msl | | 09/06/16 00:00 | |
| | Collar Elevation | 452.27 | ft/msl | | 09/06/16 00:00 | |
| | Depth to Water | 15.30 | feet | | 09/06/16 00:00 | |
| EPA 9056 | Chloride | 477 | mg/L | 25.0 | 09/09/16 22:56 | |
| EPA 9056 | Fluoride | 0.52 | mg/L | 0.10 | 09/09/16 22:23 | |
| EPA 9056 | Sulfate | 3.5 | mg/L | 0.25 | 09/09/16 22:23 | |
| EPA 6010 | Barium | 483 | ug/L | 10.0 | 09/16/16 12:39 | |
| EPA 6010 | Boron | 460 | ug/L | 100 | 09/16/16 12:39 | |
| EPA 6010 | Calcium | 210000 | ug/L | 2500 | 09/16/16 14:38 | |
| EPA 6010 | Cobalt | 28.4 | ug/L | 5.0 | 09/16/16 12:39 | |
| EPA 6010 | Iron | 3360 | ug/L | 50.0 | 09/16/16 12:39 | |
| EPA 6010 | Magnesium | 104000 | ug/L | 500 | 09/16/16 12:39 | |
| EPA 6010 | Manganese | 73.9 | ug/L | 5.0 | 09/16/16 12:39 | |
| EPA 6010 | Nickel | 72.0 | ug/L | 10.0 | 09/16/16 12:39 | |
| EPA 6010 | Sodium | 161000 | ug/L | 1000 | 09/16/16 12:39 | |
| EPA 6010 | Total Hardness by 2340B | 953000 | ug/L | 5000 | 09/16/16 14:38 | |
| EPA 6020 | Arsenic | 6.6 | ug/L | 5.0 | 09/16/16 11:19 | |
| SM 2540C | Total Dissolved Solids | 1490 | mg/L | 10.0 | 09/09/16 10:28 | |
| EPA 410.4 | Chemical Oxygen Demand | 37.6 | mg/L | 10.0 | 09/21/16 16:26 | |
| EPA 365.1 | Phosphorus | 0.26 | mg/L | 0.050 | 09/15/16 09:27 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.99 | mg/L | 0.10 | 09/19/16 16:33 | |
| **50152744060** | **PZ-100-SD** | | | | | |
| | Field pH | 7.15 | Std. Units | | 09/07/16 00:00 | |
| | Field Temperature | 18.1 | deg C | | 09/07/16 00:00 | |
| | Field Specific Conductance | 567 | umhos/cm | | 09/07/16 00:00 | |
| | Field Turbidity | 5.95 | NTU | | 09/07/16 00:00 | |
| | Total Well Depth | 96.19 | feet | | 09/07/16 00:00 | |
| | Elevation Water Level | 453.37 | ft/msl | | 09/07/16 00:00 | |
| | Collar Elevation | 485.72 | ft/msl | | 09/07/16 00:00 | |
| | Depth to Water | 32.35 | feet | | 09/07/16 00:00 | |
| EPA 9056 | Chloride | 1.7 | mg/L | 0.25 | 09/09/16 23:45 | |
| EPA 9056 | Fluoride | 2.2 | mg/L | 0.10 | 09/09/16 23:45 | |
| EPA 9056 | Sulfate | 10 | mg/L | 0.25 | 09/09/16 23:45 | |
| EPA 6010 | Barium | 318 | ug/L | 10.0 | 09/16/16 12:41 | |
| EPA 6010 | Calcium | 76600 | ug/L | 500 | 09/16/16 12:41 | |
| EPA 6010 | Iron | 759 | ug/L | 50.0 | 09/16/16 12:41 | |
| EPA 6010 | Magnesium | 35500 | ug/L | 500 | 09/16/16 12:41 | |
| EPA 6010 | Manganese | 56.5 | ug/L | 5.0 | 09/16/16 12:41 | |
| EPA 6010 | Sodium | 6750 | ug/L | 1000 | 09/16/16 12:41 | |
| EPA 6010 | Total Hardness by 2340B | 337000 | ug/L | 1000 | 09/16/16 12:41 | |
| SM 2540C | Total Dissolved Solids | 323 | mg/L | 10.0 | 09/12/16 10:01 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.47 | mg/L | 0.10 | 09/19/16 16:34 | |
| **50152744061** | **PZ-100-SS** | | | | | |
| | Field pH | 7.06 | Std. Units | | 09/07/16 00:00 | |
| | Field Temperature | 18.1 | deg C | | 09/07/16 00:00 | |

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744061** | **PZ-100-SS** | | | | | |
| | Field Specific Conductance | 618 | umhos/cm | | 09/07/16 00:00 | |
| | Field Turbidity | 5.64 | NTU | | 09/07/16 00:00 | |
| | Total Well Depth | 89.13 | feet | | 09/07/16 00:00 | |
| | Elevation Water Level | 455.69 | ft/msl | | 09/07/16 00:00 | |
| | Collar Elevation | 485.75 | ft/msl | | 09/07/16 00:00 | |
| | Depth to Water | 30.06 | feet | | 09/07/16 00:00 | |
| EPA 9056 | Chloride | 5.1 | mg/L | 0.25 | 09/10/16 00:34 | |
| EPA 9056 | Fluoride | 0.64 | mg/L | 0.10 | 09/10/16 00:34 | |
| EPA 9056 | Sulfate | 37.9 | mg/L | 2.5 | 09/10/16 00:50 | |
| EPA 6010 | Barium | 68.6 | ug/L | 10.0 | 09/16/16 12:43 | |
| EPA 6010 | Boron | 118 | ug/L | 100 | 09/16/16 12:43 | |
| EPA 6010 | Calcium | 93200 | ug/L | 500 | 09/16/16 12:43 | |
| EPA 6010 | Magnesium | 53600 | ug/L | 500 | 09/16/16 12:43 | |
| EPA 6010 | Nickel | 10.1 | ug/L | 10.0 | 09/16/16 12:43 | |
| EPA 6010 | Sodium | 11500 | ug/L | 1000 | 09/16/16 12:43 | |
| EPA 6010 | Total Hardness by 2340B | 454000 | ug/L | 1000 | 09/16/16 12:43 | |
| SM 2540C | Total Dissolved Solids | 437 | mg/L | 10.0 | 09/12/16 10:01 | |
| **50152744062** | **PZ-111-SD** | | | | | |
| | Field pH | 7.01 | Std. Units | | 09/07/16 00:00 | |
| | Field Temperature | 19.2 | deg C | | 09/07/16 00:00 | |
| | Field Specific Conductance | 697 | umhos/cm | | 09/07/16 00:00 | |
| | Field Turbidity | 7.83 | NTU | | 09/07/16 00:00 | |
| | Total Well Depth | 198.83 | feet | | 09/07/16 00:00 | |
| | Elevation Water Level | 433.06 | ft/msl | | 09/07/16 00:00 | |
| | Collar Elevation | 466.46 | ft/msl | | 09/07/16 00:00 | |
| | Depth to Water | 33.40 | feet | | 09/07/16 00:00 | |
| EPA 9056 | Chloride | 10.4 | mg/L | 0.25 | 09/10/16 01:23 | |
| EPA 9056 | Fluoride | 2.2 | mg/L | 0.10 | 09/10/16 01:23 | |
| EPA 9056 | Sulfate | 45.7 | mg/L | 2.5 | 09/10/16 01:39 | |
| EPA 6010 | Barium | 103 | ug/L | 10.0 | 09/16/16 12:46 | |
| EPA 6010 | Calcium | 89000 | ug/L | 500 | 09/16/16 12:46 | |
| EPA 6010 | Iron | 900 | ug/L | 50.0 | 09/16/16 12:46 | |
| EPA 6010 | Magnesium | 52300 | ug/L | 500 | 09/16/16 12:46 | |
| EPA 6010 | Manganese | 21.4 | ug/L | 5.0 | 09/16/16 12:46 | |
| EPA 6010 | Sodium | 17500 | ug/L | 1000 | 09/16/16 12:46 | |
| EPA 6010 | Total Hardness by 2340B | 438000 | ug/L | 1000 | 09/16/16 12:46 | |
| SM 2540C | Total Dissolved Solids | 424 | mg/L | 10.0 | 09/12/16 10:02 | |
| SM 4500-NH3 G | Nitrogen, Ammonia | 0.13 | mg/L | 0.10 | 09/19/16 16:36 | |
| **50152744063** | **PZ-205-SS** | | | | | |
| | Field pH | 6.96 | Std. Units | | 09/07/16 00:00 | |
| | Field Temperature | 21.6 | deg C | | 09/07/16 00:00 | |
| | Field Specific Conductance | 772 | umhos/cm | | 09/07/16 00:00 | |
| | Field Turbidity | 6.69 | NTU | | 09/07/16 00:00 | |
| | Total Well Depth | 93.00 | feet | | 09/07/16 00:00 | |
| | Elevation Water Level | 435.79 | ft/msl | | 09/07/16 00:00 | |
| | Collar Elevation | 465.83 | ft/msl | | 09/07/16 00:00 | |

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## SUMMARY OF DETECTION

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50152744063** | **PZ-205-SS** | | | | | |
| | Depth to Water | 30.04 | feet | | 09/07/16 00:00 | |
| EPA 9056 | Chloride | 32.8 | mg/L | 2.5 | 09/10/16 03:17 | |
| EPA 9056 | Fluoride | 0.42 | mg/L | 0.10 | 09/10/16 03:01 | |
| EPA 9056 | Sulfate | 52.5 | mg/L | 2.5 | 09/10/16 03:17 | |
| EPA 6010 | Barium | 140 | ug/L | 10.0 | 09/16/16 12:48 | |
| EPA 6010 | Calcium | 99000 | ug/L | 500 | 09/16/16 12:48 | |
| EPA 6010 | Iron | 127 | ug/L | 50.0 | 09/16/16 12:48 | |
| EPA 6010 | Magnesium | 56600 | ug/L | 500 | 09/16/16 12:48 | |
| EPA 6010 | Sodium | 15500 | ug/L | 1000 | 09/16/16 12:48 | |
| EPA 6010 | Total Hardness by 2340B | 480000 | ug/L | 1000 | 09/16/16 12:48 | |
| SM 2540C | Total Dissolved Solids | 512 | mg/L | 10.0 | 09/12/16 10:02 | |



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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-110-SS** **Lab ID: 50152744001** Collected: 08/23/16 08:42 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.73** | Std. Units | | 1 | | 08/28/16 00:00 | | |
| Field Temperature | **16.6** | deg C | | 1 | | 08/28/16 00:00 | | |
| Field Specific Conductance | **1915** | umhos/cm | | 1 | | 08/28/16 00:00 | | |
| Field Turbidity | **5.23** | NTU | | 1 | | 08/28/16 00:00 | | |
| Total Well Depth | **107.23** | feet | | 1 | | 08/28/16 00:00 | | |
| Elevation Water Level | **432.82** | ft/msl | | 1 | | 08/28/16 00:00 | | |
| Collar Elevation | **461.15** | ft/msl | | 1 | | 08/28/16 00:00 | | |
| Depth to Water | **28.33** | feet | | 1 | | 08/28/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **213** | mg/L | 25.0 | 100 | | 08/30/16 20:04 | 16887-00-6 | |
| Fluoride | **0.47** | mg/L | 0.10 | 1 | | 08/30/16 19:31 | 16984-48-8 | |
| Sulfate | **51.2** | mg/L | 2.5 | 10 | | 08/30/16 19:47 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **281** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7440-39-3 | |
| Boron | **225** | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7440-42-8 | |
| Calcium | **210000** | ug/L | 5000 | 10 | 08/30/16 07:05 | 08/31/16 11:21 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7440-48-4 | |
| Iron | **6590** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7439-89-6 | |
| Magnesium | **88000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7439-95-4 | |
| Manganese | **156** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7439-96-5 | |
| Nickel | **12.7** | ug/L | 10.0 | 1 | 09/06/16 07:46 | 09/07/16 09:14 | 7440-02-0 | |
| Sodium | **79500** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7440-23-5 | |
| Total Hardness by 2340B | **886000** | ug/L | 10000 | 10 | 08/30/16 07:05 | 08/31/16 11:21 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:03 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 19:50 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/16/16 14:29 | 09/16/16 20:27 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 03:16 | 107-13-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-110-SS** **Lab ID: 50152744001** Collected: 08/23/16 08:42 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | **5.2** | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 03:16 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 03:16 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 03:16 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 106 | %. | 84-118 | 1 | | 08/30/16 03:16 | 1868-53-7 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-110-SS** **Lab ID: 50152744001** Collected: 08/23/16 08:42 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 08/30/16 03:16 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 86-110 | 1 | | 08/30/16 03:16 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1160** | mg/L | 10.0 | 1 | | 08/28/16 08:53 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **65.2** | mg/L | 10.0 | 1 | 09/08/16 08:39 | 09/08/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 12:38 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.15** | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 13:56 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.40** | mg/L | 0.10 | 1 | | 08/30/16 11:42 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **18.6** | mg/L | 10.0 | 10 | | 08/29/16 22:14 | 7440-44-0 | |

**Sample: PZ-109-SS** **Lab ID: 50152744002** Collected: 08/23/16 09:45 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.11** | Std. Units | | 1 | | 08/23/16 00:00 | | |
| Field Temperature | **21.1** | deg C | | 1 | | 08/23/16 00:00 | | |
| Field Specific Conductance | **792** | umhos/cm | | 1 | | 08/23/16 00:00 | | |
| Field Turbidity | **10.73** | NTU | | 1 | | 08/23/16 00:00 | | |
| Total Well Depth | **130.99** | feet | | 1 | | 08/23/16 00:00 | | |
| Elevation Water Level | **435.12** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Collar Elevation | **460.19** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Depth to Water | **25.07** | feet | | 1 | | 08/23/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **3.9** | mg/L | 0.25 | 1 | | 08/30/16 20:20 | 16887-00-6 | |
| Fluoride | **2.5** | mg/L | 0.10 | 1 | | 08/30/16 20:20 | 16984-48-8 | |
| Sulfate | **23.6** | mg/L | 0.25 | 1 | | 08/30/16 20:20 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **57.9** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7440-39-3 | |
| Boron | **178** | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7440-42-8 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-109-SS** **Lab ID: 50152744002** Collected: 08/23/16 09:45 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Calcium | **87200** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7440-48-4 | |
| Iron | ND | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7439-89-6 | |
| Magnesium | **51500** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7439-95-4 | |
| Manganese | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7440-02-0 | |
| Sodium | **10300** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7440-23-5 | |
| Total Hardness by 2340B | **430000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:06 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 19:55 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/16/16 14:29 | 09/16/16 20:29 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 04:21 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 95-50-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-109-SS** **Lab ID: 50152744002** Collected: 08/23/16 09:45 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 04:21 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 04:21 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 04:21 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 108 | %. | 84-118 | 1 | | 08/30/16 04:21 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 79-116 | 1 | | 08/30/16 04:21 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 86-110 | 1 | | 08/30/16 04:21 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **417** | mg/L | 10.0 | 1 | | 08/28/16 08:53 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/08/16 08:39 | 09/08/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 12:40 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 13:58 | 7723-14-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-109-SS** **Lab ID: 50152744002** Collected: 08/23/16 09:45 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 08/30/16 11:45 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 08/29/16 22:14 | 7440-44-0 | |

**Sample: PZ-106-SD** **Lab ID: 50152744003** Collected: 08/23/16 11:31 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.80** | Std. Units | | 1 | | 08/23/16 00:00 | | |
| Field Temperature | **23.5** | deg C | | 1 | | 08/23/16 00:00 | | |
| Field Specific Conductance | **2680** | umhos/cm | | 1 | | 08/23/16 00:00 | | |
| Field Turbidity | **5.38** | NTU | | 1 | | 08/23/16 00:00 | | |
| Total Well Depth | **196.29** | feet | | 1 | | 08/23/16 00:00 | | |
| Elevation Water Level | **449.96** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Collar Elevation | **463.36** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Depth to Water | **13.40** | feet | | 1 | | 08/23/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **306** | mg/L | 25.0 | 100 | | 08/30/16 21:42 | 16887-00-6 | |
| Fluoride | **1.4** | mg/L | 0.10 | 1 | | 08/30/16 21:09 | 16984-48-8 | |
| Sulfate | **35.8** | mg/L | 2.5 | 10 | | 08/30/16 21:25 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **664** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7440-39-3 | |
| Boron | **1400** | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7440-42-8 | |
| Calcium | **105000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7440-48-4 | |
| Iron | **1780** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7439-89-6 | |
| Magnesium | **75600** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7439-95-4 | |
| Manganese | **29.1** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7439-96-5 | |
| Nickel | **17.1** | ug/L | 10.0 | 1 | 09/06/16 07:46 | 09/07/16 09:17 | 7440-02-0 | |
| Sodium | **246000** | ug/L | 10000 | 10 | 08/30/16 07:05 | 08/31/16 11:23 | 7440-23-5 | |
| Total Hardness by 2340B | **574000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:08 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-43-9 | |
| Chromium | **7.4** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7439-92-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-106-SD** **Lab ID: 50152744003** Collected: 08/23/16 11:31 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 18:56 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 18:48 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 05:27 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 79-34-5 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-106-SD** **Lab ID: 50152744003** Collected: 08/23/16 11:31 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 05:27 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 05:27 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 05:27 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 106 | %. | 84-118 | 1 | | 08/30/16 05:27 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 08/30/16 05:27 | 460-00-4 | |
| Toluene-d8 (S) | 95 | %. | 86-110 | 1 | | 08/30/16 05:27 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1360** | mg/L | 10.0 | 1 | | 08/28/16 08:54 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **214** | mg/L | 20.0 | 1 | 09/08/16 08:39 | 09/08/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 12:42 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.11** | mg/L | 0.10 | 1 | 09/02/16 11:26 | 09/02/16 13:59 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **58.6** | mg/L | 1.0 | 10 | | 08/30/16 12:43 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **64.1** | mg/L | 10.0 | 10 | | 08/29/16 22:14 | 7440-44-0 | |

**Sample: PZ-106-SS** **Lab ID: 50152744004** Collected: 08/23/16 12:26 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.00** | Std. Units | | 1 | | 08/23/16 00:00 | | |
| Field Temperature | **23.5** | deg C | | 1 | | 08/23/16 00:00 | | |
| Field Specific Conductance | **939** | umhos/cm | | 1 | | 08/23/16 00:00 | | |
| Field Turbidity | **4.79** | NTU | | 1 | | 08/23/16 00:00 | | |
| Total Well Depth | **161.42** | feet | | 1 | | 08/23/16 00:00 | | |
| Elevation Water Level | **448.76** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Collar Elevation | **462.71** | ft/msl | | 1 | | 08/23/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-106-SS** **Lab ID: 50152744004** Collected: 08/23/16 12:26 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Depth to Water | **12.95** | feet | | 1 | | 08/23/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **37.7** | mg/L | 2.5 | 10 | | 08/30/16 22:47 | 16887-00-6 | |
| Fluoride | **2.0** | mg/L | 0.10 | 1 | | 08/30/16 22:30 | 16984-48-8 | |
| Sulfate | **46.5** | mg/L | 2.5 | 10 | | 08/30/16 22:47 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **176** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7440-42-8 | |
| Calcium | **103000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7440-48-4 | |
| Iron | **2310** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7439-89-6 | |
| Magnesium | **51000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7439-95-4 | |
| Manganese | **14.5** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7440-02-0 | |
| Sodium | **22600** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7440-23-5 | |
| Total Hardness by 2340B | **466000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:10 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-36-0 | |
| Arsenic | **6.1** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 19:59 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/16/16 14:29 | 09/16/16 20:35 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 05:59 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 75-15-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-106-SS** **Lab ID: 50152744004** Collected: 08/23/16 12:26 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 05:59 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 05:59 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 05:59 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 108 | %. | 84-118 | 1 | | 08/30/16 05:59 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 08/30/16 05:59 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 86-110 | 1 | | 08/30/16 05:59 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **536** | mg/L | 10.0 | 1 | | 08/28/16 08:54 | | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-106-SS** **Lab ID: 50152744004** Collected: 08/23/16 12:26 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **21.2** | mg/L | 10.0 | 1 | 09/08/16 08:39 | 09/08/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 12:48 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 13:59 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.24** | mg/L | 0.10 | 1 | | 08/30/16 12:15 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 4.0 | 4 | | 08/29/16 22:14 | 7440-44-0 | D3 |

**Sample: PZ-105-SS** **Lab ID: 50152744005** Collected: 08/23/16 14:39 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.10** | Std. Units | | 1 | | 08/23/16 00:00 | | |
| Field Temperature | **19.6** | deg C | | 1 | | 08/23/16 00:00 | | |
| Field Specific Conductance | **1071** | umhos/cm | | 1 | | 08/23/16 00:00 | | |
| Field Turbidity | **10.64** | NTU | | 1 | | 08/23/16 00:00 | | |
| Total Well Depth | **144.93** | feet | | 1 | | 08/23/16 00:00 | | |
| Elevation Water Level | **459.67** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Collar Elevation | **483.51** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Depth to Water | **23.84** | feet | | 1 | | 08/23/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **65.0** | mg/L | 2.5 | 10 | | 08/30/16 23:19 | 16887-00-6 | |
| Fluoride | **0.56** | mg/L | 0.10 | 1 | | 08/30/16 23:03 | 16984-48-8 | |
| Sulfate | **49.5** | mg/L | 2.5 | 10 | | 08/30/16 23:19 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **187** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7440-42-8 | |
| Calcium | **107000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7440-48-4 | |
| Iron | **5460** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7439-89-6 | |
| Magnesium | **57500** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7439-95-4 | |
| Manganese | **133** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7440-02-0 | |
| Sodium | **41400** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7440-23-5 | |
| Total Hardness by 2340B | **503000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:13 | 7440-66-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-105-SS** **Lab ID: 50152744005** Collected: 08/23/16 14:39 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 20:08 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/16/16 14:29 | 09/16/16 20:37 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 06:32 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 100-41-4 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-105-SS** **Lab ID: 50152744005** Collected: 08/23/16 14:39 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 06:32 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 06:32 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 06:32 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 108 | %. | 84-118 | 1 | | 08/30/16 06:32 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 79-116 | 1 | | 08/30/16 06:32 | 460-00-4 | |
| Toluene-d8 (S) | 95 | %. | 86-110 | 1 | | 08/30/16 06:32 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **608** | mg/L | 10.0 | 1 | | 08/28/16 08:54 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **12.3** | mg/L | 10.0 | 1 | 09/08/16 08:39 | 09/08/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 12:55 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 14:00 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 08/30/16 11:49 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 4.0 | 4 | | 09/01/16 13:00 | 7440-44-0 | D3 |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-116-SS** **Lab ID: 50152744006** Collected: 08/23/16 15:55 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.21** | Std. Units | | 1 | | 08/23/16 00:00 | | |
| Field Temperature | **24.8** | deg C | | 1 | | 08/23/16 00:00 | | |
| Field Specific Conductance | **551** | umhos/cm | | 1 | | 08/23/16 00:00 | | |
| Field Turbidity | **4.54** | NTU | | 1 | | 08/23/16 00:00 | | |
| Total Well Depth | **142.64** | feet | | 1 | | 08/23/16 00:00 | | |
| Elevation Water Level | **467.86** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Collar Elevation | **478.21** | ft/msl | | 1 | | 08/23/16 00:00 | | |
| Depth to Water | **10.35** | feet | | 1 | | 08/23/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **3.5** | mg/L | 0.25 | 1 | | 08/30/16 23:36 | 16887-00-6 | |
| Fluoride | **2.6** | mg/L | 0.10 | 1 | | 08/30/16 23:36 | 16984-48-8 | |
| Sulfate | **35.6** | mg/L | 2.5 | 10 | | 08/30/16 23:52 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **81.8** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7440-39-3 | |
| Boron | **359** | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7440-42-8 | |
| Calcium | **48300** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7440-48-4 | |
| Iron | ND | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7439-89-6 | |
| Magnesium | **33800** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7439-95-4 | |
| Manganese | **171** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7440-02-0 | |
| Sodium | **40800** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7440-23-5 | |
| Total Hardness by 2340B | **260000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:15 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 20:13 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/16/16 14:29 | 09/16/16 20:39 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 07:05 | 107-13-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-116-SS** **Lab ID: 50152744006** Collected: 08/23/16 15:55 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | **19.7** | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 95-50-1 | |
| 1,4-Dichlorobenzene | **8.1** | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 10061-02-6 | |
| Ethylbenzene | **5.3** | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 07:05 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 07:05 | 75-01-4 | |
| Xylene (Total) | **8.3** | ug/L | 5.0 | 1 | | 08/30/16 07:05 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 84-118 | 1 | | 08/30/16 07:05 | 1868-53-7 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-116-SS** **Lab ID: 50152744006** Collected: 08/23/16 15:55 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| *Surrogates* | | | | | | | | |
| 4-Bromofluorobenzene (S) | 97 | %. | 79-116 | 1 | | 08/30/16 07:05 | 460-00-4 | |
| Toluene-d8 (S) | 94 | %. | 86-110 | 1 | | 08/30/16 07:05 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **346** | mg/L | 10.0 | 1 | | 08/29/16 08:06 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/08/16 08:39 | 09/08/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 12:59 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.11** | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 14:00 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 08/30/16 11:54 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/03/16 09:00 | 7440-44-0 | |

**Sample: PZ-202-SS** **Lab ID: 50152744007** Collected: 08/24/16 08:34 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.60** | Std. Units | | 1 | | 08/24/16 00:00 | | |
| Field Temperature | **17.4** | deg C | | 1 | | 08/24/16 00:00 | | |
| Field Specific Conductance | **6270** | umhos/cm | | 1 | | 08/24/16 00:00 | | |
| Field Turbidity | **14.67** | NTU | | 1 | | 08/24/16 00:00 | | |
| Total Well Depth | **85.22** | feet | | 1 | | 08/24/16 00:00 | | |
| Elevation Water Level | **469.60** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Collar Elevation | **481.02** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Depth to Water | **11.42** | feet | | 1 | | 08/24/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **1430** | mg/L | 250 | 1000 | | 08/31/16 23:26 | 16887-00-6 | |
| Fluoride | ND | mg/L | 0.10 | 1 | | 08/31/16 00:08 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 08/31/16 00:08 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **2650** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7440-42-8 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-202-SS** **Lab ID: 50152744007** Collected: 08/24/16 08:34 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Calcium | **612000** | ug/L | 5000 | 10 | 08/30/16 07:05 | 08/31/16 11:26 | 7440-70-2 | |
| Cobalt | **14.1** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7440-48-4 | |
| Iron | **82000** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7439-89-6 | |
| Magnesium | **290000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7439-95-4 | |
| Manganese | **2130** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7439-96-5 | |
| Nickel | **56.6** | ug/L | 10.0 | 1 | 09/06/16 07:46 | 09/07/16 09:19 | 7440-02-0 | |
| Sodium | **196000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7440-23-5 | |
| Total Hardness by 2340B | **2720000** | ug/L | 10000 | 10 | 08/30/16 07:05 | 08/31/16 11:26 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:21 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-36-0 | |
| Arsenic | **76.6** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 21:39 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 18:50 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 07:38 | 107-13-1 | |
| Benzene | **210** | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 95-50-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-202-SS** **Lab ID: 50152744007** Collected: 08/24/16 08:34 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 07:38 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 07:38 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 07:38 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 84-118 | 1 | | 08/30/16 07:38 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 08/30/16 07:38 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 08/30/16 07:38 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **4920** | mg/L | 20.0 | 1 | | 08/31/16 07:18 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **869** | mg/L | 10.0 | 1 | 09/08/16 13:58 | 09/09/16 09:08 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 13:01 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.17** | mg/L | 0.10 | 1 | 09/02/16 11:26 | 09/02/16 14:02 | 7723-14-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-202-SS** **Lab ID: 50152744007** Collected: 08/24/16 08:34 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.39** | mg/L | 0.10 | 1 | | 08/30/16 11:55 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **260** | mg/L | 40.0 | 40 | | 09/03/16 09:00 | 7440-44-0 | |

**Sample: FB @ PZ-104-SS** **Lab ID: 50152744008** Collected: 08/24/16 09:25 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **NA** | Std. Units | | 1 | | 08/24/16 00:00 | | |
| Field Temperature | **NA** | deg C | | 1 | | 08/24/16 00:00 | | |
| Field Specific Conductance | **NA** | umhos/cm | | 1 | | 08/24/16 00:00 | | |
| Field Turbidity | **NA** | NTU | | 1 | | 08/24/16 00:00 | | |
| Total Well Depth | **NA** | feet | | 1 | | 08/24/16 00:00 | | |
| Elevation Water Level | **NA** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Collar Elevation | **NA** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Depth to Water | **NA** | feet | | 1 | | 08/24/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | ND | mg/L | 0.25 | 1 | | 08/31/16 01:46 | 16887-00-6 | |
| Fluoride | ND | mg/L | 0.10 | 1 | | 08/31/16 01:46 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 08/31/16 01:46 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7440-42-8 | |
| Calcium | ND | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7440-48-4 | |
| Iron | ND | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7439-89-6 | |
| Magnesium | ND | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7439-95-4 | |
| Manganese | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7440-02-0 | |
| Sodium | ND | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7440-23-5 | |
| Total Hardness by 2340B | **1430** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:24 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7439-92-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: FB @ PZ-104-SS** **Lab ID: 50152744008** Collected: 08/24/16 09:25 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 20:27 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 18:57 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | **11.0** | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 08:10 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 79-34-5 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: FB @ PZ-104-SS** **Lab ID: 50152744008** Collected: 08/24/16 09:25 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 08:10 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 08:10 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 08:10 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 108 | %. | 84-118 | 1 | | 08/30/16 08:10 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 08/30/16 08:10 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 86-110 | 1 | | 08/30/16 08:10 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | ND | mg/L | 10.0 | 1 | | 08/31/16 07:18 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/09/16 08:36 | 09/09/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 13:03 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 14:03 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 08/30/16 11:56 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/03/16 09:00 | 7440-44-0 | |

**Sample: PZ-104-SS** **Lab ID: 50152744009** Collected: 08/24/16 10:12 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.70** | Std. Units | | 1 | | 08/24/16 00:00 | | |
| Field Temperature | **28.6** | deg C | | 1 | | 08/24/16 00:00 | | |
| Field Specific Conductance | **791** | umhos/cm | | 1 | | 08/24/16 00:00 | | |
| Field Turbidity | **4.68** | NTU | | 1 | | 08/24/16 00:00 | | |
| Total Well Depth | **140.35** | feet | | 1 | | 08/24/16 00:00 | | |
| Elevation Water Level | **463.97** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Collar Elevation | **483.45** | ft/msl | | 1 | | 08/24/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SS** **Lab ID: 50152744009** Collected: 08/24/16 10:12 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Depth to Water | **19.48** | feet | | 1 | | 08/24/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **4.2** | mg/L | 0.25 | 1 | | 08/31/16 00:41 | 16887-00-6 | |
| Fluoride | **0.79** | mg/L | 0.10 | 1 | | 08/31/16 00:41 | 16984-48-8 | |
| Sulfate | **12.2** | mg/L | 0.25 | 1 | | 08/31/16 00:41 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **102** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7440-39-3 | |
| Boron | **132** | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7440-42-8 | |
| Calcium | **81900** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7440-48-4 | |
| Iron | **310** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7439-89-6 | |
| Magnesium | **49700** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7439-95-4 | |
| Manganese | **22.7** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7440-02-0 | |
| Sodium | **14600** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7440-23-5 | |
| Total Hardness by 2340B | **409000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:26 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 20:31 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 18:59 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 08:43 | 107-13-1 | |
| Benzene | **221** | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 75-15-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SS** **Lab ID: 50152744009** Collected: 08/24/16 10:12 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 95-50-1 | |
| 1,4-Dichlorobenzene | **9.0** | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 10061-02-6 | |
| Ethylbenzene | **7.8** | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 127-18-4 | |
| Toluene | **17.1** | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 08:43 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 08:43 | 75-01-4 | |
| Xylene (Total) | **22.1** | ug/L | 5.0 | 1 | | 08/30/16 08:43 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 84-118 | 1 | | 08/30/16 08:43 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 102 | %. | 79-116 | 1 | | 08/30/16 08:43 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 86-110 | 1 | | 08/30/16 08:43 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **410** | mg/L | 10.0 | 1 | | 08/31/16 07:19 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SS** **Lab ID: 50152744009** Collected: 08/24/16 10:12 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **31.7** | mg/L | 10.0 | 1 | 09/09/16 08:36 | 09/09/16 11:29 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 13:09 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 14:03 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 08/30/16 11:57 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 4.0 | 4 | | 09/03/16 09:00 | 7440-44-0 | D3 |

**Sample: PZ-104-SD** **Lab ID: 50152744010** Collected: 08/24/16 10:54 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.90** | Std. Units | | 1 | | 08/24/16 00:00 | | |
| Field Temperature | **29.2** | deg C | | 1 | | 08/24/16 00:00 | | |
| Field Specific Conductance | **2030** | umhos/cm | | 1 | | 08/24/16 00:00 | | |
| Field Turbidity | **12.87** | NTU | | 1 | | 08/24/16 00:00 | | |
| Total Well Depth | **120.66** | feet | | 1 | | 08/24/16 00:00 | | |
| Elevation Water Level | **462.71** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Collar Elevation | **483.51** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Depth to Water | **20.80** | feet | | 1 | | 08/24/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **356** | mg/L | 25.0 | 100 | | 08/31/16 02:35 | 16887-00-6 | |
| Fluoride | **1.0** | mg/L | 0.10 | 1 | | 08/31/16 02:02 | 16984-48-8 | |
| Sulfate | **0.69** | mg/L | 0.25 | 1 | | 08/31/16 02:02 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **628** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7440-39-3 | |
| Boron | **1240** | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7440-42-8 | |
| Calcium | **116000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7440-48-4 | |
| Iron | **16100** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7439-89-6 | |
| Magnesium | **72900** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7439-95-4 | |
| Manganese | **137** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7439-96-5 | |
| Nickel | **70.1** | ug/L | 10.0 | 1 | 09/06/16 07:46 | 09/07/16 09:21 | 7440-02-0 | |
| Sodium | **197000** | ug/L | 10000 | 10 | 08/30/16 07:05 | 08/31/16 11:28 | 7440-23-5 | |
| Total Hardness by 2340B | **590000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:28 | 7440-66-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SD** **Lab ID: 50152744010** Collected: 08/24/16 10:54 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-36-0 | |
| Arsenic | **17.9** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-43-9 | |
| Chromium | **16.9** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-47-3 | |
| Copper | **5.1** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-28-0 | |
| Vanadium | **17.5** | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 21:17 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:01 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 14:33 | 107-13-1 | |
| Benzene | **451** | ug/L | 50.0 | 10 | | 08/30/16 15:06 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 95-50-1 | |
| 1,4-Dichlorobenzene | **8.9** | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 10061-02-6 | |
| Ethylbenzene | **7.3** | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 100-41-4 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SD** **Lab ID: 50152744010** Collected: 08/24/16 10:54 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 127-18-4 | |
| Toluene | **9.3** | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 14:33 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 14:33 | 75-01-4 | |
| Xylene (Total) | **33.7** | ug/L | 5.0 | 1 | | 08/30/16 14:33 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 96 | %. | 84-118 | 1 | | 08/30/16 14:33 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 79-116 | 1 | | 08/30/16 14:33 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 08/30/16 14:33 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1370** | mg/L | 20.0 | 1 | | 08/31/16 07:20 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **401** | mg/L | 10.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 13:11 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.17** | mg/L | 0.10 | 1 | 09/02/16 11:26 | 09/02/16 14:04 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **55.4** | mg/L | 1.0 | 10 | | 08/30/16 12:17 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **110** | mg/L | 40.0 | 40 | | 09/03/16 09:00 | 7440-44-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SD DUP** **Lab ID: 50152744011** Collected: 08/24/16 10:54 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **336** | mg/L | 25.0 | 100 | | 08/31/16 03:24 | 16887-00-6 | |
| Fluoride | **1.1** | mg/L | 0.10 | 1 | | 08/31/16 02:51 | 16984-48-8 | |
| Sulfate | **0.55** | mg/L | 0.25 | 1 | | 08/31/16 02:51 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **687** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7440-39-3 | |
| Boron | **1380** | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7440-42-8 | |
| Calcium | **121000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7440-48-4 | |
| Iron | **17000** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7439-89-6 | |
| Magnesium | **76700** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7439-95-4 | |
| Manganese | **144** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7439-96-5 | |
| Nickel | **81.9** | ug/L | 10.0 | 1 | 09/06/16 07:46 | 09/07/16 09:24 | 7440-02-0 | |
| Sodium | **213000** | ug/L | 10000 | 10 | 08/30/16 07:05 | 08/31/16 11:30 | 7440-23-5 | |
| Total Hardness by 2340B | **617000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:31 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-36-0 | |
| Arsenic | **19.5** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-43-9 | |
| Chromium | **20.0** | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-28-0 | |
| Vanadium | **19.3** | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 21:21 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:03 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/29/16 22:37 | 107-13-1 | |
| Benzene | **521** | ug/L | 50.0 | 10 | | 08/29/16 23:10 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 75-00-3 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SD DUP** **Lab ID: 50152744011** Collected: 08/24/16 10:54 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 95-50-1 | |
| 1,4-Dichlorobenzene | **8.5** | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 10061-02-6 | |
| Ethylbenzene | **7.5** | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 127-18-4 | |
| Toluene | **9.9** | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/29/16 22:37 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/29/16 22:37 | 75-01-4 | |
| Xylene (Total) | **33.6** | ug/L | 5.0 | 1 | | 08/29/16 22:37 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 84-118 | 1 | | 08/29/16 22:37 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 08/29/16 22:37 | 460-00-4 | |
| Toluene-d8 (S) | 95 | %. | 86-110 | 1 | | 08/29/16 22:37 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1320** | mg/L | 20.0 | 1 | | 08/31/16 07:20 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **413** | mg/L | 10.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-SD DUP** **Lab ID: 50152744011** Collected: 08/24/16 10:54 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 13:12 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.18** | mg/L | 0.10 | 1 | 09/02/16 11:26 | 09/02/16 14:05 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **59.0** | mg/L | 1.0 | 10 | | 08/30/16 12:20 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **107** | mg/L | 40.0 | 40 | | 09/03/16 09:00 | 7440-44-0 | |

**Sample: PZ-212-SD** **Lab ID: 50152744012** Collected: 08/24/16 13:26 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.43** | Std. Units | | 1 | | 08/24/16 00:00 | | |
| Field Temperature | **16.7** | deg C | | 1 | | 08/24/16 00:00 | | |
| Field Specific Conductance | **1072** | umhos/cm | | 1 | | 08/24/16 00:00 | | |
| Field Turbidity | **5.67** | NTU | | 1 | | 08/24/16 00:00 | | |
| Total Well Depth | **92.80** | feet | | 1 | | 08/24/16 00:00 | | |
| Elevation Water Level | **468.75** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Collar Elevation | **482.72** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Depth to Water | **13.97** | feet | | 1 | | 08/24/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **119** | mg/L | 2.5 | 10 | | 08/31/16 03:56 | 16887-00-6 | |
| Fluoride | **0.26** | mg/L | 0.10 | 1 | | 08/31/16 03:40 | 16984-48-8 | |
| Sulfate | **73.7** | mg/L | 2.5 | 10 | | 08/31/16 03:56 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **214** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7440-42-8 | |
| Calcium | **105000** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7440-48-4 | |
| Iron | **189** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7439-89-6 | |
| Magnesium | **49700** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7439-95-4 | |
| Manganese | **305** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7440-02-0 | |
| Sodium | **49800** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7440-23-5 | |
| Total Hardness by 2340B | **468000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:33 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-36-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-212-SD** **Lab ID: 50152744012** Collected: 08/24/16 13:26 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 20:40 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:09 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/29/16 23:43 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 591-78-6 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-212-SD** **Lab ID: 50152744012** Collected: 08/24/16 13:26 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/29/16 23:43 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/29/16 23:43 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/29/16 23:43 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 84-118 | 1 | | 08/29/16 23:43 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 08/29/16 23:43 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 86-110 | 1 | | 08/29/16 23:43 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **634** | mg/L | 10.0 | 1 | | 08/31/16 07:20 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/01/16 13:14 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.36** | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 14:05 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 08/30/16 12:22 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 4.0 | 4 | | 09/03/16 09:00 | 7440-44-0 | D3 |

**Sample: PZ-201A-SS** **Lab ID: 50152744013** Collected: 08/24/16 14:11 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.20** | Std. Units | | 1 | | 08/24/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-201A-SS** **Lab ID: 50152744013** Collected: 08/24/16 14:11 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field Temperature | **18.4** | deg C | | 1 | | 08/24/16 00:00 | | |
| Field Specific Conductance | **766** | umhos/cm | | 1 | | 08/24/16 00:00 | | |
| Field Turbidity | **5.28** | NTU | | 1 | | 08/24/16 00:00 | | |
| Total Well Depth | **86.34** | feet | | 1 | | 08/24/16 00:00 | | |
| Elevation Water Level | **470.05** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Collar Elevation | **480.20** | ft/msl | | 1 | | 08/24/16 00:00 | | |
| Depth to Water | **10.51** | feet | | 1 | | 08/24/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **3.7** | mg/L | 0.25 | 1 | | 08/31/16 04:45 | 16887-00-6 | |
| Fluoride | **0.36** | mg/L | 0.10 | 1 | | 08/31/16 04:45 | 16984-48-8 | |
| Sulfate | **61.2** | mg/L | 2.5 | 10 | | 08/31/16 05:02 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **131** | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7440-42-8 | |
| Calcium | **93200** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7440-48-4 | |
| Iron | **102** | ug/L | 50.0 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7439-89-6 | |
| Magnesium | **46300** | ug/L | 500 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7439-95-4 | |
| Manganese | **23.4** | ug/L | 5.0 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7440-02-0 | |
| Sodium | **11500** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7440-23-5 | |
| Total Hardness by 2340B | **423000** | ug/L | 1000 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 08/30/16 07:05 | 08/31/16 09:35 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/29/16 09:30 | 08/31/16 20:45 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:12 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 02:59 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 71-43-2 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-201A-SS** **Lab ID: 50152744013** Collected: 08/24/16 14:11 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 02:59 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 02:59 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 02:59 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 84-118 | 1 | | 08/30/16 02:59 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 79-116 | 1 | | 08/30/16 02:59 | 460-00-4 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-201A-SS** **Lab ID: 50152744013** Collected: 08/24/16 14:11 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 08/30/16 02:59 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **461** | mg/L | 10.0 | 1 | | 08/31/16 07:21 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | **0.31** | mg/L | 0.10 | 1 | | 09/01/16 13:16 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/02/16 11:26 | 09/02/16 14:06 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.11** | mg/L | 0.10 | 1 | | 08/30/16 12:01 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/03/16 09:00 | 7440-44-0 | |

**Sample: TRIP BLANK** **Lab ID: 50152744014** Collected: 08/24/16 08:00 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/30/16 10:54 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 95-50-1 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744014** Collected: 08/24/16 08:00 Received: 08/25/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 08/30/16 10:54 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/30/16 10:54 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 08/30/16 10:54 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 107 | %. | 84-118 | 1 | | 08/30/16 10:54 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 08/30/16 10:54 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 08/30/16 10:54 | 2037-26-5 | |

**Sample: PZ-207-AS** **Lab ID: 50152744015** Collected: 08/25/16 09:17 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.60** | Std. Units | | 1 | | 08/25/16 00:00 | | |
| Field Temperature | **21.1** | deg C | | 1 | | 08/25/16 00:00 | | |
| Field Specific Conductance | **2440** | umhos/cm | | 1 | | 08/25/16 00:00 | | |
| Field Turbidity | **0.95** | NTU | | 1 | | 08/25/16 00:00 | | |
| Total Well Depth | **38.92** | feet | | 1 | | 08/25/16 00:00 | | |
| Elevation Water Level | **433.26** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Collar Elevation | **462.48** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Depth to Water | **29.23** | feet | | 1 | | 08/25/16 00:00 | | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-207-AS** **Lab ID: 50152744015** Collected: 08/25/16 09:17 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **180** | mg/L | 25.0 | 100 | | 09/07/16 10:51 | 16887-00-6 | |
| Fluoride | ND | mg/L | 0.10 | 1 | | 08/31/16 19:54 | 16984-48-8 | |
| Sulfate | **0.66** | mg/L | 0.25 | 1 | | 08/31/16 19:54 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **562** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7440-39-3 | |
| Boron | **1040** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7440-42-8 | |
| Calcium | **122000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7440-48-4 | |
| Iron | **20900** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7439-89-6 | |
| Magnesium | **59800** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7439-95-4 | |
| Manganese | **86.4** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7439-96-5 | |
| Nickel | **20.1** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7440-02-0 | |
| Sodium | **187000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7440-23-5 | |
| Total Hardness by 2340B | **550000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | | |
| Zinc | **90.0** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 17:37 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-36-0 | |
| Arsenic | **18.5** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-47-3 | |
| Copper | **23.0** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-50-8 | |
| Lead | **6.5** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 03:42 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:14 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/02/16 17:57 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 56-23-5 | |
| Chlorobenzene | **15.9** | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 75-00-3 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-207-AS** **Lab ID: 50152744015** Collected: 08/25/16 09:17 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/02/16 17:57 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/02/16 17:57 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/02/16 17:57 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 84-118 | 1 | | 09/02/16 17:57 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 79-116 | 1 | | 09/02/16 17:57 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/02/16 17:57 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1110** | mg/L | 20.0 | 1 | | 08/31/16 09:07 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **107** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-207-AS** **Lab ID: 50152744015** Collected: 08/25/16 09:17 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | **0.44** | mg/L | 0.10 | 1 | | 09/02/16 11:18 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.65** | mg/L | 0.050 | 1 | 09/07/16 13:01 | 09/08/16 11:08 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **78.7** | mg/L | 1.0 | 10 | | 08/30/16 13:04 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **22.0** | mg/L | 20.0 | 20 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: D-87** **Lab ID: 50152744016** Collected: 08/25/16 10:17 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.99** | Std. Units | | 1 | | 08/25/16 00:00 | | |
| Field Temperature | **18.5** | deg C | | 1 | | 08/25/16 00:00 | | |
| Field Specific Conductance | **3650** | umhos/cm | | 1 | | 08/25/16 00:00 | | |
| Field Turbidity | **60.78** | NTU | | 1 | | 08/25/16 00:00 | | |
| Total Well Depth | **114.61** | feet | | 1 | | 08/25/16 00:00 | | |
| Elevation Water Level | **432.67** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Collar Elevation | **464.41** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Depth to Water | **31.74** | feet | | 1 | | 08/25/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **375** | mg/L | 25.0 | 100 | | 08/31/16 12:26 | 16887-00-6 | |
| Fluoride | ND | mg/L | 0.10 | 1 | | 08/31/16 11:54 | 16984-48-8 | |
| Sulfate | **0.38** | mg/L | 0.25 | 1 | | 08/31/16 11:54 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **2610** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7440-39-3 | |
| Boron | **1720** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7440-42-8 | |
| Calcium | **337000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:15 | 7440-70-2 | |
| Cobalt | **8.4** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7440-48-4 | |
| Iron | **59900** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7439-89-6 | |
| Magnesium | **81900** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7439-95-4 | |
| Manganese | **703** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7439-96-5 | |
| Nickel | **33.7** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7440-02-0 | |
| Sodium | **358000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:15 | 7440-23-5 | |
| Total Hardness by 2340B | **1180000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:15 | | |
| Zinc | **166** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 17:51 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-36-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-87** **Lab ID: 50152744016** Collected: 08/25/16 10:17 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Arsenic | ND | ug/L | 50.0 | 10 | 08/30/16 09:30 | 09/02/16 04:54 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-41-7 | |
| Cadmium | **1.2** | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-43-9 | |
| Chromium | **9.8** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-47-3 | |
| Copper | **91.5** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-50-8 | |
| Lead | **48.6** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 10 | 08/30/16 09:30 | 09/02/16 04:54 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-28-0 | |
| Vanadium | **16.3** | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 05:12 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:16 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 14:42 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 591-78-6 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-87** **Lab ID: 50152744016** Collected: 08/25/16 10:17 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 14:42 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 14:42 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 14:42 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 84-118 | 1 | | 09/08/16 14:42 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 79-116 | 1 | | 09/08/16 14:42 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/08/16 14:42 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1710** | mg/L | 20.0 | 1 | | 08/31/16 09:07 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **133** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/02/16 11:20 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.91** | mg/L | 0.050 | 1 | 09/07/16 13:01 | 09/08/16 11:08 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **13.2** | mg/L | 0.20 | 2 | | 08/30/16 12:31 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **22.3** | mg/L | 20.0 | 20 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: LR-103** **Lab ID: 50152744017** Collected: 08/25/16 11:41 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.81** | Std. Units | | 1 | | 08/25/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: LR-103** **Lab ID: 50152744017** Collected: 08/25/16 11:41 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field Temperature | **18.8** | deg C | | 1 | | 08/25/16 00:00 | | |
| Field Specific Conductance | **1191** | umhos/cm | | 1 | | 08/25/16 00:00 | | |
| Field Turbidity | **13.80** | NTU | | 1 | | 08/25/16 00:00 | | |
| Total Well Depth | **49.82** | feet | | 1 | | 08/25/16 00:00 | | |
| Elevation Water Level | **432.69** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Collar Elevation | **470.54** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Depth to Water | **37.85** | feet | | 1 | | 08/25/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **132** | mg/L | 25.0 | 100 | | 08/31/16 22:04 | 16887-00-6 | |
| Fluoride | **0.20** | mg/L | 0.10 | 1 | | 08/31/16 13:30 | 16984-48-8 | |
| Sulfate | **0.40** | mg/L | 0.25 | 1 | | 08/31/16 13:30 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **1180** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7440-39-3 | |
| Boron | **266** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7440-42-8 | |
| Calcium | **281000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:18 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7440-48-4 | |
| Iron | **42200** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7439-89-6 | |
| Magnesium | **70600** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7439-95-4 | |
| Manganese | **780** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7439-96-5 | |
| Nickel | **15.3** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7440-02-0 | |
| Sodium | **67300** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7440-23-5 | |
| Total Hardness by 2340B | **993000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:18 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 17:54 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-36-0 | |
| Arsenic | **119** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 03:46 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:18 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/02/16 18:31 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 71-43-2 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: LR-103** **Lab ID: 50152744017** Collected: 08/25/16 11:41 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/02/16 18:31 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/02/16 18:31 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/02/16 18:31 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/02/16 18:31 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/02/16 18:31 | 460-00-4 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: LR-103** **Lab ID: 50152744017** Collected: 08/25/16 11:41 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/02/16 18:31 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1100** | mg/L | 20.0 | 1 | | 08/31/16 09:08 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **45.5** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/02/16 11:22 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.50** | mg/L | 0.050 | 1 | 09/07/16 13:01 | 09/08/16 11:09 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **1.8** | mg/L | 0.10 | 1 | | 08/30/16 12:07 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **9.6** | mg/L | 4.0 | 4 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: PZ-101-SS** **Lab ID: 50152744018** Collected: 08/25/16 13:18 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.51** | Std. Units | | 1 | | 08/25/16 00:00 | | |
| Field Temperature | **29.0** | deg C | | 1 | | 08/25/16 00:00 | | |
| Field Specific Conductance | **1975** | umhos/cm | | 1 | | 08/25/16 00:00 | | |
| Field Turbidity | **9.65** | NTU | | 1 | | 08/25/16 00:00 | | |
| Total Well Depth | **153.49** | feet | | 1 | | 08/25/16 00:00 | | |
| Elevation Water Level | **453.61** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Collar Elevation | **491.26** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Depth to Water | **37.65** | feet | | 1 | | 08/25/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **209** | mg/L | 25.0 | 100 | | 09/01/16 00:31 | 16887-00-6 | |
| Fluoride | **1.3** | mg/L | 0.10 | 1 | | 08/31/16 14:00 | 16984-48-8 | |
| Sulfate | **1.7** | mg/L | 0.25 | 1 | | 08/31/16 14:00 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **579** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7440-39-3 | |
| Boron | **792** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7440-42-8 | |
| Calcium | **175000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7440-70-2 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-101-SS** **Lab ID: 50152744018** Collected: 08/25/16 13:18 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7440-48-4 | |
| Iron | **4830** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7439-89-6 | |
| Magnesium | **97800** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7439-95-4 | |
| Manganese | **132** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7439-96-5 | |
| Nickel | **14.8** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7440-02-0 | |
| Sodium | **94400** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7440-23-5 | |
| Total Hardness by 2340B | **840000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 17:57 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-36-0 | |
| Arsenic | **73.2** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 03:55 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:20 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/02/16 19:06 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 56-23-5 | |
| Chlorobenzene | **11.2** | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 106-46-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-101-SS** **Lab ID: 50152744018** Collected: 08/25/16 13:18 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/02/16 19:06 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/02/16 19:06 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/02/16 19:06 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 84-118 | 1 | | 09/02/16 19:06 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 79-116 | 1 | | 09/02/16 19:06 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 86-110 | 1 | | 09/02/16 19:06 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1170** | mg/L | 10.0 | 1 | | 08/31/16 09:08 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **105** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/02/16 13:07 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.14** | mg/L | 0.050 | 1 | 09/07/16 13:01 | 09/08/16 11:09 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **11.6** | mg/L | 0.20 | 2 | | 08/30/16 12:34 | 7664-41-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-101-SS** **Lab ID: 50152744018** Collected: 08/25/16 13:18 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **26.8** | mg/L | 20.0 | 20 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: PZ-102R-SS** **Lab ID: 50152744019** Collected: 08/25/16 14:27 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.99** | Std. Units | | 1 | | 08/25/16 00:00 | | |
| Field Temperature | **21.8** | deg C | | 1 | | 08/25/16 00:00 | | |
| Field Specific Conductance | **856** | umhos/cm | | 1 | | 08/25/16 00:00 | | |
| Field Turbidity | **46.20** | NTU | | 1 | | 08/25/16 00:00 | | |
| Total Well Depth | **91.10** | feet | | 1 | | 08/25/16 00:00 | | |
| Elevation Water Level | **464.98** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Collar Elevation | **485.62** | ft/msl | | 1 | | 08/25/16 00:00 | | |
| Depth to Water | **20.64** | feet | | 1 | | 08/25/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **6.8** | mg/L | 0.25 | 1 | | 08/31/16 14:31 | 16887-00-6 | |
| Fluoride | **0.60** | mg/L | 0.10 | 1 | | 08/31/16 14:31 | 16984-48-8 | |
| Sulfate | **56.8** | mg/L | 2.5 | 10 | | 08/31/16 14:46 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **88.0** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7440-39-3 | |
| Boron | **176** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7440-42-8 | |
| Calcium | **120000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7440-48-4 | |
| Iron | **5790** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7439-89-6 | |
| Magnesium | **43900** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7439-95-4 | |
| Manganese | **114** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7440-02-0 | |
| Sodium | **21900** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7440-23-5 | |
| Total Hardness by 2340B | **480000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | | |
| Zinc | **22.7** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:00 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-28-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-102R-SS** **Lab ID: 50152744019** Collected: 08/25/16 14:27 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 04:00 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:22 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/02/16 20:14 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 71-55-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-102R-SS** **Lab ID: 50152744019** Collected: 08/25/16 14:27 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/02/16 20:14 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/02/16 20:14 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/02/16 20:14 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 84-118 | 1 | | 09/02/16 20:14 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 79-116 | 1 | | 09/02/16 20:14 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 09/02/16 20:14 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **510** | mg/L | 10.0 | 1 | | 08/31/16 09:08 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/02/16 13:09 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.052** | mg/L | 0.050 | 1 | 09/07/16 13:01 | 09/08/16 11:10 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.18** | mg/L | 0.10 | 1 | | 08/30/16 12:35 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: PZ-304-AS** **Lab ID: 50152744020** Collected: 08/26/16 08:33 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.76** | Std. Units | | 1 | | 08/26/16 00:00 | | |
| Field Temperature | **18.5** | deg C | | 1 | | 08/26/16 00:00 | | |
| Field Specific Conductance | **4030** | umhos/cm | | 1 | | 08/26/16 00:00 | | |
| Field Turbidity | **57.58** | NTU | | 1 | | 08/26/16 00:00 | | |
| Total Well Depth | **29.20** | feet | | 1 | | 08/26/16 00:00 | | |
| Elevation Water Level | **432.36** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Collar Elevation | **453.61** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Depth to Water | **21.25** | feet | | 1 | | 08/26/16 00:00 | | |



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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-304-AS** **Lab ID: 50152744020** Collected: 08/26/16 08:33 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **391** | mg/L | 25.0 | 100 | | 08/31/16 15:33 | 16887-00-6 | |
| Fluoride | **0.28** | mg/L | 0.10 | 1 | | 08/31/16 15:01 | 16984-48-8 | |
| Sulfate | **0.55** | mg/L | 0.25 | 1 | | 08/31/16 15:01 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **3640** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7440-39-3 | |
| Boron | **2520** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7440-42-8 | |
| Calcium | **112000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7440-70-2 | |
| Cobalt | **6.2** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7440-48-4 | |
| Iron | **28700** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7439-89-6 | |
| Magnesium | **65500** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7439-95-4 | |
| Manganese | **116** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7439-96-5 | |
| Nickel | **66.6** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7440-02-0 | |
| Sodium | **478000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:21 | 7440-23-5 | |
| Total Hardness by 2340B | **549000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:08 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-36-0 | |
| Arsenic | **265** | ug/L | 50.0 | 10 | 08/30/16 09:30 | 09/07/16 14:20 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-43-9 | |
| Chromium | **5.2** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-28-0 | |
| Vanadium | **11.6** | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 04:09 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:24 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/01/16 12:28 | 107-13-1 | |
| Benzene | **7.3** | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 56-23-5 | |
| Chlorobenzene | **57.2** | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 75-00-3 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-304-AS** **Lab ID: 50152744020** Collected: 08/26/16 08:33 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 95-50-1 | |
| 1,4-Dichlorobenzene | **16.9** | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/01/16 12:28 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/01/16 12:28 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/01/16 12:28 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 103 | %. | 84-118 | 1 | | 09/01/16 12:28 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 79-116 | 1 | | 09/01/16 12:28 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/01/16 12:28 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1940** | mg/L | 20.0 | 1 | | 09/01/16 07:01 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **260** | mg/L | 20.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-304-AS** **Lab ID: 50152744020** Collected: 08/26/16 08:33 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.20 | 2 | | 09/02/16 14:23 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **2.6** | mg/L | 0.25 | 5 | 09/07/16 13:01 | 09/08/16 11:33 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **126** | mg/L | 2.0 | 20 | | 08/30/16 12:38 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **69.7** | mg/L | 40.0 | 40 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: PZ-304-AI** **Lab ID: 50152744021** Collected: 08/26/16 09:24 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.83** | Std. Units | | 1 | | 08/26/16 00:00 | | |
| Field Temperature | **18.4** | deg C | | 1 | | 08/26/16 00:00 | | |
| Field Specific Conductance | **2940** | umhos/cm | | 1 | | 08/26/16 00:00 | | |
| Field Turbidity | **15.94** | NTU | | 1 | | 08/26/16 00:00 | | |
| Total Well Depth | **51.99** | feet | | 1 | | 08/26/16 00:00 | | |
| Elevation Water Level | **432.36** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Collar Elevation | **453.86** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Depth to Water | **21.50** | feet | | 1 | | 08/26/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **321** | mg/L | 25.0 | 100 | | 09/07/16 11:08 | 16887-00-6 | |
| Fluoride | **0.14** | mg/L | 0.10 | 1 | | 08/31/16 16:22 | 16984-48-8 | |
| Sulfate | **2.4** | mg/L | 0.25 | 1 | | 08/31/16 16:22 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **1560** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7440-39-3 | |
| Boron | **1470** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7440-42-8 | |
| Calcium | **237000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:30 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7440-48-4 | |
| Iron | **24200** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7439-89-6 | |
| Magnesium | **79100** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7439-95-4 | |
| Manganese | **1040** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7439-96-5 | |
| Nickel | **22.8** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7440-02-0 | |
| Sodium | **278000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:30 | 7440-23-5 | |
| Total Hardness by 2340B | **916000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:30 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:11 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-36-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-304-AI** **Lab ID: 50152744021** Collected: 08/26/16 09:24 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Arsenic | **9.3** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 04:23 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:26 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/02/16 21:22 | 107-13-1 | |
| Benzene | **5.1** | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 56-23-5 | |
| Chlorobenzene | **47.5** | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 591-78-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-304-AI** **Lab ID: 50152744021** Collected: 08/26/16 09:24 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/02/16 21:22 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/02/16 21:22 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/02/16 21:22 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/02/16 21:22 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/02/16 21:22 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 86-110 | 1 | | 09/02/16 21:22 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1560** | mg/L | 20.0 | 1 | | 09/01/16 07:01 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **129** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/02/16 13:12 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.33** | mg/L | 0.050 | 1 | 09/07/16 13:01 | 09/08/16 11:11 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **35.3** | mg/L | 0.50 | 5 | | 08/30/16 12:40 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **37.5** | mg/L | 10.0 | 10 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: MW-104** **Lab ID: 50152744022** Collected: 08/26/16 10:09 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.78** | Std. Units | | 1 | | 08/26/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-104** **Lab ID: 50152744022** Collected: 08/26/16 10:09 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field Temperature | **19.3** | deg C | | 1 | | 08/26/16 00:00 | | |
| Field Specific Conductance | **1896** | umhos/cm | | 1 | | 08/26/16 00:00 | | |
| Field Turbidity | **249.3** | NTU | | 1 | | 08/26/16 00:00 | | |
| Total Well Depth | **19.15** | feet | | 1 | | 08/26/16 00:00 | | |
| Elevation Water Level | **432.41** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Collar Elevation | **440.91** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Depth to Water | **8.50** | feet | | 1 | | 08/26/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **5.5** | mg/L | 0.25 | 1 | | 08/31/16 16:54 | 16887-00-6 | |
| Fluoride | **0.46** | mg/L | 0.10 | 1 | | 08/31/16 16:54 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 08/31/16 16:54 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **854** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7440-39-3 | |
| Boron | **197** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7440-42-8 | |
| Calcium | **318000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:32 | 7440-70-2 | |
| Cobalt | **7.7** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7440-48-4 | |
| Iron | **88000** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7439-89-6 | |
| Magnesium | **104000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7439-95-4 | |
| Manganese | **4360** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7439-96-5 | |
| Nickel | **25.7** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7440-02-0 | |
| Sodium | **14600** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7440-23-5 | |
| Total Hardness by 2340B | **1220000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:32 | | |
| Zinc | **147** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:14 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-36-0 | |
| Arsenic | **116** | ug/L | 50.0 | 10 | 08/30/16 09:30 | 09/02/16 04:59 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-41-7 | |
| Cadmium | **1.2** | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-43-9 | |
| Chromium | **14.0** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-47-3 | |
| Copper | **22.0** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-50-8 | |
| Lead | **21.9** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 10 | 08/30/16 09:30 | 09/02/16 04:59 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-28-0 | |
| Vanadium | **33.6** | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 05:22 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:28 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/02/16 21:57 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 71-43-2 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-104** **Lab ID: 50152744022** Collected: 08/26/16 10:09 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/02/16 21:57 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/02/16 21:57 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/02/16 21:57 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 84-118 | 1 | | 09/02/16 21:57 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/02/16 21:57 | 460-00-4 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-104** **Lab ID: 50152744022** Collected: 08/26/16 10:09 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/02/16 21:57 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1060** | mg/L | 20.0 | 1 | | 09/01/16 07:01 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **64.8** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.20 | 2 | | 09/06/16 14:06 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **1.4** | mg/L | 0.25 | 5 | 09/07/16 13:01 | 09/08/16 11:34 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.47** | mg/L | 0.10 | 1 | | 09/01/16 14:39 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **8.3** | mg/L | 4.0 | 4 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: D-81** **Lab ID: 50152744023** Collected: 08/26/16 10:58 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.59** | Std. Units | | 1 | | 08/26/16 00:00 | | |
| Field Temperature | **17.9** | deg C | | 1 | | 08/26/16 00:00 | | |
| Field Specific Conductance | **1371** | umhos/cm | | 1 | | 08/26/16 00:00 | | |
| Field Turbidity | **37.19** | NTU | | 1 | | 08/26/16 00:00 | | |
| Total Well Depth | **62.53** | feet | | 1 | | 08/26/16 00:00 | | |
| Elevation Water Level | **432.47** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Collar Elevation | **450.87** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Depth to Water | **18.40** | feet | | 1 | | 08/26/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **6.4** | mg/L | 0.25 | 1 | | 08/31/16 17:27 | 16887-00-6 | |
| Fluoride | **0.19** | mg/L | 0.10 | 1 | | 08/31/16 17:27 | 16984-48-8 | |
| Sulfate | **21.6** | mg/L | 0.25 | 1 | | 08/31/16 17:27 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **482** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7440-39-3 | |
| Boron | **162** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7440-42-8 | |
| Calcium | **270000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:35 | 7440-70-2 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-81** **Lab ID: 50152744023** Collected: 08/26/16 10:58 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7440-48-4 | |
| Iron | **21800** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7439-89-6 | |
| Magnesium | **60600** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7439-95-4 | |
| Manganese | **969** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7439-96-5 | |
| Nickel | **16.0** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7440-02-0 | |
| Sodium | **15200** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7440-23-5 | |
| Total Hardness by 2340B | **925000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:35 | | |
| Zinc | **29.4** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:17 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-36-0 | |
| Arsenic | **10.9** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-41-7 | |
| Cadmium | **0.65** | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 04:27 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:37 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/02/16 22:31 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/02/16 22:31 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 22:31 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/02/16 22:31 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/02/16 22:31 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/02/16 22:31 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/02/16 22:31 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/02/16 22:31 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/02/16 22:31 | 106-46-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-302-AI** **Lab ID: 50152744024** Collected: 08/26/16 12:24 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 04:36 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:39 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 01:56 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 71-55-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-302-AI** **Lab ID: 50152744024** Collected: 08/26/16 12:24 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 01:56 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 01:56 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/03/16 01:56 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 84-118 | 1 | | 09/03/16 01:56 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/03/16 01:56 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/03/16 01:56 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **917** | mg/L | 10.0 | 1 | | 09/01/16 07:02 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **17.4** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 14:18 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.071** | mg/L | 0.050 | 1 | 09/07/16 13:01 | 09/08/16 11:15 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 09/01/16 14:08 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **5.3** | mg/L | 1.0 | 1 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: PZ-200-SS** **Lab ID: 50152744025** Collected: 08/26/16 14:27 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.29** | Std. Units | | 1 | | 08/26/16 00:00 | | |
| Field Temperature | **19.2** | deg C | | 1 | | 08/26/16 00:00 | | |
| Field Specific Conductance | **2770** | umhos/cm | | 1 | | 08/26/16 00:00 | | |
| Field Turbidity | **51.64** | NTU | | 1 | | 08/26/16 00:00 | | |
| Total Well Depth | **99.30** | feet | | 1 | | 08/26/16 00:00 | | |
| Elevation Water Level | **464.82** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Collar Elevation | **485.57** | ft/msl | | 1 | | 08/26/16 00:00 | | |
| Depth to Water | **20.75** | feet | | 1 | | 08/26/16 00:00 | | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-200-SS** **Lab ID: 50152744025** Collected: 08/26/16 14:27 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **696** | mg/L | 25.0 | 100 | | 09/07/16 11:24 | 16887-00-6 | |
| Fluoride | ND | mg/L | 0.10 | 1 | | 08/31/16 18:32 | 16984-48-8 | |
| Sulfate | **42.4** | mg/L | 2.5 | 10 | | 08/31/16 18:49 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **324** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7440-42-8 | |
| Calcium | **288000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:41 | 7440-70-2 | |
| Cobalt | **41.6** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7440-48-4 | |
| Iron | **53500** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7439-89-6 | |
| Magnesium | **97700** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7439-95-4 | |
| Manganese | **3230** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7439-96-5 | |
| Nickel | **96.0** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7440-02-0 | |
| Sodium | **130000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7440-23-5 | |
| Total Hardness by 2340B | **1120000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:41 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:23 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-36-0 | |
| Arsenic | **87.0** | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 08/30/16 09:30 | 09/02/16 04:41 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:41 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 02:31 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 75-00-3 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-200-SS** **Lab ID: 50152744025** Collected: 08/26/16 14:27 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 02:31 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 02:31 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/03/16 02:31 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/03/16 02:31 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 79-116 | 1 | | 09/03/16 02:31 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 86-110 | 1 | | 09/03/16 02:31 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1910** | mg/L | 10.0 | 1 | | 09/01/16 07:02 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **58.5** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-200-SS** **Lab ID: 50152744025** Collected: 08/26/16 14:27 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.20 | 2 | | 09/06/16 14:57 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **1.2** | mg/L | 0.25 | 5 | 09/07/16 13:01 | 09/08/16 11:36 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.80** | mg/L | 0.10 | 1 | | 09/01/16 14:09 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: TRIP BLANK** **Lab ID: 50152744026** Collected: 08/26/16 08:00 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 03:05 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 10061-02-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744026** Collected: 08/26/16 08:00 Received: 08/27/16 08:45 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 03:05 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 03:05 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/03/16 03:05 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 84-118 | 1 | | 09/03/16 03:05 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 79-116 | 1 | | 09/03/16 03:05 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/03/16 03:05 | 2037-26-5 | |

**Sample: PZ-206-SS** **Lab ID: 50152744027** Collected: 08/29/16 08:51 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.93** | Std. Units | | 1 | | 08/29/16 00:00 | | |
| Field Temperature | **21.2** | deg C | | 1 | | 08/29/16 00:00 | | |
| Field Specific Conductance | **1397** | umhos/cm | | 1 | | 08/29/16 00:00 | | |
| Field Turbidity | **73.43** | NTU | | 1 | | 08/29/16 00:00 | | |
| Total Well Depth | **129.74** | feet | | 1 | | 08/29/16 00:00 | | |
| Elevation Water Level | **435.23** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Collar Elevation | **463.42** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Depth to Water | **28.19** | feet | | 1 | | 08/29/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **130** | mg/L | 25.0 | 100 | | 09/02/16 13:11 | 16887-00-6 | |
| Fluoride | **1.6** | mg/L | 0.10 | 1 | | 09/02/16 11:33 | 16984-48-8 | |
| Sulfate | **50.6** | mg/L | 2.5 | 10 | | 09/02/16 12:22 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **102** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7440-39-3 | |
| Boron | **192** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7440-42-8 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-206-SS** **Lab ID: 50152744027** Collected: 08/29/16 08:51 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Calcium | **147000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7440-48-4 | |
| Iron | **5310** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7439-89-6 | |
| Magnesium | **94900** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7439-95-4 | |
| Manganese | **102** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7440-02-0 | |
| Sodium | **25300** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7440-23-5 | |
| Total Hardness by 2340B | **757000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:26 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 16:23 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/17/16 12:33 | 09/18/16 19:43 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 08:13 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 95-50-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-206-SS** **Lab ID: 50152744027** Collected: 08/29/16 08:51 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 08:13 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 08:13 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/03/16 08:13 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/03/16 08:13 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 79-116 | 1 | | 09/03/16 08:13 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 86-110 | 1 | | 09/03/16 08:13 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **829** | mg/L | 10.0 | 1 | | 09/01/16 08:51 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **70.1** | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:42 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.14** | mg/L | 0.050 | 1 | 09/09/16 11:28 | 09/12/16 09:30 | 7723-14-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-206-SS** **Lab ID: 50152744027** Collected: 08/29/16 08:51 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.26** | mg/L | 0.10 | 1 | | 09/01/16 14:14 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **20.0** | mg/L | 10.0 | 10 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: PZ-113-SS** **Lab ID: 50152744028** Collected: 08/29/16 10:14 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.48** | Std. Units | | 1 | | 08/29/16 00:00 | | |
| Field Temperature | **23.7** | deg C | | 1 | | 08/29/16 00:00 | | |
| Field Specific Conductance | **535** | umhos/cm | | 1 | | 08/29/16 00:00 | | |
| Field Turbidity | **353.6** | NTU | | 1 | | 08/29/16 00:00 | | |
| Total Well Depth | **160.21** | feet | | 1 | | 08/29/16 00:00 | | |
| Elevation Water Level | **432.64** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Collar Elevation | **461.77** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Depth to Water | **29.13** | feet | | 1 | | 08/29/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **11.5** | mg/L | 0.25 | 1 | | 09/02/16 17:32 | 16887-00-6 | |
| Fluoride | **2.8** | mg/L | 0.10 | 1 | | 09/02/16 17:32 | 16984-48-8 | |
| Sulfate | **18.3** | mg/L | 0.25 | 1 | | 09/02/16 17:32 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **214** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7440-42-8 | |
| Calcium | **119000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7440-48-4 | |
| Iron | **4300** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7439-89-6 | |
| Magnesium | **48900** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7439-95-4 | |
| Manganese | **78.1** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7440-02-0 | |
| Sodium | **19300** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7440-23-5 | |
| Total Hardness by 2340B | **498000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | | |
| Zinc | **20.2** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:29 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-41-7 | CU |
| Cadmium | **0.21** | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-43-9 | |
| Chromium | **12.3** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7439-92-1 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-113-SS** **Lab ID: 50152744028** Collected: 08/29/16 10:14 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-28-0 | |
| Vanadium | **12.9** | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 16:32 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:13 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 08:48 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 79-34-5 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-113-SS** **Lab ID: 50152744028** Collected: 08/29/16 10:14 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 08:48 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 08:48 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/03/16 08:48 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 103 | %. | 84-118 | 1 | | 09/03/16 08:48 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/03/16 08:48 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 86-110 | 1 | | 09/03/16 08:48 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **282** | mg/L | 20.0 | 1 | | 09/01/16 08:51 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/13/16 10:31 | 09/14/16 10:21 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:44 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.35** | mg/L | 0.050 | 1 | 09/09/16 11:28 | 09/12/16 09:31 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 09/01/16 14:19 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/08/16 14:37 | 7440-44-0 | |

**Sample: PZ-113-AD** **Lab ID: 50152744029** Collected: 08/29/16 11:23 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.96** | Std. Units | | 1 | | 08/29/16 00:00 | | |
| Field Temperature | **24.0** | deg C | | 1 | | 08/29/16 00:00 | | |
| Field Specific Conductance | **4500** | umhos/cm | | 1 | | 08/29/16 00:00 | | |
| Field Turbidity | **16.02** | NTU | | 1 | | 08/29/16 00:00 | | |
| Total Well Depth | **110.11** | feet | | 1 | | 08/29/16 00:00 | | |
| Elevation Water Level | **432.64** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Collar Elevation | **461.54** | ft/msl | | 1 | | 08/29/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-113-AD** **Lab ID: 50152744029** Collected: 08/29/16 11:23 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Depth to Water | **28.90** | feet | | 1 | | 08/29/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **793** | mg/L | 25.0 | 100 | | 09/02/16 18:53 | 16887-00-6 | |
| Fluoride | **0.24** | mg/L | 0.10 | 1 | | 09/02/16 18:21 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/02/16 18:21 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **2820** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7440-39-3 | |
| Boron | **1630** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7440-42-8 | |
| Calcium | **333000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:44 | 7440-70-2 | |
| Cobalt | **7.2** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7440-48-4 | |
| Iron | **39900** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7439-89-6 | |
| Magnesium | **95400** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7439-95-4 | |
| Manganese | **717** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7439-96-5 | |
| Nickel | **29.0** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7440-02-0 | |
| Sodium | **523000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:44 | 7440-23-5 | |
| Total Hardness by 2340B | **1220000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:44 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:32 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-36-0 | |
| Arsenic | **5.5** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 16:41 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:23 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 09:22 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 75-15-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-113-AD** **Lab ID: 50152744029** Collected: 08/29/16 11:23 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 09:22 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 09:22 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/03/16 09:22 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 103 | %. | 84-118 | 1 | | 09/03/16 09:22 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/03/16 09:22 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 86-110 | 1 | | 09/03/16 09:22 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **2480** | mg/L | 20.0 | 1 | | 09/01/16 08:52 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-113-AD** **Lab ID: 50152744029** Collected: 08/29/16 11:23 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **175** | mg/L | 20.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:45 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.62** | mg/L | 0.050 | 1 | 09/09/16 11:28 | 09/12/16 09:31 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **36.2** | mg/L | 0.50 | 5 | | 09/01/16 14:41 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 40.0 | 40 | | 09/12/16 18:47 | 7440-44-0 | D3 |

**Sample: PZ-113-AS** **Lab ID: 50152744030** Collected: 08/29/16 13:32 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.85** | Std. Units | | 1 | | 08/29/16 00:00 | | |
| Field Temperature | **21.3** | deg C | | 1 | | 08/29/16 00:00 | | |
| Field Specific Conductance | **1394** | umhos/cm | | 1 | | 08/29/16 00:00 | | |
| Field Turbidity | **16.44** | NTU | | 1 | | 08/29/16 00:00 | | |
| Total Well Depth | **39.17** | feet | | 1 | | 08/29/16 00:00 | | |
| Elevation Water Level | **432.57** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Collar Elevation | **461.40** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Depth to Water | **28.83** | feet | | 1 | | 08/29/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **109** | mg/L | 2.5 | 10 | | 09/02/16 20:31 | 16887-00-6 | |
| Fluoride | **0.36** | mg/L | 0.10 | 1 | | 09/02/16 20:15 | 16984-48-8 | |
| Sulfate | **12.2** | mg/L | 0.25 | 1 | | 09/02/16 20:15 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **805** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7440-39-3 | |
| Boron | **374** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7440-42-8 | |
| Calcium | **186000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7440-70-2 | |
| Cobalt | **10.4** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7440-48-4 | |
| Iron | **9340** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7439-89-6 | |
| Magnesium | **50800** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7439-95-4 | |
| Manganese | **5460** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7439-96-5 | |
| Nickel | **27.9** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7440-02-0 | |
| Sodium | **67000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7440-23-5 | |
| Total Hardness by 2340B | **674000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:35 | 7440-66-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-113-AS** **Lab ID: 50152744030** Collected: 08/29/16 13:32 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-36-0 | |
| Arsenic | **23.2** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 16:50 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:25 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 09:56 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 100-41-4 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-113-AS** **Lab ID: 50152744030** Collected: 08/29/16 13:32 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 09:56 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 09:56 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/03/16 09:56 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/03/16 09:56 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/03/16 09:56 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/03/16 09:56 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **831** | mg/L | 10.0 | 1 | | 09/01/16 08:52 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **19.7** | mg/L | 10.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:47 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.23** | mg/L | 0.050 | 1 | 09/09/16 11:28 | 09/12/16 09:32 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **1.6** | mg/L | 0.10 | 1 | | 09/01/16 14:43 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **5.6** | mg/L | 4.0 | 4 | | 09/12/16 18:47 | 7440-44-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-103-SS** **Lab ID: 50152744031** Collected: 08/29/16 14:48 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.36** | Std. Units | | 1 | | 08/29/16 00:00 | | |
| Field Temperature | **29.4** | deg C | | 1 | | 08/29/16 00:00 | | |
| Field Specific Conductance | **2050** | umhos/cm | | 1 | | 08/29/16 00:00 | | |
| Field Turbidity | **35.74** | NTU | | 1 | | 08/29/16 00:00 | | |
| Total Well Depth | **149.66** | feet | | 1 | | 08/29/16 00:00 | | |
| Elevation Water Level | **469.43** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Collar Elevation | **483.56** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Depth to Water | **14.13** | feet | | 1 | | 08/29/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **17.9** | mg/L | 2.5 | 10 | | 09/02/16 21:20 | 16887-00-6 | |
| Fluoride | **0.90** | mg/L | 0.10 | 1 | | 09/02/16 21:04 | 16984-48-8 | |
| Sulfate | **0.97** | mg/L | 0.25 | 1 | | 09/02/16 21:04 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **778** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7440-39-3 | |
| Boron | **368** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7440-42-8 | |
| Calcium | **306000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:47 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7440-48-4 | |
| Iron | **23900** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7439-89-6 | |
| Magnesium | **105000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7439-95-4 | |
| Manganese | **676** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7439-96-5 | |
| Nickel | **11.8** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7440-02-0 | |
| Sodium | **78000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7440-23-5 | |
| Total Hardness by 2340B | **1200000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:47 | | |
| Zinc | **33.2** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:44 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-41-7 | CU |
| Cadmium | **0.47** | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-43-9 | |
| Chromium | **7.8** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-47-3 | |
| Copper | **5.0** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-28-0 | |
| Vanadium | **13.2** | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 16:59 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:28 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/03/16 10:30 | 107-13-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-103-SS** **Lab ID: 50152744031** Collected: 08/29/16 14:48 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | **66.3** | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 95-50-1 | |
| 1,4-Dichlorobenzene | **5.3** | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 10061-02-6 | |
| Ethylbenzene | **7.1** | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 127-18-4 | |
| Toluene | **14.0** | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/03/16 10:30 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/03/16 10:30 | 75-01-4 | |
| Xylene (Total) | **5.7** | ug/L | 5.0 | 1 | | 09/03/16 10:30 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/03/16 10:30 | 1868-53-7 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-103-SS** **Lab ID: 50152744031** Collected: 08/29/16 14:48 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| *Surrogates* | | | | | | | | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 09/03/16 10:30 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 86-110 | 1 | | 09/03/16 10:30 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1240** | mg/L | 10.0 | 1 | | 09/01/16 08:52 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **27.0** | mg/L | 10.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:49 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.69** | mg/L | 0.050 | 1 | 09/09/16 11:28 | 09/12/16 09:33 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.37** | mg/L | 0.10 | 1 | | 09/01/16 14:22 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 10.0 | 10 | | 09/12/16 18:47 | 7440-44-0 | D3 |

**Sample: PZ-203-SS** **Lab ID: 50152744032** Collected: 08/29/16 16:02 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.21** | Std. Units | | 1 | | 08/29/16 00:00 | | |
| Field Temperature | **19.1** | deg C | | 1 | | 08/29/16 00:00 | | |
| Field Specific Conductance | **742** | umhos/cm | | 1 | | 08/29/16 00:00 | | |
| Field Turbidity | **11.26** | NTU | | 1 | | 08/29/16 00:00 | | |
| Total Well Depth | **111.10** | feet | | 1 | | 08/29/16 00:00 | | |
| Elevation Water Level | **461.34** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Collar Elevation | **486.44** | ft/msl | | 1 | | 08/29/16 00:00 | | |
| Depth to Water | **25.10** | feet | | 1 | | 08/29/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **9.0** | mg/L | 0.25 | 1 | | 09/02/16 21:53 | 16887-00-6 | |
| Fluoride | **0.55** | mg/L | 0.10 | 1 | | 09/02/16 21:53 | 16984-48-8 | |
| Sulfate | **52.6** | mg/L | 2.5 | 10 | | 09/02/16 22:09 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **102** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7440-39-3 | |
| Boron | **123** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7440-42-8 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-203-SS** **Lab ID: 50152744032** Collected: 08/29/16 16:02 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Calcium | **103000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7440-48-4 | |
| Iron | **1750** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7439-89-6 | |
| Magnesium | **45300** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7439-95-4 | |
| Manganese | **17.4** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7440-02-0 | |
| Sodium | **8800** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7440-23-5 | |
| Total Hardness by 2340B | **443000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:46 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 17:41 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:30 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/06/16 14:30 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 95-50-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-203-SS** **Lab ID: 50152744032** Collected: 08/29/16 16:02 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/06/16 14:30 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/06/16 14:30 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/06/16 14:30 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 103 | %. | 84-118 | 1 | | 09/06/16 14:30 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/06/16 14:30 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/06/16 14:30 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **443** | mg/L | 10.0 | 1 | | 09/01/16 08:53 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **22.7** | mg/L | 10.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:50 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/09/16 11:28 | 09/12/16 09:35 | 7723-14-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-203-SS** **Lab ID: 50152744032** Collected: 08/29/16 16:02 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.11** | mg/L | 0.10 | 1 | | 09/01/16 14:23 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **5.9** | mg/L | 1.0 | 1 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: PZ-205-AS** **Lab ID: 50152744033** Collected: 08/30/16 08:45 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.68** | Std. Units | | 1 | | 08/30/16 00:00 | | |
| Field Temperature | **21.7** | deg C | | 1 | | 08/30/16 00:00 | | |
| Field Specific Conductance | **4500** | umhos/cm | | 1 | | 08/30/16 00:00 | | |
| Field Turbidity | **278.7** | NTU | | 1 | | 08/30/16 00:00 | | |
| Total Well Depth | **53.88** | feet | | 1 | | 08/30/16 00:00 | | |
| Elevation Water Level | **433.88** | ft/msl | | 1 | | 08/30/16 00:00 | | |
| Collar Elevation | **464.77** | ft/msl | | 1 | | 08/30/16 00:00 | | |
| Depth to Water | **30.89** | feet | | 1 | | 08/30/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **973** | mg/L | 25.0 | 100 | | 09/03/16 00:03 | 16887-00-6 | |
| Fluoride | **0.28** | mg/L | 0.10 | 1 | | 09/02/16 23:30 | 16984-48-8 | |
| Sulfate | **0.30** | mg/L | 0.25 | 1 | | 09/02/16 23:30 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **3640** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7440-39-3 | |
| Boron | **1430** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7440-42-8 | |
| Calcium | **484000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:50 | 7440-70-2 | |
| Cobalt | **7.2** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7440-48-4 | |
| Iron | **78400** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7439-89-6 | |
| Magnesium | **138000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7439-95-4 | |
| Manganese | **1080** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7439-96-5 | |
| Nickel | **40.1** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7440-02-0 | |
| Sodium | **294000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:50 | 7440-23-5 | |
| Total Hardness by 2340B | **1780000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:50 | | |
| Zinc | **69.0** | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:49 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-36-0 | |
| Arsenic | **53.1** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-41-7 | CU |
| Cadmium | **0.38** | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-43-9 | |
| Chromium | **22.2** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-47-3 | |
| Copper | **25.2** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-50-8 | |
| Lead | **22.5** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7439-92-1 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-205-AS** **Lab ID: 50152744033** Collected: 08/30/16 08:45 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-28-0 | |
| Vanadium | **31.5** | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 18:21 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:32 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/06/16 15:04 | 107-13-1 | |
| Benzene | **547** | ug/L | 100 | 20 | | 09/07/16 19:40 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 56-23-5 | |
| Chlorobenzene | **7.8** | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 95-50-1 | |
| 1,4-Dichlorobenzene | **22.9** | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 10061-02-6 | |
| Ethylbenzene | **23.2** | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 79-34-5 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-205-AS** **Lab ID: 50152744033** Collected: 08/30/16 08:45 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 127-18-4 | |
| Toluene | **89.6** | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/06/16 15:04 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/06/16 15:04 | 75-01-4 | |
| Xylene (Total) | **63.1** | ug/L | 5.0 | 1 | | 09/06/16 15:04 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 84-118 | 1 | | 09/06/16 15:04 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/06/16 15:04 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 86-110 | 1 | | 09/06/16 15:04 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **3340** | mg/L | 40.0 | 1 | | 09/01/16 11:03 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **597** | mg/L | 10.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:57 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **1.5** | mg/L | 0.10 | 1 | 09/09/16 11:28 | 09/12/16 09:35 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **24.8** | mg/L | 0.50 | 5 | | 09/01/16 14:45 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **103** | mg/L | 100 | 100 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: PZ-107-SS** **Lab ID: 50152744034** Collected: 08/30/16 09:59 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.70** | Std. Units | | 1 | | 08/30/16 00:00 | | |
| Field Temperature | **21.6** | deg C | | 1 | | 08/30/16 00:00 | | |
| Field Specific Conductance | **2980** | umhos/cm | | 1 | | 08/30/16 00:00 | | |
| Field Turbidity | **9.73** | NTU | | 1 | | 08/30/16 00:00 | | |
| Total Well Depth | **103.78** | feet | | 1 | | 08/30/16 00:00 | | |
| Elevation Water Level | **432.83** | ft/msl | | 1 | | 08/30/16 00:00 | | |
| Collar Elevation | **464.56** | ft/msl | | 1 | | 08/30/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-107-SS** **Lab ID: 50152744034** Collected: 08/30/16 09:59 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Depth to Water | **31.73** | feet | | 1 | | 08/30/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **460** | mg/L | 25.0 | 100 | | 09/03/16 00:52 | 16887-00-6 | |
| Fluoride | **0.54** | mg/L | 0.10 | 1 | | 09/03/16 00:19 | 16984-48-8 | |
| Sulfate | **35.7** | mg/L | 2.5 | 10 | | 09/03/16 00:36 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **950** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7440-39-3 | |
| Boron | **1080** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7440-42-8 | |
| Calcium | **266000** | ug/L | 2500 | 5 | 09/08/16 07:31 | 09/08/16 20:53 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7440-48-4 | |
| Iron | **8730** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7439-89-6 | |
| Magnesium | **136000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7439-95-4 | |
| Manganese | **140** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7439-96-5 | |
| Nickel | **46.1** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7440-02-0 | |
| Sodium | **190000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7440-23-5 | |
| Total Hardness by 2340B | **1220000** | ug/L | 5000 | 5 | 09/08/16 07:31 | 09/08/16 20:53 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:52 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-36-0 | |
| Arsenic | **8.2** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-43-9 | |
| Chromium | **8.8** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 18:31 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:34 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/06/16 15:39 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 75-15-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-107-SS** **Lab ID: 50152744034** Collected: 08/30/16 09:59 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/06/16 15:39 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/06/16 15:39 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/06/16 15:39 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 84-118 | 1 | | 09/06/16 15:39 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 09/06/16 15:39 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 09/06/16 15:39 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1970** | mg/L | 10.0 | 1 | | 09/01/16 11:04 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-107-SS** **Lab ID: 50152744034** Collected: 08/30/16 09:59 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **229** | mg/L | 10.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 13:58 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.40** | mg/L | 0.10 | 1 | 09/09/16 11:28 | 09/12/16 09:36 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **26.2** | mg/L | 0.50 | 5 | | 09/01/16 14:48 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **47.9** | mg/L | 40.0 | 40 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: LR-100** **Lab ID: 50152744035** Collected: 08/30/16 11:45 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.69** | Std. Units | | 1 | | 08/30/16 00:00 | | |
| Field Temperature | **19.0** | deg C | | 1 | | 08/30/16 00:00 | | |
| Field Specific Conductance | **2310** | umhos/cm | | 1 | | 08/30/16 00:00 | | |
| Field Turbidity | **8.82** | NTU | | 1 | | 08/30/16 00:00 | | |
| Total Well Depth | **26.99** | feet | | 1 | | 08/30/16 00:00 | | |
| Elevation Water Level | **452.42** | ft/msl | | 1 | | 08/30/16 00:00 | | |
| Collar Elevation | **468.14** | ft/msl | | 1 | | 08/30/16 00:00 | | |
| Depth to Water | **15.72** | feet | | 1 | | 08/30/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **119** | mg/L | 25.0 | 100 | | 09/03/16 01:41 | 16887-00-6 | |
| Fluoride | **0.32** | mg/L | 0.10 | 1 | | 09/03/16 01:08 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/03/16 01:08 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **432** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7440-39-3 | |
| Boron | **1800** | ug/L | 100 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7440-42-8 | |
| Calcium | **126000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7440-48-4 | |
| Iron | **21500** | ug/L | 50.0 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7439-89-6 | |
| Magnesium | **61000** | ug/L | 500 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7439-95-4 | |
| Manganese | **207** | ug/L | 5.0 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7439-96-5 | |
| Nickel | **15.6** | ug/L | 10.0 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7440-02-0 | |
| Sodium | **138000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7440-23-5 | |
| Total Hardness by 2340B | **566000** | ug/L | 1000 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:31 | 09/08/16 18:55 | 7440-66-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: LR-100** **Lab ID: 50152744035** Collected: 08/30/16 11:45 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-41-7 | CU |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-50-8 | |
| Lead | **5.2** | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/02/16 10:00 | 09/07/16 17:50 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:36 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/06/16 13:56 | 107-13-1 | |
| Benzene | **9.4** | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 56-23-5 | |
| Chlorobenzene | **47.1** | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 95-50-1 | |
| 1,4-Dichlorobenzene | **6.6** | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 100-41-4 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: LR-100** **Lab ID: 50152744035** Collected: 08/30/16 11:45 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/06/16 13:56 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/06/16 13:56 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/06/16 13:56 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 84-118 | 1 | | 09/06/16 13:56 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/06/16 13:56 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 86-110 | 1 | | 09/06/16 13:56 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **981** | mg/L | 10.0 | 1 | | 09/01/16 11:04 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **88.6** | mg/L | 10.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/06/16 14:00 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.35** | mg/L | 0.050 | 1 | 09/09/16 11:28 | 09/12/16 09:36 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **90.2** | mg/L | 2.0 | 20 | | 09/01/16 14:51 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **24.4** | mg/L | 10.0 | 10 | | 09/12/16 18:47 | 7440-44-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744036** Collected: 08/30/16 08:00 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/06/16 13:21 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/06/16 13:21 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/06/16 13:21 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/06/16 13:21 | 1330-20-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744036** Collected: 08/30/16 08:00 Received: 08/31/16 08:25 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 84-118 | 1 | | 09/06/16 13:21 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/06/16 13:21 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/06/16 13:21 | 2037-26-5 | |

**Sample: S-5** **Lab ID: 50152744037** Collected: 08/31/16 09:43 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.96** | Std. Units | | 1 | | 08/31/16 00:00 | | |
| Field Temperature | **19.4** | deg C | | 1 | | 08/31/16 00:00 | | |
| Field Specific Conductance | **4780** | umhos/cm | | 1 | | 08/31/16 00:00 | | |
| Field Turbidity | **86.56** | NTU | | 1 | | 08/31/16 00:00 | | |
| Total Well Depth | **43.54** | feet | | 1 | | 08/31/16 00:00 | | |
| Elevation Water Level | **433.31** | ft/msl | | 1 | | 08/31/16 00:00 | | |
| Collar Elevation | **465.75** | ft/msl | | 1 | | 08/31/16 00:00 | | |
| Depth to Water | **32.44** | feet | | 1 | | 08/31/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **331** | mg/L | 25.0 | 100 | | 09/07/16 19:36 | 16887-00-6 | |
| Fluoride | ND | mg/L | 0.10 | 1 | | 09/07/16 19:03 | 16984-48-8 | |
| Sulfate | **0.30** | mg/L | 0.25 | 1 | | 09/07/16 19:03 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **596** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7440-39-3 | |
| Boron | **2850** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7440-42-8 | |
| Calcium | **55900** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7440-70-2 | |
| Cobalt | **9.5** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7440-48-4 | |
| Iron | **20100** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7439-89-6 | |
| Magnesium | **64300** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7439-95-4 | |
| Manganese | **144** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7439-96-5 | |
| Nickel | **58.2** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7440-02-0 | |
| Sodium | **480000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:13 | 7440-23-5 | |
| Total Hardness by 2340B | **404000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | | |
| Zinc | **59.6** | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:20 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-36-0 | |
| Arsenic | **14.5** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-41-7 | |
| Cadmium | **0.77** | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-43-9 | |
| Chromium | **6.5** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-47-3 | |
| Copper | **10.8** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-50-8 | |
| Lead | **14.9** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7439-92-1 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-5** **Lab ID: 50152744037** Collected: 08/31/16 09:43 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 13:19 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:38 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/07/16 22:15 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 95-50-1 | |
| 1,4-Dichlorobenzene | **7.5** | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 79-34-5 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-5** **Lab ID: 50152744037** Collected: 08/31/16 09:43 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/07/16 22:15 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/07/16 22:15 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/07/16 22:15 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/07/16 22:15 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/07/16 22:15 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 86-110 | 1 | | 09/07/16 22:15 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **2060** | mg/L | 20.0 | 1 | | 09/06/16 10:26 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **413** | mg/L | 10.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/13/16 14:05 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **4.3** | mg/L | 0.25 | 5 | 09/09/16 11:28 | 09/12/16 10:01 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **237** | mg/L | 4.0 | 40 | | 09/12/16 17:58 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **70.5** | mg/L | 40.0 | 40 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: I-4** **Lab ID: 50152744038** Collected: 08/31/16 10:50 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.88** | Std. Units | | 1 | | 08/31/16 00:00 | | |
| Field Temperature | **20.2** | deg C | | 1 | | 08/31/16 00:00 | | |
| Field Specific Conductance | **3140** | umhos/cm | | 1 | | 08/31/16 00:00 | | |
| Field Turbidity | **21.40** | NTU | | 1 | | 08/31/16 00:00 | | |
| Total Well Depth | **35.95** | feet | | 1 | | 08/31/16 00:00 | | |
| Elevation Water Level | **432.65** | ft/msl | | 1 | | 08/31/16 00:00 | | |
| Collar Elevation | **465.32** | ft/msl | | 1 | | 08/31/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-4** **Lab ID: 50152744038** Collected: 08/31/16 10:50 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Depth to Water | **32.67** | feet | | 1 | | 08/31/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **157** | mg/L | 25.0 | 100 | | 09/07/16 20:57 | 16887-00-6 | |
| Fluoride | ND | mg/L | 0.10 | 1 | | 09/07/16 20:24 | 16984-48-8 | |
| Sulfate | **0.36** | mg/L | 0.25 | 1 | | 09/07/16 20:24 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **657** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7440-39-3 | |
| Boron | **1860** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7440-42-8 | |
| Calcium | **98700** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7440-48-4 | |
| Iron | **22100** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7439-89-6 | |
| Magnesium | **61100** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7439-95-4 | |
| Manganese | **442** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7439-96-5 | |
| Nickel | **16.9** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7440-02-0 | |
| Sodium | **269000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:16 | 7440-23-5 | |
| Total Hardness by 2340B | **498000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:29 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-36-0 | |
| Arsenic | **7.7** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-41-7 | |
| Cadmium | **0.22** | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 13:28 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:40 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/07/16 22:32 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 75-15-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-4** **Lab ID: 50152744038** Collected: 08/31/16 10:50 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 56-23-5 | |
| Chlorobenzene | **10.9** | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/07/16 22:32 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/07/16 22:32 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/07/16 22:32 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 84-118 | 1 | | 09/07/16 22:32 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/07/16 22:32 | 460-00-4 | |
| Toluene-d8 (S) | 104 | %. | 86-110 | 1 | | 09/07/16 22:32 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1460** | mg/L | 10.0 | 1 | | 09/06/16 10:27 | | |

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(317)228-3100

# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-4** **Lab ID: 50152744038** Collected: 08/31/16 10:50 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **246** | mg/L | 10.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/13/16 14:06 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **2.6** | mg/L | 0.25 | 5 | 09/09/16 11:28 | 09/12/16 10:02 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **126** | mg/L | 2.0 | 20 | | 09/12/16 15:22 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **40.3** | mg/L | 40.0 | 40 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: D-3** **Lab ID: 50152744039** Collected: 08/31/16 11:39 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.99** | Std. Units | | 1 | | 08/31/16 00:00 | | |
| Field Temperature | **20.1** | deg C | | 1 | | 08/31/16 00:00 | | |
| Field Specific Conductance | **4180** | umhos/cm | | 1 | | 08/31/16 00:00 | | |
| Field Turbidity | **109.2** | NTU | | 1 | | 08/31/16 00:00 | | |
| Total Well Depth | **107.70** | feet | | 1 | | 08/31/16 00:00 | | |
| Elevation Water Level | **432.62** | ft/msl | | 1 | | 08/31/16 00:00 | | |
| Collar Elevation | **467.92** | ft/msl | | 1 | | 08/31/16 00:00 | | |
| Depth to Water | **35.30** | feet | | 1 | | 08/31/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **643** | mg/L | 25.0 | 100 | | 09/07/16 22:02 | 16887-00-6 | |
| Fluoride | **0.23** | mg/L | 0.10 | 1 | | 09/07/16 21:30 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/07/16 21:30 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **2560** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7440-39-3 | |
| Boron | **1830** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7440-42-8 | |
| Calcium | **263000** | ug/L | 2500 | 5 | 09/08/16 07:33 | 09/09/16 16:18 | 7440-70-2 | |
| Cobalt | **6.4** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7440-48-4 | |
| Iron | **28700** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7439-89-6 | |
| Magnesium | **78600** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7439-95-4 | |
| Manganese | **330** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7439-96-5 | |
| Nickel | **25.9** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7440-02-0 | |
| Sodium | **496000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:18 | 7440-23-5 | |
| Total Hardness by 2340B | **980000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:18 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:32 | 7440-66-6 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-3** **Lab ID: 50152744039** Collected: 08/31/16 11:39 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-36-0 | |
| Arsenic | **6.3** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 13:33 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:49 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 01:41 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 56-23-5 | |
| Chlorobenzene | **5.6** | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 100-41-4 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-3** **Lab ID: 50152744039** Collected: 08/31/16 11:39 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 01:41 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 01:41 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 01:41 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/08/16 01:41 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 79-116 | 1 | | 09/08/16 01:41 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/08/16 01:41 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **2270** | mg/L | 10.0 | 1 | | 09/06/16 10:28 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **255** | mg/L | 10.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/13/16 14:08 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.74** | mg/L | 0.050 | 1 | 09/14/16 09:10 | 09/14/16 14:16 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **43.1** | mg/L | 1.0 | 10 | | 09/12/16 15:25 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **47.1** | mg/L | 20.0 | 20 | | 09/12/16 18:47 | 7440-44-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-73** **Lab ID: 50152744040** Collected: 08/31/16 13:34 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.08** | Std. Units | | 1 | | 08/31/16 00:00 | | |
| Field Temperature | **20.3** | deg C | | 1 | | 08/31/16 00:00 | | |
| Field Specific Conductance | **3850** | umhos/cm | | 1 | | 08/31/16 00:00 | | |
| Total Well Depth | **50.75** | feet | | 1 | | 08/31/16 00:00 | | |
| Elevation Water Level | **432.61** | ft/msl | | 1 | | 08/31/16 00:00 | | |
| Collar Elevation | **461.96** | ft/msl | | 1 | | 08/31/16 00:00 | | |
| Depth to Water | **29.35** | feet | | 1 | | 08/31/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **553** | mg/L | 25.0 | 100 | | 09/07/16 22:51 | 16887-00-6 | |
| Fluoride | **0.42** | mg/L | 0.10 | 1 | | 09/07/16 22:19 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/07/16 22:19 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **1380** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7440-39-3 | |
| Boron | **3260** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7440-42-8 | |
| Calcium | **98300** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7440-70-2 | |
| Cobalt | **12.3** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7440-48-4 | |
| Iron | **49200** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7439-89-6 | |
| Magnesium | **47300** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7439-95-4 | |
| Manganese | **404** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7439-96-5 | |
| Nickel | **89.5** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7440-02-0 | |
| Sodium | **362000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:21 | 7440-23-5 | |
| Total Hardness by 2340B | **440000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | | |
| Zinc | **1390** | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:35 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-36-0 | |
| Arsenic | **143** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-41-7 | |
| Cadmium | **2.2** | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-43-9 | |
| Chromium | **32.1** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-47-3 | |
| Copper | **9.9** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-50-8 | |
| Lead | **83.7** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-28-0 | |
| Vanadium | **24.6** | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 13:15 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:51 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 02:16 | 107-13-1 | |
| Benzene | **69.7** | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 71-43-2 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-73** **Lab ID: 50152744040** Collected: 08/31/16 13:34 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 56-23-5 | |
| Chlorobenzene | **22.3** | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 02:16 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 02:16 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 02:16 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 84-118 | 1 | | 09/08/16 02:16 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/08/16 02:16 | 460-00-4 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-73** **Lab ID: 50152744040** Collected: 08/31/16 13:34 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| *Surrogates* | | | | | | | | |
| Toluene-d8 (S) | 102 | %. | 86-110 | 1 | | 09/08/16 02:16 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1550** | mg/L | 10.0 | 1 | | 09/06/16 10:28 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **233** | mg/L | 20.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/13/16 14:10 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **1.3** | mg/L | 0.25 | 5 | 09/14/16 09:10 | 09/14/16 14:43 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **170** | mg/L | 2.0 | 20 | | 09/12/16 15:28 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **49.2** | mg/L | 40.0 | 40 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: MW-1204** **Lab ID: 50152744041** Collected: 09/01/16 08:57 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.57** | Std. Units | | 1 | | 09/01/16 00:00 | | |
| Field Temperature | **26.1** | deg C | | 1 | | 09/01/16 00:00 | | |
| Field Specific Conductance | **3200** | umhos/cm | | 1 | | 09/01/16 00:00 | | |
| Field Turbidity | **61.56** | NTU | | 1 | | 09/01/16 00:00 | | |
| Total Well Depth | **215.19** | feet | | 1 | | 09/01/16 00:00 | | |
| Elevation Water Level | **470.49** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Collar Elevation | **478.04** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Depth to Water | **7.55** | feet | | 1 | | 09/01/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **837** | mg/L | 25.0 | 100 | | 09/07/16 23:56 | 16887-00-6 | |
| Fluoride | ND | mg/L | 1.0 | 10 | | 09/07/16 23:40 | 16984-48-8 | |
| Sulfate | ND | mg/L | 2.5 | 10 | | 09/07/16 23:40 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **5400** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7440-39-3 | |
| Boron | **2590** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7440-42-8 | |
| Calcium | **418000** | ug/L | 2500 | 5 | 09/08/16 07:33 | 09/09/16 16:24 | 7440-70-2 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-1204** **Lab ID: 50152744041** Collected: 09/01/16 08:57 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7440-48-4 | |
| Iron | **15800** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7439-89-6 | |
| Magnesium | **132000** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7439-95-4 | |
| Manganese | **790** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7439-96-5 | |
| Nickel | **14.3** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7440-02-0 | |
| Sodium | **389000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:24 | 7440-23-5 | |
| Total Hardness by 2340B | **1580000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:24 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:38 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-36-0 | D3 |
| Arsenic | **16.0** | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-38-2 | D3 |
| Beryllium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-41-7 | D3 |
| Cadmium | ND | ug/L | 1.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-43-9 | D3 |
| Chromium | **51.4** | ug/L | 25.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-50-8 | D3 |
| Lead | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7439-92-1 | D3 |
| Selenium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-22-4 | D3 |
| Thallium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-28-0 | D3 |
| Vanadium | **12.3** | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:05 | 7440-62-2 | D3,N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:53 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | **1780** | ug/L | 100 | 10 | | 09/08/16 15:51 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 02:50 | 107-13-1 | |
| Benzene | **11.7** | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 74-83-9 | |
| 2-Butanone (MEK) | **1320** | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 106-46-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-1204** **Lab ID: 50152744041** Collected: 09/01/16 08:57 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 100-41-4 | |
| 2-Hexanone | **19.1** | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | **25.6** | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 127-18-4 | |
| Toluene | **70.5** | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 02:50 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 02:50 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 02:50 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 84-118 | 1 | | 09/08/16 02:50 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/08/16 02:50 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/08/16 02:50 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **3710** | mg/L | 20.0 | 1 | | 09/06/16 10:48 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **1780** | mg/L | 50.0 | 1 | 09/21/16 07:48 | 09/21/16 11:51 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.50 | 5 | | 09/13/16 14:17 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.17** | mg/L | 0.050 | 1 | 09/14/16 09:10 | 09/14/16 14:18 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **75.9** | mg/L | 1.0 | 10 | | 09/12/16 15:31 | 7664-41-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-1204** **Lab ID: 50152744041** Collected: 09/01/16 08:57 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **473** | mg/L | 100 | 100 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: MW-1204 DUP** **Lab ID: 50152744042** Collected: 09/01/16 08:57 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **774** | mg/L | 25.0 | 100 | | 09/08/16 00:45 | 16887-00-6 | |
| Fluoride | ND | mg/L | 1.0 | 10 | | 09/08/16 00:29 | 16984-48-8 | |
| Sulfate | ND | mg/L | 2.5 | 10 | | 09/08/16 00:29 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **5490** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7440-39-3 | |
| Boron | **2600** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7440-42-8 | |
| Calcium | **415000** | ug/L | 2500 | 5 | 09/08/16 07:33 | 09/09/16 16:27 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7440-48-4 | |
| Iron | **15900** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7439-89-6 | |
| Magnesium | **133000** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7439-95-4 | |
| Manganese | **796** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7439-96-5 | |
| Nickel | **14.6** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7440-02-0 | |
| Sodium | **387000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:27 | 7440-23-5 | |
| Total Hardness by 2340B | **1580000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:27 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:41 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-36-0 | D3 |
| Arsenic | **15.5** | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-38-2 | D3 |
| Beryllium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-41-7 | D3 |
| Cadmium | ND | ug/L | 1.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-43-9 | D3 |
| Chromium | **49.4** | ug/L | 25.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-50-8 | D3 |
| Lead | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7439-92-1 | D3 |
| Selenium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-22-4 | D3 |
| Thallium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-28-0 | D3 |
| Vanadium | **11.7** | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:14 | 7440-62-2 | D3,N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:55 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | **1450** | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 03:24 | 107-13-1 | |
| Benzene | **10.8** | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 74-97-5 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-1204 DUP** **Lab ID: 50152744042** Collected: 09/01/16 08:57 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 74-83-9 | |
| 2-Butanone (MEK) | **1080** | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 100-41-4 | |
| 2-Hexanone | **16.5** | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | **22.9** | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 127-18-4 | |
| Toluene | **62.9** | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 03:24 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 03:24 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 03:24 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/08/16 03:24 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/08/16 03:24 | 460-00-4 | |
| Toluene-d8 (S) | 105 | %. | 86-110 | 1 | | 09/08/16 03:24 | 2037-26-5 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: MW-1204 DUP** **Lab ID: 50152744042** Collected: 09/01/16 08:57 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **3740** | mg/L | 20.0 | 1 | | 09/06/16 10:48 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **1810** | mg/L | 50.0 | 1 | 09/21/16 07:48 | 09/21/16 11:51 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.50 | 5 | | 09/13/16 14:20 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.17** | mg/L | 0.050 | 1 | 09/14/16 09:10 | 09/14/16 14:18 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **73.7** | mg/L | 2.0 | 20 | | 09/12/16 15:33 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **482** | mg/L | 100 | 100 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: PZ-112-AS** **Lab ID: 50152744043** Collected: 09/01/16 10:16 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.71** | Std. Units | | 1 | | 09/01/16 00:00 | | |
| Field Temperature | **18.8** | deg C | | 1 | | 09/01/16 00:00 | | |
| Field Specific Conductance | **2250** | umhos/cm | | 1 | | 09/01/16 00:00 | | |
| Field Turbidity | **9.63** | NTU | | 1 | | 09/01/16 00:00 | | |
| Total Well Depth | **38.41** | feet | | 1 | | 09/01/16 00:00 | | |
| Elevation Water Level | **432.61** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Collar Elevation | **462.50** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Depth to Water | **29.89** | feet | | 1 | | 09/01/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **107** | mg/L | 2.5 | 10 | | 09/08/16 01:34 | 16887-00-6 | |
| Fluoride | **0.48** | mg/L | 0.10 | 1 | | 09/08/16 01:18 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/08/16 01:18 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **1610** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7440-39-3 | |
| Boron | **918** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7440-42-8 | |
| Calcium | **95900** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7440-48-4 | |
| Iron | **25800** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7439-89-6 | |
| Magnesium | **55500** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7439-95-4 | |
| Manganese | **116** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7439-96-5 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-112-AS** **Lab ID: 50152744043** Collected: 09/01/16 10:16 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7440-02-0 | |
| Sodium | **87200** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7440-23-5 | |
| Total Hardness by 2340B | **468000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:44 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-36-0 | |
| Arsenic | **217** | ug/L | 50.0 | 10 | 09/07/16 08:30 | 09/15/16 17:23 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 06:36 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:57 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 03:59 | 107-13-1 | |
| Benzene | **15.8** | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 56-23-5 | |
| Chlorobenzene | **1000** | ug/L | 50.0 | 10 | | 09/08/16 17:00 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 95-50-1 | |
| 1,4-Dichlorobenzene | **10.9** | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 75-35-4 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-112-AS** **Lab ID: 50152744043** Collected: 09/01/16 10:16 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 03:59 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 03:59 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 03:59 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 94 | %. | 84-118 | 1 | | 09/08/16 03:59 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 09/08/16 03:59 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 86-110 | 1 | | 09/08/16 03:59 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **786** | mg/L | 10.0 | 1 | | 09/06/16 10:48 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **48.1** | mg/L | 10.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | **0.16** | mg/L | 0.10 | 1 | | 09/13/16 14:22 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **1.5** | mg/L | 0.25 | 5 | 09/14/16 09:10 | 09/14/16 14:44 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **114** | mg/L | 2.0 | 20 | | 09/12/16 15:36 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **11.5** | mg/L | 4.0 | 4 | | 09/12/16 18:47 | 7440-44-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-68** **Lab ID: 50152744044** Collected: 09/01/16 11:23 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.88** | Std. Units | | 1 | | 09/01/16 00:00 | | |
| Field Temperature | **19.0** | deg C | | 1 | | 09/01/16 00:00 | | |
| Field Specific Conductance | **1621** | umhos/cm | | 1 | | 09/01/16 00:00 | | |
| Field Turbidity | **70.90** | NTU | | 1 | | 09/01/16 00:00 | | |
| Total Well Depth | **40.45** | feet | | 1 | | 09/01/16 00:00 | | |
| Elevation Water Level | **432.79** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Collar Elevation | **450.39** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Depth to Water | **17.60** | feet | | 1 | | 09/01/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **292** | mg/L | 25.0 | 100 | | 09/08/16 03:12 | 16887-00-6 | |
| Fluoride | **0.19** | mg/L | 0.10 | 1 | | 09/08/16 02:39 | 16984-48-8 | |
| Sulfate | **54.5** | mg/L | 2.5 | 10 | | 09/08/16 02:56 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **365** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7440-42-8 | |
| Calcium | **187000** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7440-70-2 | |
| Cobalt | **18.7** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7440-48-4 | |
| Iron | **4070** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7439-89-6 | |
| Magnesium | **39500** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7439-95-4 | |
| Manganese | **3410** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7439-96-5 | |
| Nickel | **23.1** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7440-02-0 | |
| Sodium | **87700** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7440-23-5 | |
| Total Hardness by 2340B | **630000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | | |
| Zinc | **25.1** | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:47 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-36-0 | |
| Arsenic | **7.0** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-41-7 | |
| Cadmium | **0.75** | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-50-8 | |
| Lead | **5.2** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 06:41 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 21:59 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 04:33 | 107-13-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-68** **Lab ID: 50152744044** Collected: 09/01/16 11:23 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 04:33 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 04:33 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 04:33 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 96 | %. | 84-118 | 1 | | 09/08/16 04:33 | 1868-53-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: I-68** **Lab ID: 50152744044** Collected: 09/01/16 11:23 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 09/08/16 04:33 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/08/16 04:33 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1100** | mg/L | 10.0 | 1 | | 09/06/16 10:49 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **10.1** | mg/L | 10.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/13/16 14:24 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.28** | mg/L | 0.050 | 1 | 09/14/16 09:10 | 09/14/16 14:20 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 09/12/16 15:37 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: PZ-204A-SS** **Lab ID: 50152744045** Collected: 09/01/16 13:31 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.37** | Std. Units | | 1 | | 09/01/16 00:00 | | |
| Field Temperature | **19.2** | deg C | | 1 | | 09/01/16 00:00 | | |
| Field Specific Conductance | **4840** | umhos/cm | | 1 | | 09/01/16 00:00 | | |
| Field Turbidity | **14.69** | NTU | | 1 | | 09/01/16 00:00 | | |
| Total Well Depth | **84.33** | feet | | 1 | | 09/01/16 00:00 | | |
| Elevation Water Level | **458.15** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Collar Elevation | **462.60** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Depth to Water | **4.45** | feet | | 1 | | 09/01/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **900** | mg/L | 25.0 | 100 | | 09/08/16 04:01 | 16887-00-6 | |
| Fluoride | **0.17** | mg/L | 0.10 | 1 | | 09/08/16 03:28 | 16984-48-8 | |
| Sulfate | **646** | mg/L | 25.0 | 100 | | 09/08/16 04:01 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **213** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7440-39-3 | |
| Boron | **151** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7440-42-8 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-204A-SS** **Lab ID: 50152744045** Collected: 09/01/16 13:31 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Calcium | **546000** | ug/L | 2500 | 5 | 09/08/16 07:33 | 09/09/16 16:30 | 7440-70-2 | |
| Cobalt | **18.2** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7440-48-4 | |
| Iron | **45000** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7439-89-6 | |
| Magnesium | **206000** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7439-95-4 | |
| Manganese | **4270** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7439-96-5 | |
| Nickel | **53.6** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7440-02-0 | |
| Sodium | **300000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:30 | 7440-23-5 | |
| Total Hardness by 2340B | **2210000** | ug/L | 5000 | 5 | 09/08/16 07:33 | 09/09/16 16:30 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:50 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-36-0 | |
| Arsenic | **39.4** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-43-9 | |
| Chromium | **5.7** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 13:42 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 22:01 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 05:07 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 95-50-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-204A-SS** **Lab ID: 50152744045** Collected: 09/01/16 13:31 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 05:07 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 05:07 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 05:07 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 84-118 | 1 | | 09/08/16 05:07 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 79-116 | 1 | | 09/08/16 05:07 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/08/16 05:07 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **3330** | mg/L | 20.0 | 1 | | 09/06/16 10:49 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **212** | mg/L | 20.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.50 | 5 | | 09/13/16 14:44 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.29** | mg/L | 0.050 | 1 | 09/14/16 09:10 | 09/14/16 14:22 | 7723-14-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-204A-SS** **Lab ID: 50152744045** Collected: 09/01/16 13:31 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.50** | mg/L | 0.10 | 1 | | 09/12/16 15:38 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **51.4** | mg/L | 40.0 | 40 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: PZ-302-AS** **Lab ID: 50152744046** Collected: 09/01/16 13:55 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.58** | Std. Units | | 1 | | 09/01/16 00:00 | | |
| Field Temperature | **24.4** | deg C | | 1 | | 09/01/16 00:00 | | |
| Field Specific Conductance | **1652** | umhos/cm | | 1 | | 09/01/16 00:00 | | |
| Field Turbidity | **580.1** | NTU | | 1 | | 09/01/16 00:00 | | |
| Total Well Depth | **24.51** | feet | | 1 | | 09/01/16 00:00 | | |
| Elevation Water Level | **432.57** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Collar Elevation | **451.33** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Depth to Water | **18.76** | feet | | 1 | | 09/01/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **31.6** | mg/L | 2.5 | 10 | | 09/08/16 04:33 | 16887-00-6 | |
| Fluoride | **0.53** | mg/L | 0.10 | 1 | | 09/08/16 04:17 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/08/16 04:17 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **656** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7440-39-3 | |
| Boron | **555** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7440-42-8 | |
| Calcium | **197000** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7440-70-2 | |
| Cobalt | **12.5** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7440-48-4 | |
| Iron | **96200** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7439-89-6 | |
| Magnesium | **75900** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7439-95-4 | |
| Manganese | **6190** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7439-96-5 | |
| Nickel | **38.8** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7440-02-0 | |
| Sodium | **51100** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7440-23-5 | |
| Total Hardness by 2340B | **804000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | | |
| Zinc | **90.5** | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:52 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-36-0 | |
| Arsenic | **270** | ug/L | 100 | 20 | 09/07/16 08:30 | 09/15/16 12:52 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-41-7 | |
| Cadmium | **0.28** | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-43-9 | |
| Chromium | **12.0** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-47-3 | |
| Copper | **13.9** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-50-8 | |
| Lead | **10.8** | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7439-92-1 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-302-AS** **Lab ID: 50152744046** Collected: 09/01/16 13:55 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-28-0 | |
| Vanadium | **27.1** | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 13:51 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 22:04 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 05:42 | 107-13-1 | |
| Benzene | **2590** | ug/L | 125 | 25 | | 09/08/16 14:59 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 56-23-5 | |
| Chlorobenzene | **160** | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 95-50-1 | |
| 1,4-Dichlorobenzene | **22.4** | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 10061-02-6 | |
| Ethylbenzene | **106** | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 79-34-5 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-302-AS** **Lab ID: 50152744046** Collected: 09/01/16 13:55 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 127-18-4 | |
| Toluene | **182** | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 05:42 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 05:42 | 75-01-4 | |
| Xylene (Total) | **106** | ug/L | 5.0 | 1 | | 09/08/16 05:42 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 84-118 | 1 | | 09/08/16 05:42 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/08/16 05:42 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 86-110 | 1 | | 09/08/16 05:42 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1030** | mg/L | 10.0 | 1 | | 09/06/16 10:49 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **62.1** | mg/L | 10.0 | 1 | 09/15/16 08:13 | 09/15/16 11:23 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.50 | 5 | | 09/13/16 14:48 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **2.3** | mg/L | 0.25 | 5 | 09/14/16 09:10 | 09/14/16 14:46 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **2.5** | mg/L | 0.10 | 1 | | 09/12/16 17:56 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 20.0 | 20 | | 09/12/16 18:47 | 7440-44-0 | D3 |

**Sample: S-53** **Lab ID: 50152744047** Collected: 09/01/16 14:25 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.24** | Std. Units | | 1 | | 09/01/16 00:00 | | |
| Field Temperature | **25.5** | deg C | | 1 | | 09/01/16 00:00 | | |
| Field Specific Conductance | **965** | umhos/cm | | 1 | | 09/01/16 00:00 | | |
| Field Turbidity | **51.76** | NTU | | 1 | | 09/01/16 00:00 | | |
| Total Well Depth | **18.00** | feet | | 1 | | 09/01/16 00:00 | | |
| Elevation Water Level | **432.33** | ft/msl | | 1 | | 09/01/16 00:00 | | |
| Collar Elevation | **444.18** | ft/msl | | 1 | | 09/01/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-53** **Lab ID: 50152744047** Collected: 09/01/16 14:25 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Depth to Water | **11.85** | feet | | 1 | | 09/01/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **32.8** | mg/L | 2.5 | 10 | | 09/08/16 06:27 | 16887-00-6 | |
| Fluoride | **0.26** | mg/L | 0.10 | 1 | | 09/08/16 06:11 | 16984-48-8 | |
| Sulfate | **67.4** | mg/L | 2.5 | 10 | | 09/08/16 06:27 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **233** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7440-42-8 | |
| Calcium | **138000** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7440-48-4 | |
| Iron | **241** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7439-89-6 | |
| Magnesium | **40600** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7439-95-4 | |
| Manganese | **16.8** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7440-02-0 | |
| Sodium | **21700** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7440-23-5 | |
| Total Hardness by 2340B | **512000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 15:55 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/07/16 08:30 | 09/15/16 06:45 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 22:06 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 06:16 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 75-15-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-53** **Lab ID: 50152744047** Collected: 09/01/16 14:25 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 06:16 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 06:16 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 06:16 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 84-118 | 1 | | 09/08/16 06:16 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 93 | %. | 79-116 | 1 | | 09/08/16 06:16 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/08/16 06:16 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **605** | mg/L | 10.0 | 1 | | 09/06/16 10:49 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-53** **Lab ID: 50152744047** Collected: 09/01/16 14:25 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/20/16 08:44 | 09/20/16 17:41 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/13/16 14:29 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.066** | mg/L | 0.050 | 1 | 09/14/16 09:10 | 09/14/16 14:23 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 09/12/16 17:57 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: LCS-6B** **Lab ID: 50152744048** Collected: 09/01/16 15:15 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.25** | Std. Units | | 1 | | 09/01/16 00:00 | | |
| Field Temperature | **39.7** | deg C | | 1 | | 09/01/16 00:00 | | |
| Field Specific Conductance | **15700** | umhos/cm | | 1 | | 09/01/16 00:00 | | |
| Field Turbidity | **25.03** | NTU | | 1 | | 09/01/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **2330** | mg/L | 250 | 1000 | | 09/09/16 07:02 | 16887-00-6 | |
| Fluoride | ND | mg/L | 1.0 | 10 | | 09/08/16 07:00 | 16984-48-8 | |
| Sulfate | ND | mg/L | 2.5 | 10 | | 09/08/16 07:00 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **1090** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7440-39-3 | |
| Boron | **11200** | ug/L | 100 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7440-42-8 | |
| Calcium | **47100** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7440-70-2 | |
| Cobalt | **74.4** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7440-48-4 | |
| Iron | **4810** | ug/L | 50.0 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7439-89-6 | |
| Magnesium | **41000** | ug/L | 500 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7439-95-4 | |
| Manganese | **273** | ug/L | 5.0 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7439-96-5 | |
| Nickel | **184** | ug/L | 10.0 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7440-02-0 | |
| Sodium | **1920000** | ug/L | 20000 | 20 | 09/08/16 07:33 | 09/09/16 16:39 | 7440-23-5 | |
| Total Hardness by 2340B | **286000** | ug/L | 1000 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | | |
| Zinc | **291** | ug/L | 20.0 | 1 | 09/08/16 07:33 | 09/09/16 16:04 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | **66.7** | ug/L | 25.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-36-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: LCS-6B** **Lab ID: 50152744048** Collected: 09/01/16 15:15 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Arsenic | **775** | ug/L | 25.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-38-2 | |
| Beryllium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-41-7 | D3 |
| Cadmium | **5.6** | ug/L | 1.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-43-9 | |
| Chromium | **149** | ug/L | 25.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-47-3 | |
| Copper | **174** | ug/L | 25.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-50-8 | |
| Lead | **11.0** | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7439-92-1 | D3 |
| Selenium | **5.1** | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-22-4 | D3 |
| Thallium | ND | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-28-0 | D3 |
| Vanadium | **39.4** | ug/L | 5.0 | 5 | 09/07/16 08:30 | 09/15/16 14:23 | 7440-62-2 | D3,N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:18 | 09/19/16 22:08 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | **667** | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/07/16 20:15 | 107-13-1 | |
| Benzene | **13.1** | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 74-83-9 | |
| 2-Butanone (MEK) | **481** | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 56-23-5 | |
| Chlorobenzene | **5.2** | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 95-50-1 | |
| 1,4-Dichlorobenzene | **15.5** | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 10061-02-6 | |
| Ethylbenzene | **24.7** | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 591-78-6 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: LCS-6B** **Lab ID: 50152744048** Collected: 09/01/16 15:15 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | **30.1** | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 127-18-4 | |
| Toluene | **56.8** | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/07/16 20:15 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/07/16 20:15 | 75-01-4 | |
| Xylene (Total) | **67.5** | ug/L | 5.0 | 1 | | 09/07/16 20:15 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 84-118 | 1 | | 09/07/16 20:15 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 79-116 | 1 | | 09/07/16 20:15 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/07/16 20:15 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **8720** | mg/L | 100 | 1 | | 09/06/16 10:50 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **4630** | mg/L | 50.0 | 1 | 09/15/16 07:00 | 09/19/16 14:13 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 2.0 | 20 | | 09/14/16 13:37 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **6.2** | mg/L | 0.50 | 1 | 09/14/16 09:10 | 09/14/16 14:23 | 7723-14-0 | |
| **4500 Ammonia Water, Distilled** | Analytical Method: SM 4500-NH3 G Preparation Method: SM 4500-NH3 B | | | | | | | |
| Nitrogen, Ammonia | **973** | mg/L | 30.0 | 5 | 09/19/16 10:14 | 09/19/16 12:42 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **1310** | mg/L | 100 | 100 | | 09/12/16 18:47 | 7440-44-0 | |

**Sample: TRIP BLANK** **Lab ID: 50152744049** Collected: 09/01/16 08:00 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 67-64-1 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744049** Collected: 09/01/16 08:00 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/08/16 06:51 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/08/16 06:51 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/08/16 06:51 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/08/16 06:51 | 1330-20-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744049** Collected: 09/01/16 08:00 Received: 09/02/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 84-118 | 1 | | 09/08/16 06:51 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/08/16 06:51 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 09/08/16 06:51 | 2037-26-5 | |

**Sample: FB@PZ-104-KS** **Lab ID: 50152744050** Collected: 09/07/16 14:05 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **10.1** | mg/L | 0.25 | 1 | | 09/10/16 02:44 | 16887-00-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 08:09 | 71-43-2 | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 09/15/16 08:09 | 99-87-6 | |
| Tetrahydrofuran | ND | ug/L | 100 | 1 | | 09/15/16 08:09 | 109-99-9 | N2 |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 08:09 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 84-118 | 1 | | 09/15/16 08:09 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 09/15/16 08:09 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 09/15/16 08:09 | 2037-26-5 | |

**Sample: PZ-104-KS** **Lab ID: 50152744051** Collected: 09/07/16 15:10 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.10** | Std. Units | | 1 | | 09/07/16 00:00 | | |
| Field Temperature | **26.8** | deg C | | 1 | | 09/07/16 00:00 | | |
| Field Specific Conductance | **712** | umhos/cm | | 1 | | 09/07/16 00:00 | | |
| Field Turbidity | **3.81** | NTU | | 1 | | 09/07/16 00:00 | | |
| Total Well Depth | **93.09** | feet | | 1 | | 09/07/16 00:00 | | |
| Elevation Water Level | **467.22** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Collar Elevation | **483.95** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Depth to Water | **16.73** | feet | | 1 | | 09/07/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **38.4** | mg/L | 2.5 | 10 | | 09/10/16 04:06 | 16887-00-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 08:34 | 71-43-2 | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 09/15/16 08:34 | 99-87-6 | |
| Tetrahydrofuran | ND | ug/L | 100 | 1 | | 09/15/16 08:34 | 109-99-9 | N2 |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 08:34 | 1330-20-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-104-KS** **Lab ID: 50152744051** Collected: 09/07/16 15:10 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/15/16 08:34 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/15/16 08:34 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/15/16 08:34 | 2037-26-5 | |

**Sample: Trip Blank** **Lab ID: 50152744052** Collected: 09/07/16 08:00 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 08:59 | 71-43-2 | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 09/15/16 08:59 | 99-87-6 | |
| Tetrahydrofuran | ND | ug/L | 100 | 1 | | 09/15/16 08:59 | 109-99-9 | N2 |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 08:59 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/15/16 08:59 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/15/16 08:59 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/15/16 08:59 | 2037-26-5 | |

**Sample: S-84** **Lab ID: 50152744053** Collected: 09/06/16 08:36 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.75** | Std. Units | | 1 | | 09/06/16 00:00 | | |
| Field Temperature | **19.1** | deg C | | 1 | | 09/06/16 00:00 | | |
| Field Specific Conductance | **1288** | umhos/cm | | 1 | | 09/06/16 00:00 | | |
| Field Turbidity | **290.9** | NTU | | 1 | | 09/06/16 00:00 | | |
| Total Well Depth | **32.90** | feet | | 1 | | 09/06/16 00:00 | | |
| Elevation Water Level | **432.49** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Collar Elevation | **456.78** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Depth to Water | **24.29** | feet | | 1 | | 09/06/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **73.6** | mg/L | 2.5 | 10 | | 09/13/16 19:44 | 16887-00-6 | |
| Fluoride | **0.27** | mg/L | 0.10 | 1 | | 09/09/16 15:52 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/09/16 15:52 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **1480** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7440-39-3 | |
| Boron | **239** | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7440-42-8 | |
| Calcium | **253000** | ug/L | 2500 | 5 | 09/10/16 13:15 | 09/16/16 14:29 | 7440-70-2 | |
| Cobalt | **68.9** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7440-48-4 | |
| Iron | **98900** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7439-89-6 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-84** **Lab ID: 50152744053** Collected: 09/06/16 08:36 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Magnesium | **93600** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7439-95-4 | |
| Manganese | **2060** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7439-96-5 | |
| Nickel | **110** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7440-02-0 | |
| Sodium | **50700** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7440-23-5 | |
| Total Hardness by 2340B | **1020000** | ug/L | 5000 | 5 | 09/10/16 13:15 | 09/16/16 14:29 | | |
| Zinc | **212** | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:21 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7440-36-0 | |
| Arsenic | **362** | ug/L | 50.0 | 10 | 09/12/16 08:30 | 09/16/16 10:41 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:33 | 7440-41-7 | |
| Cadmium | **1.3** | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7440-43-9 | |
| Chromium | **26.2** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7440-47-3 | |
| Copper | **22.1** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7440-50-8 | |
| Lead | **44.0** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 10 | 09/12/16 08:30 | 09/16/16 10:41 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7440-28-0 | |
| Vanadium | **64.2** | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 12:00 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:33 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 03:08 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 56-23-5 | |
| Chlorobenzene | **6.8** | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 75-34-3 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-84** **Lab ID: 50152744053** Collected: 09/06/16 08:36 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 03:08 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 03:08 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 03:08 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/15/16 03:08 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 09/15/16 03:08 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/15/16 03:08 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **644** | mg/L | 10.0 | 1 | | 09/09/16 10:26 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **66.4** | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 11:15 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **2.4** | mg/L | 0.25 | 5 | 09/14/16 12:31 | 09/15/16 09:50 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **1.4** | mg/L | 0.10 | 1 | | 09/19/16 16:21 | 7664-41-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: S-84** **Lab ID: 50152744053** Collected: 09/06/16 08:36 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **9.6** | mg/L | 4.0 | 4 | | 09/14/16 23:17 | 7440-44-0 | |

**Sample: D-85** **Lab ID: 50152744054** Collected: 09/06/16 09:27 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.87** | Std. Units | | 1 | | 09/06/16 00:00 | | |
| Field Temperature | **18.8** | deg C | | 1 | | 09/06/16 00:00 | | |
| Field Specific Conductance | **2390** | umhos/cm | | 1 | | 09/06/16 00:00 | | |
| Field Turbidity | **389.1** | NTU | | 1 | | 09/06/16 00:00 | | |
| Total Well Depth | **77.19** | feet | | 1 | | 09/06/16 00:00 | | |
| Elevation Water Level | **432.51** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Collar Elevation | **457.06** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Depth to Water | **24.55** | feet | | 1 | | 09/06/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **410** | mg/L | 25.0 | 100 | | 09/09/16 17:14 | 16887-00-6 | |
| Fluoride | **0.22** | mg/L | 0.10 | 1 | | 09/09/16 16:41 | 16984-48-8 | |
| Sulfate | **72.5** | mg/L | 2.5 | 10 | | 09/09/16 16:57 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **3750** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7440-39-3 | |
| Boron | **241** | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7440-42-8 | |
| Calcium | **407000** | ug/L | 2500 | 5 | 09/10/16 13:15 | 09/16/16 14:31 | 7440-70-2 | |
| Cobalt | **47.7** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7440-48-4 | |
| Iron | **142000** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7439-89-6 | |
| Magnesium | **103000** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7439-95-4 | |
| Manganese | **3780** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7439-96-5 | |
| Nickel | **117** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7440-02-0 | |
| Sodium | **141000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7440-23-5 | |
| Total Hardness by 2340B | **1440000** | ug/L | 5000 | 5 | 09/10/16 13:15 | 09/16/16 14:31 | | |
| Zinc | **248** | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:23 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7440-36-0 | |
| Arsenic | **50.7** | ug/L | 50.0 | 10 | 09/12/16 08:30 | 09/16/16 10:46 | 7440-38-2 | |
| Beryllium | **2.3** | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:38 | 7440-41-7 | |
| Cadmium | **1.6** | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7440-43-9 | |
| Chromium | **30.7** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7440-47-3 | |
| Copper | **36.2** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7440-50-8 | |
| Lead | **70.1** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 10 | 09/12/16 08:30 | 09/16/16 10:46 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7440-28-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-85** **Lab ID: 50152744054** Collected: 09/06/16 09:27 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Vanadium | **64.2** | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 12:05 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:42 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 03:33 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 56-23-5 | |
| Chlorobenzene | **51.7** | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 71-55-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-85** **Lab ID: 50152744054** Collected: 09/06/16 09:27 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 03:33 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 03:33 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 03:33 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 84-118 | 1 | | 09/15/16 03:33 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 103 | %. | 79-116 | 1 | | 09/15/16 03:33 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 09/15/16 03:33 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1450** | mg/L | 16.7 | 1 | | 09/09/16 10:27 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **40.9** | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.20 | 2 | | 09/14/16 11:46 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **8.7** | mg/L | 0.50 | 10 | 09/14/16 12:31 | 09/15/16 10:07 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **3.3** | mg/L | 0.10 | 1 | | 09/19/16 16:24 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 2.0 | 2 | | 09/14/16 23:17 | 7440-44-0 | D3 |

**Sample: D-85 DUP** **Lab ID: 50152744055** Collected: 09/06/16 09:27 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **398** | mg/L | 25.0 | 100 | | 09/09/16 19:08 | 16887-00-6 | |
| Fluoride | **0.23** | mg/L | 0.10 | 1 | | 09/09/16 18:35 | 16984-48-8 | |
| Sulfate | **71.6** | mg/L | 2.5 | 10 | | 09/09/16 18:52 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **3810** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7440-39-3 | |
| Boron | **246** | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7440-42-8 | |
| Calcium | **406000** | ug/L | 2500 | 5 | 09/10/16 13:15 | 09/16/16 14:33 | 7440-70-2 | |
| Cobalt | **46.4** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7440-48-4 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-85 DUP** **Lab ID: 50152744055** Collected: 09/06/16 09:27 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Iron | **141000** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7439-89-6 | |
| Magnesium | **101000** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7439-95-4 | |
| Manganese | **3720** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7439-96-5 | |
| Nickel | **113** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7440-02-0 | |
| Sodium | **142000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7440-23-5 | |
| Total Hardness by 2340B | **1430000** | ug/L | 5000 | 5 | 09/10/16 13:15 | 09/16/16 14:33 | | |
| Zinc | **256** | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:26 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7440-36-0 | |
| Arsenic | **47.0** | ug/L | 5.0 | 10 | 09/12/16 08:30 | 09/16/16 10:51 | 7440-38-2 | D3 |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:47 | 7440-41-7 | |
| Cadmium | **1.5** | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7440-43-9 | |
| Chromium | **29.2** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7440-47-3 | |
| Copper | **36.3** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7440-50-8 | |
| Lead | **65.4** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 10 | 09/12/16 08:30 | 09/16/16 10:51 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7440-28-0 | |
| Vanadium | **58.4** | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 12:14 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:44 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 03:58 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 56-23-5 | |
| Chlorobenzene | **50.6** | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 110-57-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-85 DUP** **Lab ID: 50152744055** Collected: 09/06/16 09:27 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 03:58 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 03:58 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 03:58 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 84-118 | 1 | | 09/15/16 03:58 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/15/16 03:58 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/15/16 03:58 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1390** | mg/L | 20.0 | 1 | | 09/09/16 10:27 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **40.3** | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.20 | 2 | | 09/14/16 11:50 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **9.7** | mg/L | 0.50 | 10 | 09/14/16 12:31 | 09/15/16 10:09 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **3.3** | mg/L | 0.10 | 1 | | 09/19/16 16:25 | 7664-41-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: D-85 DUP** **Lab ID: 50152744055** Collected: 09/06/16 09:27 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/14/16 23:17 | 7440-44-0 | |

**Sample: PZ-208-SS** **Lab ID: 50152744056** Collected: 09/06/16 10:49 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.93** | Std. Units | | 1 | | 09/06/16 00:00 | | |
| Field Temperature | **20.6** | deg C | | 1 | | 09/06/16 00:00 | | |
| Field Specific Conductance | **1106** | umhos/cm | | 1 | | 09/06/16 00:00 | | |
| Field Turbidity | **6.87** | NTU | | 1 | | 09/06/16 00:00 | | |
| Total Well Depth | **100.38** | feet | | 1 | | 09/06/16 00:00 | | |
| Elevation Water Level | **454.39** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Collar Elevation | **474.19** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Depth to Water | **19.80** | feet | | 1 | | 09/06/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **111** | mg/L | 2.5 | 10 | | 09/09/16 19:40 | 16887-00-6 | |
| Fluoride | **0.44** | mg/L | 0.10 | 1 | | 09/09/16 19:24 | 16984-48-8 | |
| Sulfate | **32.1** | mg/L | 2.5 | 10 | | 09/09/16 19:40 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **165** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7440-42-8 | |
| Calcium | **104000** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7440-48-4 | |
| Iron | **1430** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7439-89-6 | |
| Magnesium | **53900** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7439-95-4 | |
| Manganese | **23.4** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7440-02-0 | |
| Sodium | **45800** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7440-23-5 | |
| Total Hardness by 2340B | **482000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:28 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 19:34 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-28-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-208-SS** **Lab ID: 50152744056** Collected: 09/06/16 10:49 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 10:55 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:46 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 04:23 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 71-55-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-208-SS** **Lab ID: 50152744056** Collected: 09/06/16 10:49 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 04:23 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 04:23 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 04:23 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 84-118 | 1 | | 09/15/16 04:23 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/15/16 04:23 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 86-110 | 1 | | 09/15/16 04:23 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **598** | mg/L | 10.0 | 1 | | 09/09/16 10:28 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 11:20 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/14/16 12:31 | 09/15/16 09:26 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 09/19/16 16:26 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/14/16 23:17 | 7440-44-0 | |

**Sample: PZ-303-AS** **Lab ID: 50152744057** Collected: 09/06/16 12:17 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.70** | Std. Units | | 1 | | 09/06/16 00:00 | | |
| Field Temperature | **20.8** | deg C | | 1 | | 09/06/16 00:00 | | |
| Field Specific Conductance | **2110** | umhos/cm | | 1 | | 09/06/16 00:00 | | |
| Field Turbidity | **37.73** | NTU | | 1 | | 09/06/16 00:00 | | |
| Total Well Depth | **23.80** | feet | | 1 | | 09/06/16 00:00 | | |
| Elevation Water Level | **431.18** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Collar Elevation | **453.08** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Depth to Water | **21.90** | feet | | 1 | | 09/06/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-303-AS** **Lab ID: 50152744057** Collected: 09/06/16 12:17 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **109** | mg/L | 2.5 | 10 | | 09/09/16 21:02 | 16887-00-6 | |
| Fluoride | **0.35** | mg/L | 0.10 | 1 | | 09/09/16 20:46 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/09/16 20:46 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **762** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7440-39-3 | |
| Boron | **272** | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7440-42-8 | |
| Calcium | **296000** | ug/L | 2500 | 5 | 09/10/16 13:15 | 09/16/16 14:35 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7440-48-4 | |
| Iron | **81000** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7439-89-6 | |
| Magnesium | **69200** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7439-95-4 | |
| Manganese | **2080** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7439-96-5 | |
| Nickel | **11.7** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7440-02-0 | |
| Sodium | **59200** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7440-23-5 | |
| Total Hardness by 2340B | **1020000** | ug/L | 5000 | 5 | 09/10/16 13:15 | 09/16/16 14:35 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:30 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-36-0 | D3 |
| Arsenic | **100** | ug/L | 25.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:52 | 7440-41-7 | |
| Cadmium | ND | ug/L | 1.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-43-9 | D3 |
| Chromium | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-47-3 | D3 |
| Copper | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-50-8 | D3 |
| Lead | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7439-92-1 | D3 |
| Selenium | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7782-49-2 | D3 |
| Silver | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-22-4 | D3 |
| Thallium | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-28-0 | D3 |
| Vanadium | ND | ug/L | 5.0 | 5 | 09/12/16 08:30 | 09/16/16 12:27 | 7440-62-2 | D3,N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:48 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 04:48 | 107-13-1 | |
| Benzene | **39.7** | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 75-00-3 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-303-AS** **Lab ID: 50152744057** Collected: 09/06/16 12:17 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 10061-02-6 | |
| Ethylbenzene | **18.0** | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 127-18-4 | |
| Toluene | **306** | ug/L | 50.0 | 10 | | 09/17/16 01:18 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 04:48 | 108-05-4 | |
| Vinyl chloride | **2.2** | ug/L | 2.0 | 1 | | 09/17/16 00:53 | 75-01-4 | |
| Xylene (Total) | **389** | ug/L | 5.0 | 1 | | 09/15/16 04:48 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 93 | %. | 84-118 | 1 | | 09/15/16 04:48 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 102 | %. | 79-116 | 1 | | 09/15/16 04:48 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 09/15/16 04:48 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1260** | mg/L | 10.0 | 1 | | 09/09/16 10:28 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **502** | mg/L | 10.0 | 1 | 09/21/16 07:48 | 09/21/16 11:51 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-303-AS** **Lab ID: 50152744057** Collected: 09/06/16 12:17 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 2.0 | 20 | | 09/14/16 11:56 | | D3 |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **1.7** | mg/L | 0.25 | 5 | 09/14/16 12:31 | 09/15/16 09:53 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.36** | mg/L | 0.10 | 1 | | 09/19/16 16:27 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 100 | 100 | | 09/17/16 09:23 | 7440-44-0 | D3 |

**Sample: PZ-114-AS** **Lab ID: 50152744058** Collected: 09/06/16 15:30 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.72** | Std. Units | | 1 | | 09/06/16 00:00 | | |
| Field Temperature | **17.6** | deg C | | 1 | | 09/06/16 00:00 | | |
| Field Specific Conductance | **2060** | umhos/cm | | 1 | | 09/06/16 00:00 | | |
| Field Turbidity | **9.02** | NTU | | 1 | | 09/06/16 00:00 | | |
| Total Well Depth | **26.32** | feet | | 1 | | 09/06/16 00:00 | | |
| Elevation Water Level | **432.93** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Collar Elevation | **451.26** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Depth to Water | **18.33** | feet | | 1 | | 09/06/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **466** | mg/L | 25.0 | 100 | | 09/09/16 22:07 | 16887-00-6 | |
| Fluoride | **0.28** | mg/L | 0.10 | 1 | | 09/09/16 21:35 | 16984-48-8 | |
| Sulfate | ND | mg/L | 0.25 | 1 | | 09/09/16 21:35 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **922** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7440-39-3 | |
| Boron | **326** | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7440-42-8 | |
| Calcium | **198000** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7440-48-4 | |
| Iron | **66600** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7439-89-6 | |
| Magnesium | **49400** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7439-95-4 | |
| Manganese | **3850** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7440-02-0 | |
| Sodium | **176000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7440-23-5 | |
| Total Hardness by 2340B | **697000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:32 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-36-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-114-AS** **Lab ID: 50152744058** Collected: 09/06/16 15:30 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Arsenic | **108** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 19:43 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 11:15 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:50 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 05:13 | 107-13-1 | |
| Benzene | **5.2** | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 56-23-5 | |
| Chlorobenzene | **44.9** | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 95-50-1 | |
| 1,4-Dichlorobenzene | **6.3** | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 591-78-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-114-AS** **Lab ID: 50152744058** Collected: 09/06/16 15:30 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 05:13 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 05:13 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 05:13 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 96 | %. | 84-118 | 1 | | 09/15/16 05:13 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/15/16 05:13 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 09/15/16 05:13 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1500** | mg/L | 10.0 | 1 | | 09/09/16 10:28 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **37.9** | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 11:24 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **1.6** | mg/L | 0.25 | 5 | 09/14/16 12:31 | 09/15/16 09:55 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **5.6** | mg/L | 0.10 | 1 | | 09/19/16 16:28 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 20.0 | 20 | | 09/19/16 23:13 | 7440-44-0 | D3 |

**Sample: PZ-115-SS** **Lab ID: 50152744059** Collected: 09/06/16 16:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.68** | Std. Units | | 1 | | 09/06/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-115-SS** **Lab ID: 50152744059** Collected: 09/06/16 16:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field Temperature | **17.3** | deg C | | 1 | | 09/06/16 00:00 | | |
| Field Specific Conductance | **1920** | umhos/cm | | 1 | | 09/06/16 00:00 | | |
| Field Turbidity | **5.22** | NTU | | 1 | | 09/06/16 00:00 | | |
| Total Well Depth | **81.04** | feet | | 1 | | 09/06/16 00:00 | | |
| Elevation Water Level | **436.97** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Collar Elevation | **452.27** | ft/msl | | 1 | | 09/06/16 00:00 | | |
| Depth to Water | **15.30** | feet | | 1 | | 09/06/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **477** | mg/L | 25.0 | 100 | | 09/09/16 22:56 | 16887-00-6 | |
| Fluoride | **0.52** | mg/L | 0.10 | 1 | | 09/09/16 22:23 | 16984-48-8 | |
| Sulfate | **3.5** | mg/L | 0.25 | 1 | | 09/09/16 22:23 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **483** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7440-39-3 | |
| Boron | **460** | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7440-42-8 | |
| Calcium | **210000** | ug/L | 2500 | 5 | 09/10/16 13:15 | 09/16/16 14:38 | 7440-70-2 | |
| Cobalt | **28.4** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7440-48-4 | |
| Iron | **3360** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7439-89-6 | |
| Magnesium | **104000** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7439-95-4 | |
| Manganese | **73.9** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7439-96-5 | |
| Nickel | **72.0** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7440-02-0 | |
| Sodium | **161000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7440-23-5 | |
| Total Hardness by 2340B | **953000** | ug/L | 5000 | 5 | 09/10/16 13:15 | 09/16/16 14:38 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:39 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-36-0 | |
| Arsenic | **6.6** | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 19:57 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 11:19 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:52 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 05:38 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 71-43-2 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-115-SS** **Lab ID: 50152744059** Collected: 09/06/16 16:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 05:38 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 05:38 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 05:38 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 84-118 | 1 | | 09/15/16 05:38 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 79-116 | 1 | | 09/15/16 05:38 | 460-00-4 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-115-SS** **Lab ID: 50152744059** Collected: 09/06/16 16:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/15/16 05:38 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **1490** | mg/L | 10.0 | 1 | | 09/09/16 10:28 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | **37.6** | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 12:14 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | **0.26** | mg/L | 0.050 | 1 | 09/14/16 12:31 | 09/15/16 09:27 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.99** | mg/L | 0.10 | 1 | | 09/19/16 16:33 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 4.0 | 4 | | 09/17/16 09:23 | 7440-44-0 | D3 |

**Sample: PZ-100-SD** **Lab ID: 50152744060** Collected: 09/07/16 08:58 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.15** | Std. Units | | 1 | | 09/07/16 00:00 | | |
| Field Temperature | **18.1** | deg C | | 1 | | 09/07/16 00:00 | | |
| Field Specific Conductance | **567** | umhos/cm | | 1 | | 09/07/16 00:00 | | |
| Field Turbidity | **5.95** | NTU | | 1 | | 09/07/16 00:00 | | |
| Total Well Depth | **96.19** | feet | | 1 | | 09/07/16 00:00 | | |
| Elevation Water Level | **453.37** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Collar Elevation | **485.72** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Depth to Water | **32.35** | feet | | 1 | | 09/07/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **1.7** | mg/L | 0.25 | 1 | | 09/09/16 23:45 | 16887-00-6 | |
| Fluoride | **2.2** | mg/L | 0.10 | 1 | | 09/09/16 23:45 | 16984-48-8 | |
| Sulfate | **10** | mg/L | 0.25 | 1 | | 09/09/16 23:45 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **318** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7440-42-8 | |
| Calcium | **76600** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7440-70-2 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-100-SD** **Lab ID: 50152744060** Collected: 09/07/16 08:58 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7440-48-4 | |
| Iron | **759** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7439-89-6 | |
| Magnesium | **35500** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7439-95-4 | |
| Manganese | **56.5** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7440-02-0 | |
| Sodium | **6750** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7440-23-5 | |
| Total Hardness by 2340B | **337000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:41 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:02 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 11:28 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:54 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 06:03 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 106-46-7 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-100-SD** **Lab ID: 50152744060** Collected: 09/07/16 08:58 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 06:03 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 06:03 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 06:03 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 84-118 | 1 | | 09/15/16 06:03 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 102 | %. | 79-116 | 1 | | 09/15/16 06:03 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/15/16 06:03 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **323** | mg/L | 10.0 | 1 | | 09/12/16 10:01 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 12:19 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/14/16 12:31 | 09/15/16 09:30 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.47** | mg/L | 0.10 | 1 | | 09/19/16 16:34 | 7664-41-7 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-100-SD** **Lab ID: 50152744060** Collected: 09/07/16 08:58 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/17/16 09:23 | 7440-44-0 | |

**Sample: PZ-100-SS** **Lab ID: 50152744061** Collected: 09/07/16 09:44 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.06** | Std. Units | | 1 | | 09/07/16 00:00 | | |
| Field Temperature | **18.1** | deg C | | 1 | | 09/07/16 00:00 | | |
| Field Specific Conductance | **618** | umhos/cm | | 1 | | 09/07/16 00:00 | | |
| Field Turbidity | **5.64** | NTU | | 1 | | 09/07/16 00:00 | | |
| Total Well Depth | **89.13** | feet | | 1 | | 09/07/16 00:00 | | |
| Elevation Water Level | **455.69** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Collar Elevation | **485.75** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Depth to Water | **30.06** | feet | | 1 | | 09/07/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **5.1** | mg/L | 0.25 | 1 | | 09/10/16 00:34 | 16887-00-6 | |
| Fluoride | **0.64** | mg/L | 0.10 | 1 | | 09/10/16 00:34 | 16984-48-8 | |
| Sulfate | **37.9** | mg/L | 2.5 | 10 | | 09/10/16 00:50 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **68.6** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7440-39-3 | |
| Boron | **118** | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7440-42-8 | |
| Calcium | **93200** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7440-48-4 | |
| Iron | ND | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7439-89-6 | |
| Magnesium | **53600** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7439-95-4 | |
| Manganese | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7439-96-5 | |
| Nickel | **10.1** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7440-02-0 | |
| Sodium | **11500** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7440-23-5 | |
| Total Hardness by 2340B | **454000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:43 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:06 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-28-0 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-100-SS** **Lab ID: 50152744061** Collected: 09/07/16 09:44 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 11:33 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:57 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 06:28 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 71-55-6 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-100-SS** **Lab ID: 50152744061** Collected: 09/07/16 09:44 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 06:28 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 06:28 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 06:28 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/15/16 06:28 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 79-116 | 1 | | 09/15/16 06:28 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/15/16 06:28 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **437** | mg/L | 10.0 | 1 | | 09/12/16 10:01 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 12:21 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/14/16 12:31 | 09/15/16 09:30 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 09/19/16 16:35 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/17/16 09:23 | 7440-44-0 | |

**Sample: PZ-111-SD** **Lab ID: 50152744062** Collected: 09/07/16 11:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **7.01** | Std. Units | | 1 | | 09/07/16 00:00 | | |
| Field Temperature | **19.2** | deg C | | 1 | | 09/07/16 00:00 | | |
| Field Specific Conductance | **697** | umhos/cm | | 1 | | 09/07/16 00:00 | | |
| Field Turbidity | **7.83** | NTU | | 1 | | 09/07/16 00:00 | | |
| Total Well Depth | **198.83** | feet | | 1 | | 09/07/16 00:00 | | |
| Elevation Water Level | **433.06** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Collar Elevation | **466.46** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Depth to Water | **33.40** | feet | | 1 | | 09/07/16 00:00 | | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-111-SD** **Lab ID: 50152744062** Collected: 09/07/16 11:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **10.4** | mg/L | 0.25 | 1 | | 09/10/16 01:23 | 16887-00-6 | |
| Fluoride | **2.2** | mg/L | 0.10 | 1 | | 09/10/16 01:23 | 16984-48-8 | |
| Sulfate | **45.7** | mg/L | 2.5 | 10 | | 09/10/16 01:39 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **103** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7440-42-8 | |
| Calcium | **89000** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7440-48-4 | |
| Iron | **900** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7439-89-6 | |
| Magnesium | **52300** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7439-95-4 | |
| Manganese | **21.4** | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7440-02-0 | |
| Sodium | **17500** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7440-23-5 | |
| Total Hardness by 2340B | **438000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:46 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-36-0 | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:15 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 11:37 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 22:59 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 06:54 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 75-00-3 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-111-SD** **Lab ID: 50152744062** Collected: 09/07/16 11:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 06:54 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 06:54 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 06:54 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 84-118 | 1 | | 09/15/16 06:54 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 79-116 | 1 | | 09/15/16 06:54 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 86-110 | 1 | | 09/15/16 06:54 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **424** | mg/L | 10.0 | 1 | | 09/12/16 10:02 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-111-SD** **Lab ID: 50152744062** Collected: 09/07/16 11:09 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 12:23 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/14/16 12:31 | 09/15/16 09:31 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | **0.13** | mg/L | 0.10 | 1 | | 09/19/16 16:36 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/17/16 09:23 | 7440-44-0 | |

**Sample: PZ-205-SS** **Lab ID: 50152744063** Collected: 09/07/16 12:50 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.96** | Std. Units | | 1 | | 09/07/16 00:00 | | |
| Field Temperature | **21.6** | deg C | | 1 | | 09/07/16 00:00 | | |
| Field Specific Conductance | **772** | umhos/cm | | 1 | | 09/07/16 00:00 | | |
| Field Turbidity | **6.69** | NTU | | 1 | | 09/07/16 00:00 | | |
| Total Well Depth | **93.00** | feet | | 1 | | 09/07/16 00:00 | | |
| Elevation Water Level | **435.79** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Collar Elevation | **465.83** | ft/msl | | 1 | | 09/07/16 00:00 | | |
| Depth to Water | **30.04** | feet | | 1 | | 09/07/16 00:00 | | |
| **9056 IC Anions** | Analytical Method: EPA 9056 | | | | | | | |
| Chloride | **32.8** | mg/L | 2.5 | 10 | | 09/10/16 03:17 | 16887-00-6 | |
| Fluoride | **0.42** | mg/L | 0.10 | 1 | | 09/10/16 03:01 | 16984-48-8 | |
| Sulfate | **52.5** | mg/L | 2.5 | 10 | | 09/10/16 03:17 | 14808-79-8 | |
| **6010 MET ICP** | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Barium | **140** | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7440-39-3 | |
| Boron | ND | ug/L | 100 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7440-42-8 | |
| Calcium | **99000** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7440-70-2 | |
| Cobalt | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7440-48-4 | |
| Iron | **127** | ug/L | 50.0 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7439-89-6 | |
| Magnesium | **56600** | ug/L | 500 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7439-95-4 | |
| Manganese | ND | ug/L | 5.0 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7439-96-5 | |
| Nickel | ND | ug/L | 10.0 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7440-02-0 | |
| Sodium | **15500** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7440-23-5 | |
| Total Hardness by 2340B | **480000** | ug/L | 1000 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | | |
| Zinc | ND | ug/L | 20.0 | 1 | 09/10/16 13:15 | 09/16/16 12:48 | 7440-66-6 | |
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Antimony | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-36-0 | |

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# ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-205-SS** **Lab ID: 50152744063** Collected: 09/07/16 12:50 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **6020 MET ICPMS** | Analytical Method: EPA 6020 Preparation Method: EPA 200.2 | | | | | | | |
| Arsenic | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-38-2 | |
| Beryllium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/15/16 20:20 | 7440-41-7 | |
| Cadmium | ND | ug/L | 0.20 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-43-9 | |
| Chromium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-47-3 | |
| Copper | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-50-8 | |
| Lead | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7439-92-1 | |
| Selenium | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7782-49-2 | |
| Silver | ND | ug/L | 5.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-22-4 | |
| Thallium | ND | ug/L | 2.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-28-0 | |
| Vanadium | ND | ug/L | 10.0 | 1 | 09/12/16 08:30 | 09/16/16 11:46 | 7440-62-2 | N2 |
| **7470 Mercury** | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | |
| Mercury | ND | ug/L | 0.20 | 1 | 09/19/16 11:25 | 09/19/16 23:01 | 7439-97-6 | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 67-64-1 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 07:19 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 74-97-5 | |
| Bromodichloromethan | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 591-78-6 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: PZ-205-SS** **Lab ID: 50152744063** Collected: 09/07/16 12:50 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 07:19 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 07:19 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 07:19 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 84-118 | 1 | | 09/15/16 07:19 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 79-116 | 1 | | 09/15/16 07:19 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 86-110 | 1 | | 09/15/16 07:19 | 2037-26-5 | |
| **2540C Total Dissolved Solids** | Analytical Method: SM 2540C | | | | | | | |
| Total Dissolved Solids | **512** | mg/L | 10.0 | 1 | | 09/12/16 10:02 | | |
| **410.4 COD** | Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 | | | | | | | |
| Chemical Oxygen Demand | ND | mg/L | 10.0 | 1 | 09/21/16 12:46 | 09/21/16 16:26 | | |
| **353.2 Nitrogen, NO2/NO3 pres.** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, NO2 plus NO3 | ND | mg/L | 0.10 | 1 | | 09/14/16 12:24 | | |
| **365.1 Total Phosphorus** | Analytical Method: EPA 365.1 Preparation Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND | mg/L | 0.050 | 1 | 09/14/16 12:31 | 09/15/16 09:32 | 7723-14-0 | |
| **4500 Ammonia Water** | Analytical Method: SM 4500-NH3 G | | | | | | | |
| Nitrogen, Ammonia | ND | mg/L | 0.10 | 1 | | 09/19/16 16:37 | 7664-41-7 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | ND | mg/L | 1.0 | 1 | | 09/17/16 09:23 | 7440-44-0 | |

**Sample: TRIP BLANK** **Lab ID: 50152744064** Collected: 09/07/16 08:00 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 67-64-1 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744064** Collected: 09/07/16 08:00 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 09/15/16 07:44 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 71-43-2 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 75-25-2 | |
| Bromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 78-93-3 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 108-90-7 | |
| Chloroethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 67-66-3 | |
| Chloromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 96-12-8 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 110-57-6 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 78-87-5 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 100-41-4 | |
| 2-Hexanone | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 591-78-6 | |
| Iodomethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 74-88-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 108-10-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 96-18-4 | |
| Vinyl acetate | ND | ug/L | 10.0 | 1 | | 09/15/16 07:44 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 09/15/16 07:44 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 5.0 | 1 | | 09/15/16 07:44 | 1330-20-7 | |

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## ANALYTICAL RESULTS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

**Sample: TRIP BLANK** **Lab ID: 50152744064** Collected: 09/07/16 08:00 Received: 09/08/16 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 84-118 | 1 | | 09/15/16 07:44 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 79-116 | 1 | | 09/15/16 07:44 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-110 | 1 | | 09/15/16 07:44 | 2037-26-5 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 348633 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

METHOD BLANK: 1612570 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | ND | 0.25 | 08/30/16 14:05 | |
| Fluoride | mg/L | ND | 0.10 | 08/30/16 14:05 | |
| Sulfate | mg/L | ND | 0.25 | 08/30/16 14:05 | |

LABORATORY CONTROL SAMPLE: 1612571

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 1.2 | 1.1 | 92 | 80-120 | |
| Fluoride | mg/L | .5 | 0.51 | 101 | 80-120 | |
| Sulfate | mg/L | 2.5 | 2.4 | 96 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1612572 1612573

| Parameter | Units | 50152742001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 15.0 | 12.5 | 12.5 | 25.9 | 25.9 | 88 | 87 | 80-120 | 0 | 15 | |
| Fluoride | mg/L | 1.8 | .5 | .5 | 2.3 | 2.3 | 99 | 98 | 80-120 | 0 | 15 | |
| Sulfate | mg/L | 120 | 25 | 25 | 144 | 144 | 96 | 95 | 80-120 | 0 | 15 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349074
QC Batch Method: EPA 9056
Analysis Method: EPA 9056
Analysis Description: 9056 IC Anions
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021 50152744022, 50152744023, 50152744024, 50152744025

METHOD BLANK: 1614746 Matrix: Water
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021 50152744022, 50152744023, 50152744024, 50152744025

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | ND | 0.25 | 08/31/16 19:37 | |
| Fluoride | mg/L | ND | 0.10 | 08/31/16 19:37 | |
| Sulfate | mg/L | ND | 0.25 | 08/31/16 19:37 | |

LABORATORY CONTROL SAMPLE: 1614747

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 1.2 | 1.1 | 91 | 80-120 | |
| Fluoride | mg/L | .5 | 0.48 | 95 | 80-120 | |
| Sulfate | mg/L | 2.5 | 2.3 | 93 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1614750 1614751

| Parameter | Units | 50152704009 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 32.0 | 12.5 | 12.5 | 42.5 | 43.5 | 84 | 92 | 80-120 | 2 | 15 | |
| Fluoride | mg/L | 0.16 | .5 | .5 | 0.66 | 0.64 | 98 | 95 | 80-120 | 2 | 15 | |
| Sulfate | mg/L | 138 | 25 | 25 | 158 | 161 | 82 | 92 | 80-120 | 2 | 15 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349846 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

METHOD BLANK: 1617964 Matrix: Water
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | ND | 0.25 | 09/02/16 11:00 | |
| Fluoride | mg/L | ND | 0.10 | 09/02/16 11:00 | |
| Sulfate | mg/L | ND | 0.25 | 09/02/16 11:00 | |

LABORATORY CONTROL SAMPLE: 1617965

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 1.2 | 1.1 | 91 | 80-120 | |
| Fluoride | mg/L | .5 | 0.50 | 100 | 80-120 | |
| Sulfate | mg/L | 2.5 | 2.4 | 96 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617966 1617967

| Parameter | Units | 50152744027 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 130 | 125 | 125 | 235 | 235 | 84 | 84 | 80-120 | 0 | 15 | |
| Fluoride | mg/L | 1.6 | .5 | .5 | 2.1 | 2.1 | 110 | 108 | 80-120 | 0 | 15 | |
| Sulfate | mg/L | 50.6 | 25 | 25 | 76.4 | 73.3 | 103 | 91 | 80-120 | 4 | 15 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350065 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

METHOD BLANK: 1619557 Matrix: Water
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | ND | 0.25 | 09/07/16 14:42 | |
| Fluoride | mg/L | ND | 0.10 | 09/07/16 14:42 | |
| Sulfate | mg/L | ND | 0.25 | 09/07/16 14:42 | |

LABORATORY CONTROL SAMPLE: 1619558

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 1.2 | 1.2 | 95 | 80-120 | |
| Fluoride | mg/L | .5 | 0.51 | 102 | 80-120 | |
| Sulfate | mg/L | 2.5 | 2.5 | 100 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1619559 1619560

| Parameter | Units | 50153343001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 77.3 | 12.5 | 12.5 | 89.1 | 88.7 | 94 | 91 | 80-120 | 0 | 15 | |
| Fluoride | mg/L | 0.34 | .5 | .5 | 0.81 | 0.82 | 94 | 97 | 80-120 | 2 | 15 | |
| Sulfate | mg/L | 0.34 | 2.5 | 2.5 | 2.7 | 2.7 | 95 | 94 | 80-120 | 1 | 15 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350591 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions
Associated Lab Samples: 50152744050, 50152744051, 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1621533 Matrix: Water
Associated Lab Samples: 50152744050, 50152744051, 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | ND | 0.25 | 09/09/16 14:47 | |
| Fluoride | mg/L | ND | 0.10 | 09/09/16 14:47 | |
| Sulfate | mg/L | ND | 0.25 | 09/09/16 14:47 | |

LABORATORY CONTROL SAMPLE: 1621534

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 1.2 | 1.2 | 95 | 80-120 | |
| Fluoride | mg/L | .5 | 0.52 | 104 | 80-120 | |
| Sulfate | mg/L | 2.5 | 2.5 | 100 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1621535 1621536

| Parameter | Units | 50152744053 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 73.6 | 12.5 | 12.5 | 83.5 | 84.0 | 80 | 83 | 80-120 | 1 | 15 | |
| Fluoride | mg/L | 0.27 | .5 | .5 | 0.75 | 0.74 | 96 | 94 | 80-120 | 1 | 15 | |
| Sulfate | mg/L | ND | 2.5 | 2.5 | 2.5 | 2.5 | 96 | 96 | 80-120 | 0 | 15 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351755 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 50152744001, 50152744002, 50152744004, 50152744005, 50152744006

METHOD BLANK: 1627083 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744004, 50152744005, 50152744006

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Mercury | ug/L | ND | 0.20 | 09/16/16 20:22 | |

LABORATORY CONTROL SAMPLE: 1627084

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Mercury | ug/L | 5 | 5.2 | 105 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1627085 1627086

| Parameter | Units | 50153816008 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | ND | 5 | 5 | 5.8 | 5.7 | 115 | 114 | 75-125 | 1 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351902 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 50152744003, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013, 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027

METHOD BLANK: 1627988 Matrix: Water
Associated Lab Samples: 50152744003, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013, 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Mercury | ug/L | ND | 0.20 | 09/18/16 18:44 | |

LABORATORY CONTROL SAMPLE: 1627989

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Mercury | ug/L | 5 | 5.0 | 100 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1627990 1627991

| Parameter | Units | 50152744007 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | ND | 5 | 5 | 3.7 | 3.5 | 74 | 70 | 75-125 | 6 | 20 | M3 |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351903 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035, 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

METHOD BLANK: 1627992 Matrix: Water
Associated Lab Samples: 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035, 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Mercury | ug/L | ND | 0.20 | 09/19/16 21:09 | |

LABORATORY CONTROL SAMPLE: 1627993

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Mercury | ug/L | 5 | 4.9 | 98 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1627994 1627995

| Parameter | Units | 50152744028 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | ND | 5 | 5 | 4.9 | 4.8 | 97 | 95 | 75-125 | 2 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351946 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1628366 Matrix: Water
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Mercury | ug/L | ND | 0.20 | 09/19/16 22:14 | |

LABORATORY CONTROL SAMPLE: 1628367

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Mercury | ug/L | 5 | 5.2 | 103 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1628368 1628369

| Parameter | Units | 50153155001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | ND | 5 | 5 | 4.8 | 4.8 | 97 | 96 | 75-125 | 1 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 348819
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

METHOD BLANK: 1613587
Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Barium | ug/L | ND | 10.0 | 08/31/16 10:16 | |
| Boron | ug/L | ND | 100 | 08/31/16 10:16 | |
| Calcium | ug/L | ND | 500 | 08/31/16 10:16 | |
| Cobalt | ug/L | ND | 5.0 | 08/31/16 10:16 | |
| Iron | ug/L | ND | 50.0 | 08/31/16 10:16 | |
| Magnesium | ug/L | ND | 500 | 08/31/16 10:16 | |
| Manganese | ug/L | ND | 5.0 | 08/31/16 10:16 | |
| Nickel | ug/L | 12.0 | 10.0 | 08/31/16 10:16 | P8 |
| Sodium | ug/L | ND | 1000 | 08/31/16 10:16 | |
| Total Hardness by 2340B | ug/L | ND | 1000 | 08/31/16 10:16 | |
| Zinc | ug/L | ND | 20.0 | 08/31/16 10:16 | |

LABORATORY CONTROL SAMPLE: 1613588

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Barium | ug/L | 1000 | 983 | 98 | 80-120 | |
| Boron | ug/L | 1000 | 1010 | 101 | 80-120 | |
| Calcium | ug/L | 10000 | 10200 | 102 | 80-120 | |
| Cobalt | ug/L | 1000 | 992 | 99 | 80-120 | |
| Iron | ug/L | 10000 | 10200 | 102 | 80-120 | |
| Magnesium | ug/L | 10000 | 10000 | 100 | 80-120 | |
| Manganese | ug/L | 1000 | 976 | 98 | 80-120 | |
| Nickel | ug/L | 1000 | 1000 | 100 | 80-120 | B |
| Sodium | ug/L | 10000 | 9780 | 98 | 80-120 | |
| Total Hardness by 2340B | ug/L | 66200 | 66800 | 101 | 80-120 | |
| Zinc | ug/L | 1000 | 988 | 99 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1613589 1613590

| Parameter | Units | 50152742001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | ug/L | 96.3 | 1000 | 1000 | 1060 | 1080 | 97 | 99 | 75-125 | 2 | 20 | |
| Boron | ug/L | 119 | 1000 | 1000 | 1140 | 1150 | 102 | 103 | 75-125 | 1 | 20 | |
| Calcium | ug/L | 76400 | 10000 | 10000 | 83600 | 84800 | 72 | 84 | 75-125 | 1 | 20 | P6 |
| Cobalt | ug/L | ND | 1000 | 1000 | 949 | 965 | 95 | 96 | 75-125 | 2 | 20 | |
| Iron | ug/L | 720 | 10000 | 10000 | 10400 | 10600 | 97 | 99 | 75-125 | 2 | 20 | |
| Magnesium | ug/L | 44900 | 10000 | 10000 | 53100 | 53800 | 82 | 89 | 75-125 | 1 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1613589 1613590

| Parameter | Units | 50152742001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manganese | ug/L | 41.9 | 1000 | 1000 | 985 | 1000 | 94 | 96 | 75-125 | 1 | 20 | |
| Nickel | ug/L | ND | 1000 | 1000 | 952 | 968 | 95 | 96 | 75-125 | 2 | 20 | B |
| Sodium | ug/L | 88300 | 10000 | 10000 | 95200 | 96900 | 69 | 86 | 75-125 | 2 | 20 | P6 |
| Total Hardness by 2340B | ug/L | 376000 | 66200 | 66200 | 427000 | 433000 | 78 | 87 | 75-125 | 1 | 20 | |
| Zinc | ug/L | ND | 1000 | 1000 | 948 | 965 | 95 | 96 | 75-125 | 2 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349625
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

METHOD BLANK: 1616706
Matrix: Water
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Barium | ug/L | ND | 10.0 | 09/08/16 17:26 | |
| Boron | ug/L | ND | 100 | 09/08/16 17:26 | |
| Calcium | ug/L | ND | 500 | 09/08/16 17:26 | |
| Cobalt | ug/L | ND | 5.0 | 09/08/16 17:26 | |
| Iron | ug/L | ND | 50.0 | 09/08/16 17:26 | |
| Magnesium | ug/L | ND | 500 | 09/08/16 17:26 | |
| Manganese | ug/L | ND | 5.0 | 09/08/16 17:26 | |
| Nickel | ug/L | ND | 10.0 | 09/08/16 17:26 | |
| Sodium | ug/L | ND | 1000 | 09/08/16 17:26 | |
| Total Hardness by 2340B | ug/L | ND | 1000 | 09/08/16 17:26 | |
| Zinc | ug/L | ND | 20.0 | 09/08/16 17:26 | |

LABORATORY CONTROL SAMPLE: 1616707

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Barium | ug/L | 1000 | 1020 | 102 | 80-120 | |
| Boron | ug/L | 1000 | 1050 | 105 | 80-120 | |
| Calcium | ug/L | 10000 | 10300 | 103 | 80-120 | |
| Cobalt | ug/L | 1000 | 1010 | 101 | 80-120 | |
| Iron | ug/L | 10000 | 10300 | 103 | 80-120 | |
| Magnesium | ug/L | 10000 | 10100 | 101 | 80-120 | |
| Manganese | ug/L | 1000 | 991 | 99 | 80-120 | |
| Nickel | ug/L | 1000 | 1040 | 104 | 80-120 | |
| Sodium | ug/L | 10000 | 10300 | 103 | 80-120 | |
| Total Hardness by 2340B | ug/L | 66200 | 67200 | 102 | 80-120 | |
| Zinc | ug/L | 1000 | 1010 | 101 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1616708 1616709

| Parameter | Units | 50152744015 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | ug/L | 562 | 1000 | 1000 | 1640 | 1580 | 107 | 102 | 75-125 | 4 | 20 | |
| Boron | ug/L | 1040 | 1000 | 1000 | 2170 | 2160 | 113 | 112 | 75-125 | 1 | 20 | |
| Calcium | ug/L | 122000 | 10000 | 10000 | 138000 | 137000 | 164 | 151 | 75-125 | 1 | 20 | P6 |
| Cobalt | ug/L | ND | 1000 | 1000 | 970 | 957 | 97 | 95 | 75-125 | 1 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1616708 1616709

| Parameter | Units | 50152744015 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iron | ug/L | 20900 | 10000 | 10000 | 31800 | 31600 | 110 | 107 | 75-125 | 1 | 20 | |
| Magnesium | ug/L | 59800 | 10000 | 10000 | 72000 | 71500 | 122 | 117 | 75-125 | 1 | 20 | |
| Manganese | ug/L | 86.4 | 1000 | 1000 | 1060 | 1060 | 97 | 97 | 75-125 | 0 | 20 | |
| Nickel | ug/L | 20.1 | 1000 | 1000 | 1010 | 999 | 99 | 98 | 75-125 | 1 | 20 | |
| Sodium | ug/L | 187000 | 10000 | 10000 | 208000 | 201000 | 211 | 138 | 75-125 | 4 | 20 | E,P6 |
| Total Hardness by 2340B | ug/L | 550000 | 66200 | 66200 | 641000 | 636000 | 138 | 130 | 75-125 | 1 | 20 | |
| Zinc | ug/L | 90.0 | 1000 | 1000 | 1090 | 1080 | 100 | 99 | 75-125 | 1 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349814 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 50152744001, 50152744003, 50152744007, 50152744010, 50152744011

METHOD BLANK: 1617742 Matrix: Water
Associated Lab Samples: 50152744001, 50152744003, 50152744007, 50152744010, 50152744011

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nickel | ug/L | ND | 10.0 | 09/07/16 10:17 | |

LABORATORY CONTROL SAMPLE: 1617743

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nickel | ug/L | 1000 | 1020 | 102 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617744 1617745

| Parameter | Units | 50153199001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nickel | ug/L | ND | 1000 | 1000 | 972 | 965 | 97 | 96 | 75-125 | 1 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350324 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

METHOD BLANK: 1620419 Matrix: Water
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Barium | ug/L | ND | 10.0 | 09/09/16 14:38 | |
| Boron | ug/L | ND | 100 | 09/09/16 14:38 | |
| Calcium | ug/L | ND | 500 | 09/09/16 14:38 | |
| Cobalt | ug/L | ND | 5.0 | 09/09/16 14:38 | |
| Iron | ug/L | ND | 50.0 | 09/09/16 14:38 | |
| Magnesium | ug/L | ND | 500 | 09/09/16 14:38 | |
| Manganese | ug/L | ND | 5.0 | 09/09/16 14:38 | |
| Nickel | ug/L | ND | 10.0 | 09/09/16 14:38 | |
| Sodium | ug/L | ND | 1000 | 09/09/16 14:38 | |
| Total Hardness by 2340B | ug/L | ND | 1000 | 09/09/16 14:38 | |
| Zinc | ug/L | ND | 20.0 | 09/09/16 14:38 | |

LABORATORY CONTROL SAMPLE: 1620420

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Barium | ug/L | 1000 | 1010 | 101 | 80-120 | |
| Boron | ug/L | 1000 | 1030 | 103 | 80-120 | |
| Calcium | ug/L | 10000 | 9940 | 99 | 80-120 | |
| Cobalt | ug/L | 1000 | 984 | 98 | 80-120 | |
| Iron | ug/L | 10000 | 9980 | 100 | 80-120 | |
| Magnesium | ug/L | 10000 | 9960 | 100 | 80-120 | |
| Manganese | ug/L | 1000 | 952 | 95 | 80-120 | |
| Nickel | ug/L | 1000 | 1020 | 102 | 80-120 | |
| Sodium | ug/L | 10000 | 10300 | 103 | 80-120 | |
| Total Hardness by 2340B | ug/L | 66200 | 65900 | 100 | 80-120 | |
| Zinc | ug/L | 1000 | 1010 | 101 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620421 1620422

| Parameter | Units | 50153343001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | ug/L | 0.13 mg/L | 1000 | 1000 | 1110 | 1090 | 98 | 96 | 75-125 | 2 | 20 | |
| Boron | ug/L | 0.66 mg/L | 1000 | 1000 | 1700 | 1670 | 103 | 100 | 75-125 | 2 | 20 | |
| Calcium | ug/L | 9.6 mg/L | 10000 | 10000 | 19200 | 18900 | 95 | 92 | 75-125 | 2 | 20 | |
| Cobalt | ug/L | ND | 1000 | 1000 | 943 | 936 | 94 | 94 | 75-125 | 1 | 20 | |
| Iron | ug/L | 0.060 mg/L | 10000 | 10000 | 9610 | 9500 | 95 | 94 | 75-125 | 1 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620421 1620422

| Parameter | Units | 50153343001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Magnesium | ug/L | 5.0 mg/L | 10000 | 10000 | 14300 | 14200 | 94 | 92 | 75-125 | 1 | 20 | |
| Manganese | ug/L | 0.031 mg/L | 1000 | 1000 | 938 | 936 | 91 | 91 | 75-125 | 0 | 20 | |
| Nickel | ug/L | ND | 1000 | 1000 | 969 | 962 | 97 | 96 | 75-125 | 1 | 20 | |
| Sodium | ug/L | 110 mg/L | 10000 | 10000 | 118000 | 116000 | 87 | 60 | 75-125 | 2 | 20 | P6 |
| Total Hardness by 2340B | ug/L | 44.4 mg/L | 66200 | 66200 | 107000 | 105000 | 94 | 92 | 75-125 | 1 | 20 | |
| Zinc | ug/L | ND | 1000 | 1000 | 996 | 987 | 99 | 98 | 75-125 | 1 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349039 Analysis Method: EPA 6020
QC Batch Method: EPA 200.2 Analysis Description: 6020 MET
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025

METHOD BLANK: 1614631 Matrix: Water
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Antimony | ug/L | ND | 5.0 | 09/02/16 02:02 | |
| Arsenic | ug/L | ND | 5.0 | 09/02/16 02:02 | |
| Beryllium | ug/L | ND | 2.0 | 09/02/16 02:02 | CU |
| Cadmium | ug/L | ND | 0.20 | 09/02/16 02:02 | |
| Chromium | ug/L | ND | 5.0 | 09/02/16 02:02 | |
| Copper | ug/L | ND | 5.0 | 09/02/16 02:02 | |
| Lead | ug/L | ND | 5.0 | 09/02/16 02:02 | |
| Selenium | ug/L | ND | 5.0 | 09/02/16 02:02 | |
| Silver | ug/L | ND | 5.0 | 09/02/16 02:02 | |
| Thallium | ug/L | ND | 2.0 | 09/02/16 02:02 | |
| Vanadium | ug/L | ND | 10.0 | 09/02/16 02:02 | N2 |

LABORATORY CONTROL SAMPLE: 1614632

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Antimony | ug/L | 40 | 40.0 | 100 | 80-120 | |
| Arsenic | ug/L | 40 | 41.0 | 103 | 80-120 | |
| Beryllium | ug/L | 40 | 42.6 | 106 | 80-120 | CH |
| Cadmium | ug/L | 40 | 38.7 | 97 | 80-120 | |
| Chromium | ug/L | 40 | 41.7 | 104 | 80-120 | |
| Copper | ug/L | 40 | 42.1 | 105 | 80-120 | |
| Lead | ug/L | 40 | 39.5 | 99 | 80-120 | |
| Selenium | ug/L | 40 | 40.7 | 102 | 80-120 | |
| Silver | ug/L | 40 | 39.7 | 99 | 80-120 | |
| Thallium | ug/L | 40 | 39.5 | 99 | 80-120 | |
| Vanadium | ug/L | 40 | 40.7 | 102 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1614633 1614634

| Parameter | Units | 50152225005 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | ND | 40 | 40 | 40.4 | 39.9 | 101 | 100 | 75-125 | 1 | 20 | |
| Arsenic | ug/L | 0.0045 mg/L | 40 | 40 | 47.3 | 45.6 | 107 | 103 | 75-125 | 4 | 20 | |
| Beryllium | ug/L | ND | 40 | 40 | 47.1 | 46.3 | 118 | 116 | 75-125 | 2 | 20 | CH |
| Cadmium | ug/L | ND | 40 | 40 | 38.4 | 36.7 | 96 | 92 | 75-125 | 4 | 20 | |
| Chromium | ug/L | ND | 40 | 40 | 42.9 | 40.5 | 106 | 100 | 75-125 | 6 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1614633 1614634

| Parameter | Units | 50152225005 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | ug/L | 0.0022 mg/L | 40 | 40 | 40.9 | 39.3 | 97 | 93 | 75-125 | 4 | 20 | |
| Lead | ug/L | ND | 40 | 40 | 39.7 | 37.7 | 99 | 94 | 75-125 | 5 | 20 | |
| Selenium | ug/L | ND | 40 | 40 | 41.3 | 40.1 | 103 | 100 | 75-125 | 3 | 20 | |
| Silver | ug/L | ND | 40 | 40 | 37.9 | 35.7 | 95 | 89 | 75-125 | 6 | 20 | |
| Thallium | ug/L | ND | 40 | 40 | 39.8 | 38.3 | 99 | 96 | 75-125 | 4 | 20 | |
| Vanadium | ug/L | ND | 40 | 40 | 43.3 | 40.4 | 107 | 100 | 75-125 | 7 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349841 Analysis Method: EPA 6020
QC Batch Method: EPA 200.2 Analysis Description: 6020 MET
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

METHOD BLANK: 1617942 Matrix: Water
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Antimony | ug/L | ND | 5.0 | 09/03/16 02:05 | |
| Arsenic | ug/L | ND | 5.0 | 09/03/16 02:05 | |
| Beryllium | ug/L | ND | 2.0 | 09/03/16 02:05 | |
| Cadmium | ug/L | ND | 0.20 | 09/03/16 02:05 | |
| Chromium | ug/L | ND | 5.0 | 09/03/16 02:05 | |
| Copper | ug/L | ND | 5.0 | 09/03/16 02:05 | |
| Lead | ug/L | ND | 5.0 | 09/03/16 02:05 | |
| Selenium | ug/L | ND | 5.0 | 09/03/16 02:05 | |
| Silver | ug/L | ND | 5.0 | 09/03/16 02:05 | |
| Thallium | ug/L | ND | 2.0 | 09/03/16 02:05 | |
| Vanadium | ug/L | ND | 10.0 | 09/03/16 02:05 | N2 |

LABORATORY CONTROL SAMPLE: 1617943

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Antimony | ug/L | 40 | 40.7 | 102 | 80-120 | |
| Arsenic | ug/L | 40 | 39.3 | 98 | 80-120 | |
| Beryllium | ug/L | 40 | 38.0 | 95 | 80-120 | |
| Cadmium | ug/L | 40 | 39.3 | 98 | 80-120 | |
| Chromium | ug/L | 40 | 41.7 | 104 | 80-120 | |
| Copper | ug/L | 40 | 42.2 | 106 | 80-120 | |
| Lead | ug/L | 40 | 41.7 | 104 | 80-120 | |
| Selenium | ug/L | 40 | 39.8 | 100 | 80-120 | |
| Silver | ug/L | 40 | 40.2 | 100 | 80-120 | |
| Thallium | ug/L | 40 | 40.5 | 101 | 80-120 | |
| Vanadium | ug/L | 40 | 41.0 | 102 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617944 1617945

| Parameter | Units | 50153227006 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | ND | 40 | 40 | 42.1 | 41.0 | 105 | 102 | 75-125 | 3 | 20 | |
| Arsenic | ug/L | ND | 40 | 40 | 40.3 | 38.7 | 99 | 95 | 75-125 | 4 | 20 | |
| Beryllium | ug/L | ND | 40 | 40 | 39.2 | 37.8 | 98 | 94 | 75-125 | 4 | 20 | |
| Cadmium | ug/L | ND | 40 | 40 | 38.5 | 37.2 | 96 | 93 | 75-125 | 3 | 20 | |
| Chromium | ug/L | ND | 40 | 40 | 41.6 | 40.2 | 101 | 97 | 75-125 | 3 | 20 | |
| Copper | ug/L | ND | 40 | 40 | 39.8 | 38.1 | 98 | 94 | 75-125 | 4 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617944 1617945

| Parameter | Units | 50153227006 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ug/L | ND | 40 | 40 | 41.5 | 39.7 | 102 | 97 | 75-125 | 5 | 20 | |
| Selenium | ug/L | ND | 40 | 40 | 39.7 | 38.8 | 97 | 95 | 75-125 | 2 | 20 | |
| Silver | ug/L | ND | 40 | 40 | 39.0 | 37.6 | 97 | 94 | 75-125 | 4 | 20 | |
| Thallium | ug/L | ND | 40 | 40 | 41.0 | 39.3 | 102 | 98 | 75-125 | 4 | 20 | |
| Vanadium | ug/L | ND | 40 | 40 | 41.4 | 40.4 | 103 | 101 | 75-125 | 3 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350094 Analysis Method: EPA 6020
QC Batch Method: EPA 200.2 Analysis Description: 6020 MET
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

METHOD BLANK: 1619689 Matrix: Water
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Antimony | ug/L | ND | 5.0 | 09/15/16 05:33 | |
| Arsenic | ug/L | ND | 5.0 | 09/15/16 05:33 | |
| Beryllium | ug/L | ND | 2.0 | 09/15/16 05:33 | |
| Cadmium | ug/L | ND | 0.20 | 09/15/16 05:33 | |
| Chromium | ug/L | ND | 5.0 | 09/15/16 05:33 | |
| Copper | ug/L | ND | 5.0 | 09/15/16 05:33 | |
| Lead | ug/L | ND | 5.0 | 09/15/16 05:33 | |
| Selenium | ug/L | ND | 5.0 | 09/15/16 05:33 | |
| Silver | ug/L | ND | 5.0 | 09/15/16 05:33 | |
| Thallium | ug/L | ND | 2.0 | 09/15/16 05:33 | |
| Vanadium | ug/L | ND | 10.0 | 09/15/16 05:33 | N2 |

LABORATORY CONTROL SAMPLE: 1619690

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Antimony | ug/L | 40 | 43.2 | 108 | 80-120 | |
| Arsenic | ug/L | 40 | 44.2 | 110 | 80-120 | |
| Beryllium | ug/L | 40 | 41.0 | 103 | 80-120 | |
| Cadmium | ug/L | 40 | 40.1 | 100 | 80-120 | |
| Chromium | ug/L | 40 | 46.4 | 116 | 80-120 | |
| Copper | ug/L | 40 | 41.3 | 103 | 80-120 | |
| Lead | ug/L | 40 | 41.0 | 102 | 80-120 | |
| Selenium | ug/L | 40 | 44.3 | 111 | 80-120 | |
| Silver | ug/L | 40 | 41.2 | 103 | 80-120 | |
| Thallium | ug/L | 40 | 43.0 | 107 | 80-120 | |
| Vanadium | ug/L | 40 | 45.6 | 114 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1619691 1619692

| Parameter | Units | 50152744040 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | ND | 40 | 40 | 42.8J | 43.8J | 105 | 108 | 75-125 | 2 | 20 | |
| Arsenic | ug/L | 143 | 40 | 40 | 197 | 202 | 135 | 146 | 75-125 | 2 | 20 | M3 |
| Beryllium | ug/L | ND | 40 | 40 | 49.0 | 47.6 | 122 | 119 | 75-125 | 3 | 20 | |
| Cadmium | ug/L | 2.2 | 40 | 40 | 44.8 | 44.7 | 106 | 106 | 75-125 | 0 | 20 | |
| Chromium | ug/L | 32.1 | 40 | 40 | 76.2 | 77.0 | 110 | 112 | 75-125 | 1 | 20 | |
| Copper | ug/L | 9.9 | 40 | 40 | 56.7 | 53.5 | 117 | 109 | 75-125 | 6 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1619691 1619692

| Parameter | Units | 50152744040 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ug/L | 83.7 | 40 | 40 | 129 | 129 | 112 | 112 | 75-125 | 0 | 20 | |
| Selenium | ug/L | ND | 40 | 40 | 37.5J | 36.2J | 92 | 89 | 75-125 | 3 | 20 | |
| Silver | ug/L | ND | 40 | 40 | 41.6J | 41.5J | 104 | 104 | 75-125 | 0 | 20 | |
| Thallium | ug/L | ND | 40 | 40 | 42.2 | 42.2 | 105 | 105 | 75-125 | 0 | 20 | |
| Vanadium | ug/L | 24.6 | 40 | 40 | 67.5J | 69.3J | 107 | 112 | 75-125 | 3 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350759 Analysis Method: EPA 6020
QC Batch Method: EPA 200.2 Analysis Description: 6020 MET
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1622282 Matrix: Water
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Antimony | ug/L | ND | 5.0 | 09/15/16 17:36 | |
| Arsenic | ug/L | ND | 5.0 | 09/15/16 17:36 | |
| Beryllium | ug/L | ND | 2.0 | 09/15/16 17:36 | |
| Cadmium | ug/L | ND | 0.20 | 09/15/16 17:36 | |
| Chromium | ug/L | ND | 5.0 | 09/15/16 17:36 | |
| Copper | ug/L | ND | 5.0 | 09/15/16 17:36 | |
| Lead | ug/L | ND | 5.0 | 09/15/16 17:36 | |
| Selenium | ug/L | ND | 0.50 | 09/15/16 17:36 | |
| Silver | ug/L | ND | 5.0 | 09/15/16 17:36 | |
| Thallium | ug/L | ND | 2.0 | 09/15/16 17:36 | |
| Vanadium | ug/L | ND | 10.0 | 09/15/16 17:36 | N2 |

LABORATORY CONTROL SAMPLE: 1622283

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Antimony | ug/L | 40 | 45.7 | 114 | 80-120 | |
| Arsenic | ug/L | 40 | 42.7 | 107 | 80-120 | |
| Beryllium | ug/L | 40 | 42.3 | 106 | 80-120 | |
| Cadmium | ug/L | 40 | 41.8 | 104 | 80-120 | |
| Chromium | ug/L | 40 | 43.5 | 109 | 80-120 | |
| Copper | ug/L | 40 | 41.3 | 103 | 80-120 | |
| Lead | ug/L | 40 | 42.4 | 106 | 80-120 | |
| Selenium | ug/L | 40 | 41.5 | 104 | 80-120 | |
| Silver | ug/L | 40 | 43.1 | 108 | 80-120 | |
| Thallium | ug/L | 40 | 42.3 | 106 | 80-120 | |
| Vanadium | ug/L | 40 | 42.3 | 106 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622284 1622285

| Parameter | Units | 50153682003 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | ND | 40 | 40 | 44.0 | 44.3 | 110 | 111 | 75-125 | 1 | 20 | |
| Arsenic | ug/L | ND | 40 | 40 | 42.5 | 42.2 | 105 | 105 | 75-125 | 1 | 20 | |
| Beryllium | ug/L | ND | 40 | 40 | 44.8 | 44.0 | 112 | 110 | 75-125 | 2 | 20 | |
| Cadmium | ug/L | ND | 40 | 40 | 41.7 | 40.5 | 104 | 101 | 75-125 | 3 | 20 | |
| Chromium | ug/L | ND | 40 | 40 | 44.1 | 43.5 | 105 | 104 | 75-125 | 1 | 20 | |
| Copper | ug/L | ND | 40 | 40 | 37.5 | 36.3 | 92 | 89 | 75-125 | 3 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622284 1622285

| Parameter | Units | 50153682003 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ug/L | ND | 40 | 40 | 42.4 | 41.3 | 106 | 103 | 75-125 | 3 | 20 | |
| Selenium | ug/L | ND | 40 | 40 | 40.8 | 40.6 | 102 | 101 | 75-125 | 0 | 20 | |
| Silver | ug/L | ND | 40 | 40 | 41.6 | 40.5 | 104 | 101 | 75-125 | 3 | 20 | |
| Thallium | ug/L | ND | 40 | 40 | 43.0 | 41.9 | 107 | 105 | 75-125 | 3 | 20 | |
| Vanadium | ug/L | ND | 40 | 40 | 42.8 | 42.3 | 107 | 106 | 75-125 | 1 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349111
QC Batch Method: EPA 8260
Associated Lab Samples: 50152744011, 50152744012

Analysis Method: EPA 8260
Analysis Description: 8260 MSV

METHOD BLANK: 1614830
Matrix: Water
Associated Lab Samples: 50152744011, 50152744012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| 2-Hexanone | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Acetone | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Acrylonitrile | ug/L | ND | 100 | 08/29/16 14:26 | |
| Benzene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Bromochloromethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Bromoform | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Bromomethane | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Carbon disulfide | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Chlorobenzene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Chloroethane | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Chloroform | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Chloromethane | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Dibromomethane | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Ethylbenzene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Iodomethane | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Methylene Chloride | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Styrene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Toluene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/29/16 14:26 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1614830 Matrix: Water
Associated Lab Samples: 50152744011, 50152744012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Trichloroethene | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Vinyl acetate | ug/L | ND | 10.0 | 08/29/16 14:26 | |
| Vinyl chloride | ug/L | ND | 2.0 | 08/29/16 14:26 | |
| Xylene (Total) | ug/L | ND | 5.0 | 08/29/16 14:26 | |
| 4-Bromofluorobenzene (S) | %. | 101 | 79-116 | 08/29/16 14:26 | |
| Dibromofluoromethane (S) | %. | 100 | 84-118 | 08/29/16 14:26 | |
| Toluene-d8 (S) | %. | 99 | 86-110 | 08/29/16 14:26 | |

LABORATORY CONTROL SAMPLE: 1614831

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 49.9 | 100 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 49.5 | 99 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 49.4 | 99 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 47.7 | 95 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 47.8 | 96 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 50.3 | 101 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 50.7 | 101 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 50.6 | 101 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 54.4 | 109 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 50.4 | 101 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 46.2 | 92 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 50.0 | 100 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 45.1 | 90 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 280 | 112 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 303 | 121 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 259 | 103 | 66-134 | |
| Acetone | ug/L | 250 | 265 | 106 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 190 | 95 | 64-133 | |
| Benzene | ug/L | 50 | 47.2 | 94 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 51.9 | 104 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 54.0 | 108 | 71-124 | |
| Bromoform | ug/L | 50 | 49.7 | 99 | 60-125 | |
| Bromomethane | ug/L | 50 | 52.2 | 104 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 44.0 | 88 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 57.4 | 115 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 47.4 | 95 | 76-118 | |
| Chloroethane | ug/L | 50 | 42.6 | 85 | 50-147 | |
| Chloroform | ug/L | 50 | 47.9 | 96 | 70-119 | |
| Chloromethane | ug/L | 50 | 44.9 | 90 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 52.6 | 105 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 55.2 | 110 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1614831

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 49.8 | 100 | 73-127 | |
| Dibromomethane | ug/L | 50 | 54.6 | 109 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 49.5 | 99 | 75-123 | |
| Iodomethane | ug/L | 100 | 95.7 | 96 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 48.8 | 98 | 66-130 | |
| Styrene | ug/L | 50 | 56.1 | 112 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 48.3 | 97 | 69-119 | |
| Toluene | ug/L | 50 | 45.6 | 91 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 45.7 | 91 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 57.5 | 115 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 203 | 101 | 39-153 | |
| Trichloroethene | ug/L | 50 | 46.5 | 93 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 48.5 | 97 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 221 | 110 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 46.1 | 92 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 153 | 102 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 102 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 100 | 84-118 | |
| Toluene-d8 (S) | %. | | | 98 | 86-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1614832 1614833

| Parameter | Units | 50152702002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 41.5 | 48.9 | 83 | 98 | 44-142 | 16 | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 43.3 | 50.1 | 87 | 100 | 51-140 | 15 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 37.1 | 45.8 | 74 | 92 | 49-138 | 21 | 20 | R1 |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 50 | 40.1 | 47.7 | 80 | 95 | 51-138 | 17 | 20 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 50 | 41.6 | 47.5 | 83 | 95 | 48-137 | 13 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 47.1 | 53.9 | 94 | 108 | 51-144 | 13 | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 50 | 40.2 | 48.7 | 80 | 97 | 51-139 | 19 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 50 | 38.9 | 42.5 | 78 | 85 | 37-127 | 9 | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 50 | 42.8 | 49.4 | 86 | 99 | 52-134 | 14 | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 50 | 40.8 | 49.1 | 82 | 98 | 38-138 | 19 | 20 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 50 | 38.3 | 44.8 | 77 | 90 | 44-144 | 16 | 20 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 50 | 40.5 | 47.7 | 81 | 95 | 56-138 | 16 | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 50 | 37.4 | 42.8 | 75 | 86 | 34-134 | 13 | 20 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 250 | 213 | 240 | 85 | 96 | 44-142 | 12 | 20 | |
| 2-Hexanone | ug/L | ND | 250 | 250 | 212 | 256 | 85 | 102 | 43-150 | 19 | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 250 | 194 | 230 | 77 | 92 | 46-143 | 17 | 20 | |
| Acetone | ug/L | ND | 250 | 250 | 181 | 211 | 72 | 84 | 33-150 | 15 | 20 | |
| Acrylonitrile | ug/L | ND | 200 | 200 | 147 | 168 | 73 | 84 | 47-143 | 13 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 41.5 | 46.7 | 83 | 93 | 51-140 | 12 | 20 | |
| Bromochloromethane | ug/L | ND | 50 | 50 | 42.0 | 49.5 | 84 | 99 | 53-148 | 16 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1614832 1614833

| Parameter | Units | 50152702002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ug/L | ND | 50 | 50 | 43.8 | 52.3 | 88 | 105 | 46-137 | 18 | 20 | |
| Bromoform | ug/L | ND | 50 | 50 | 37.6 | 44.8 | 75 | 90 | 36-127 | 18 | 20 | |
| Bromomethane | ug/L | ND | 50 | 50 | 44.8 | 54.2 | 90 | 108 | 10-188 | 19 | 20 | |
| Carbon disulfide | ug/L | ND | 50 | 50 | 39.6 | 45.6 | 79 | 91 | 35-148 | 14 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 49.0 | 55.6 | 98 | 111 | 45-151 | 13 | 20 | |
| Chlorobenzene | ug/L | ND | 50 | 50 | 39.1 | 46.6 | 78 | 93 | 45-138 | 18 | 20 | |
| Chloroethane | ug/L | ND | 50 | 50 | 38.2 | 42.0 | 76 | 84 | 33-164 | 10 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 40.1 | 45.9 | 80 | 92 | 50-135 | 14 | 20 | |
| Chloromethane | ug/L | ND | 50 | 50 | 35.6 | 41.3 | 71 | 83 | 38-145 | 15 | 20 | |
| cis-1,2-Dichloroethene | ug/L | 251 | 50 | 50 | 293 | 314 | 85 | 125 | 43-144 | 7 | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 42.4 | 52.4 | 85 | 105 | 42-136 | 21 | 20 | R1 |
| Dibromochloromethane | ug/L | ND | 50 | 50 | 40.8 | 47.1 | 82 | 94 | 45-136 | 14 | 20 | |
| Dibromomethane | ug/L | ND | 50 | 50 | 42.5 | 48.7 | 85 | 97 | 51-139 | 14 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 41.9 | 48.6 | 84 | 97 | 36-146 | 15 | 20 | |
| Iodomethane | ug/L | ND | 100 | 100 | 75.5 | 92.5 | 75 | 92 | 28-153 | 20 | 20 | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 39.7 | 46.1 | 79 | 92 | 48-140 | 15 | 20 | |
| Styrene | ug/L | ND | 50 | 50 | 45.0 | 53.4 | 90 | 107 | 31-148 | 17 | 20 | |
| Tetrachloroethene | ug/L | 2220 | 50 | 50 | 2670 | 2760 | 884 | 1080 | 38-139 | 4 | 20 | M1 |
| Toluene | ug/L | ND | 50 | 50 | 38.8 | 45.2 | 78 | 90 | 44-140 | 15 | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 42.7 | 48.6 | 85 | 97 | 50-139 | 13 | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 44.0 | 52.8 | 88 | 106 | 37-138 | 18 | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 200 | 145 | 173 | 73 | 87 | 10-157 | 18 | 20 | |
| Trichloroethene | ug/L | 133 | 50 | 50 | 174 | 188 | 83 | 111 | 44-146 | 8 | 20 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 50 | 45.6 | 51.9 | 91 | 104 | 41-164 | 13 | 20 | |
| Vinyl acetate | ug/L | ND | 200 | 200 | 168 | 190 | 84 | 95 | 15-146 | 13 | 20 | |
| Vinyl chloride | ug/L | ND | 50 | 50 | 44.6 | 50.3 | 89 | 101 | 43-166 | 12 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 123 | 145 | 82 | 97 | 35-146 | 16 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 101 | 100 | 79-116 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 104 | 104 | 84-118 | | | |
| Toluene-d8 (S) | %. | | | | | | 99 | 99 | 86-110 | | | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349160 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744014

METHOD BLANK: 1615163 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| 2-Hexanone | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Acetone | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Acrylonitrile | ug/L | ND | 100 | 08/30/16 02:43 | |
| Benzene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Bromochloromethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Bromoform | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Bromomethane | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Carbon disulfide | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Chlorobenzene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Chloroethane | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Chloroform | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Chloromethane | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Dibromomethane | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Ethylbenzene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Iodomethane | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Methylene Chloride | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Styrene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Toluene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 02:43 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1615163 Matrix: Water

Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Trichloroethene | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Vinyl acetate | ug/L | ND | 10.0 | 08/30/16 02:43 | |
| Vinyl chloride | ug/L | ND | 2.0 | 08/30/16 02:43 | |
| Xylene (Total) | ug/L | ND | 5.0 | 08/30/16 02:43 | |
| 4-Bromofluorobenzene (S) | %. | 96 | 79-116 | 08/30/16 02:43 | |
| Dibromofluoromethane (S) | %. | 106 | 84-118 | 08/30/16 02:43 | |
| Toluene-d8 (S) | %. | 95 | 86-110 | 08/30/16 02:43 | |

LABORATORY CONTROL SAMPLE: 1615164

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 53.8 | 108 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 50.8 | 102 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 51.0 | 102 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 49.9 | 100 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 47.2 | 94 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 43.0 | 86 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 50.2 | 100 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 50.0 | 100 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 54.3 | 109 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 49.3 | 99 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 45.7 | 91 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 51.0 | 102 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 45.5 | 91 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 264 | 106 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 290 | 116 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 269 | 108 | 66-134 | |
| Acetone | ug/L | 250 | 251 | 100 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 176 | 88 | 64-133 | |
| Benzene | ug/L | 50 | 47.1 | 94 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 47.5 | 95 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 51.3 | 103 | 71-124 | |
| Bromoform | ug/L | 50 | 46.1 | 92 | 60-125 | |
| Bromomethane | ug/L | 50 | 61.6 | 123 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 40.7 | 81 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 51.5 | 103 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 47.4 | 95 | 76-118 | |
| Chloroethane | ug/L | 50 | 42.2 | 84 | 50-147 | |
| Chloroform | ug/L | 50 | 46.7 | 93 | 70-119 | |
| Chloromethane | ug/L | 50 | 43.8 | 88 | 52-136 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1615164

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ug/L | 50 | 52.7 | 105 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 51.8 | 104 | 71-134 | |
| Dibromochloromethane | ug/L | 50 | 56.2 | 112 | 73-127 | |
| Dibromomethane | ug/L | 50 | 53.3 | 107 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 50.9 | 102 | 75-123 | |
| Iodomethane | ug/L | 100 | 105 | 105 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 41.8 | 84 | 66-130 | |
| Styrene | ug/L | 50 | 54.3 | 109 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 43.7 | 87 | 69-119 | |
| Toluene | ug/L | 50 | 48.4 | 97 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 46.0 | 92 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 57.2 | 114 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 189 | 94 | 39-153 | |
| Trichloroethene | ug/L | 50 | 47.1 | 94 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 47.8 | 96 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 212 | 106 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 45.3 | 91 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 151 | 101 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 101 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 95 | 84-118 | |
| Toluene-d8 (S) | %. | | | 100 | 86-110 | |

MATRIX SPIKE SAMPLE: 1615165

| Parameter | Units | 50152744001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 52.0 | 104 | 44-142 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 54.5 | 109 | 51-140 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 48.9 | 98 | 49-138 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 48.3 | 97 | 51-138 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 49.4 | 99 | 48-137 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 45.0 | 90 | 51-144 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 49.7 | 99 | 51-139 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 47.0 | 94 | 37-127 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 49.7 | 99 | 52-134 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 49.5 | 99 | 38-138 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 44.1 | 88 | 44-144 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 50.3 | 101 | 56-138 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 46.5 | 93 | 34-134 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 257 | 103 | 44-142 | |
| 2-Hexanone | ug/L | ND | 250 | 275 | 110 | 43-150 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 251 | 101 | 46-143 | |
| Acetone | ug/L | ND | 250 | 231 | 93 | 33-150 | |
| Acrylonitrile | ug/L | ND | 200 | 167 | 84 | 47-143 | |
| Benzene | ug/L | 5.2 | 50 | 52.7 | 95 | 51-140 | |
| Bromochloromethane | ug/L | ND | 50 | 45.1 | 90 | 53-148 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE SAMPLE: 1615165

| Parameter | Units | 50152744001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ug/L | ND | 50 | 50.0 | 100 | 46-137 | |
| Bromoform | ug/L | ND | 50 | 43.2 | 86 | 36-127 | |
| Bromomethane | ug/L | ND | 50 | 57.7 | 115 | 10-188 | |
| Carbon disulfide | ug/L | ND | 50 | 44.0 | 88 | 35-148 | |
| Carbon tetrachloride | ug/L | ND | 50 | 56.5 | 113 | 45-151 | |
| Chlorobenzene | ug/L | ND | 50 | 47.0 | 94 | 45-138 | |
| Chloroethane | ug/L | ND | 50 | 53.1 | 106 | 33-164 | |
| Chloroform | ug/L | ND | 50 | 48.8 | 98 | 50-135 | |
| Chloromethane | ug/L | ND | 50 | 45.6 | 91 | 38-146 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 53.5 | 101 | 43-144 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50.0 | 100 | 42-136 | |
| Dibromochloromethane | ug/L | ND | 50 | 55.6 | 111 | 45-136 | |
| Dibromomethane | ug/L | ND | 50 | 49.7 | 99 | 51-139 | |
| Ethylbenzene | ug/L | ND | 50 | 49.0 | 98 | 36-146 | |
| Iodomethane | ug/L | ND | 100 | 109 | 109 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 41.3 | 83 | 48-140 | |
| Styrene | ug/L | ND | 50 | 51.8 | 104 | 31-148 | |
| Tetrachloroethene | ug/L | ND | 50 | 45.8 | 92 | 38-139 | |
| Toluene | ug/L | ND | 50 | 47.4 | 95 | 44-140 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 49.0 | 98 | 50-139 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 57.1 | 114 | 37-138 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 182 | 91 | 10-157 | |
| Trichloroethene | ug/L | ND | 50 | 49.1 | 98 | 44-146 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 52.5 | 105 | 41-164 | |
| Vinyl acetate | ug/L | ND | 200 | 171 | 85 | 15-146 | |
| Vinyl chloride | ug/L | ND | 50 | 49.7 | 99 | 43-166 | |
| Xylene (Total) | ug/L | ND | 150 | 151 | 101 | 35-146 | |
| 4-Bromofluorobenzene (S) | %. | | | | 99 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | | 99 | 84-118 | |
| Toluene-d8 (S) | %. | | | | 97 | 86-110 | |

SAMPLE DUPLICATE: 1615166

| Parameter | Units | 50152744001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethene | ug/L | ND | ND | | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | ND | | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 1,2-Dichloroethane | ug/L | ND | ND | | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

SAMPLE DUPLICATE: 1615166

| Parameter | Units | 50152744001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ug/L | ND | ND | | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 2-Butanone (MEK) | ug/L | ND | ND | | 20 | |
| 2-Hexanone | ug/L | ND | ND | | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | ND | | 20 | |
| Acetone | ug/L | ND | ND | | 20 | |
| Acrylonitrile | ug/L | ND | ND | | 20 | |
| Benzene | ug/L | 5.2 | ND | | 20 | |
| Bromochloromethane | ug/L | ND | ND | | 20 | |
| Bromodichloromethane | ug/L | ND | ND | | 20 | |
| Bromoform | ug/L | ND | ND | | 20 | |
| Bromomethane | ug/L | ND | ND | | 20 | |
| Carbon disulfide | ug/L | ND | ND | | 20 | |
| Carbon tetrachloride | ug/L | ND | ND | | 20 | |
| Chlorobenzene | ug/L | ND | ND | | 20 | |
| Chloroethane | ug/L | ND | ND | | 20 | |
| Chloroform | ug/L | ND | ND | | 20 | |
| Chloromethane | ug/L | ND | ND | | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| Dibromochloromethane | ug/L | ND | ND | | 20 | |
| Dibromomethane | ug/L | ND | ND | | 20 | |
| Ethylbenzene | ug/L | ND | ND | | 20 | |
| Iodomethane | ug/L | ND | ND | | 20 | |
| Methylene Chloride | ug/L | ND | ND | | 20 | |
| Styrene | ug/L | ND | ND | | 20 | |
| Tetrachloroethene | ug/L | ND | ND | | 20 | |
| Toluene | ug/L | ND | ND | | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | ND | | 20 | |
| Trichloroethene | ug/L | ND | ND | | 20 | |
| Trichlorofluoromethane | ug/L | ND | ND | | 20 | |
| Vinyl acetate | ug/L | ND | ND | | 20 | |
| Vinyl chloride | ug/L | ND | ND | | 20 | |
| Xylene (Total) | ug/L | ND | ND | | 20 | |
| 4-Bromofluorobenzene (S) | %. | 96 | 100 | 4 | | |
| Dibromofluoromethane (S) | %. | 106 | 108 | 2 | | |
| Toluene-d8 (S) | %. | 97 | 97 | 1 | | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349170
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50152744013

METHOD BLANK: 1615189
Matrix: Water
Associated Lab Samples: 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| 2-Hexanone | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Acetone | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Acrylonitrile | ug/L | ND | 100 | 08/30/16 02:27 | |
| Benzene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Bromochloromethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Bromoform | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Bromomethane | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Carbon disulfide | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Chlorobenzene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Chloroethane | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Chloroform | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Chloromethane | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Dibromomethane | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Ethylbenzene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Iodomethane | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Methylene Chloride | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Styrene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Toluene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/30/16 02:27 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1615189 Matrix: Water
Associated Lab Samples: 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Trichloroethene | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Vinyl acetate | ug/L | ND | 10.0 | 08/30/16 02:27 | |
| Vinyl chloride | ug/L | ND | 2.0 | 08/30/16 02:27 | |
| Xylene (Total) | ug/L | ND | 5.0 | 08/30/16 02:27 | |
| 4-Bromofluorobenzene (S) | %. | 97 | 79-116 | 08/30/16 02:27 | |
| Dibromofluoromethane (S) | %. | 103 | 84-118 | 08/30/16 02:27 | |
| Toluene-d8 (S) | %. | 96 | 86-110 | 08/30/16 02:27 | |

LABORATORY CONTROL SAMPLE: 1615190

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 53.0 | 106 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 53.4 | 107 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 50.4 | 101 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 51.4 | 103 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 51.0 | 102 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 54.2 | 108 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 55.1 | 110 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 46.9 | 94 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 56.5 | 113 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 52.7 | 105 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 48.4 | 97 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 52.3 | 105 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 47.8 | 96 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 269 | 108 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 290 | 116 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 263 | 105 | 66-134 | |
| Acetone | ug/L | 250 | 218 | 87 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 187 | 94 | 64-133 | |
| Benzene | ug/L | 50 | 50.0 | 100 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 55.3 | 111 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 57.4 | 115 | 71-124 | |
| Bromoform | ug/L | 50 | 49.6 | 99 | 60-125 | |
| Bromomethane | ug/L | 50 | 33.7 | 67 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 46.7 | 93 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 61.1 | 122 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 48.2 | 96 | 76-118 | |
| Chloroethane | ug/L | 50 | 43.5 | 87 | 50-147 | |
| Chloroform | ug/L | 50 | 50.8 | 102 | 70-119 | |
| Chloromethane | ug/L | 50 | 38.5 | 77 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 55.2 | 110 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 54.1 | 108 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1615190

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 52.9 | 106 | 73-127 | |
| Dibromomethane | ug/L | 50 | 55.6 | 111 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 54.0 | 108 | 75-123 | |
| Iodomethane | ug/L | 100 | 90.8 | 91 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 49.7 | 99 | 66-130 | |
| Styrene | ug/L | 50 | 57.3 | 115 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 52.0 | 104 | 69-119 | |
| Toluene | ug/L | 50 | 49.2 | 98 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 48.5 | 97 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 54.8 | 110 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 150 | 75 | 39-153 | |
| Trichloroethene | ug/L | 50 | 51.1 | 102 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 51.0 | 102 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 218 | 109 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 48.2 | 96 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 159 | 106 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 103 | 84-118 | |
| Toluene-d8 (S) | %. | | | 97 | 86-110 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349462
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50152744010

METHOD BLANK: 1615999
Matrix: Water
Associated Lab Samples: 50152744010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| 2-Hexanone | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Acetone | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Acrylonitrile | ug/L | ND | 100 | 08/30/16 14:00 | |
| Benzene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Bromochloromethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Bromoform | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Bromomethane | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Carbon disulfide | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Chlorobenzene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Chloroethane | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Chloroform | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Chloromethane | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Dibromomethane | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Ethylbenzene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Iodomethane | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Methylene Chloride | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Styrene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Toluene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/30/16 14:00 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1615999 Matrix: Water
Associated Lab Samples: 50152744010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Trichloroethene | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Vinyl acetate | ug/L | ND | 10.0 | 08/30/16 14:00 | |
| Vinyl chloride | ug/L | ND | 2.0 | 08/30/16 14:00 | |
| Xylene (Total) | ug/L | ND | 5.0 | 08/30/16 14:00 | |
| 4-Bromofluorobenzene (S) | %. | 98 | 79-116 | 08/30/16 14:00 | |
| Dibromofluoromethane (S) | %. | 105 | 84-118 | 08/30/16 14:00 | |
| Toluene-d8 (S) | %. | 95 | 86-110 | 08/30/16 14:00 | |

LABORATORY CONTROL SAMPLE: 1616000

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 53.8 | 108 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 51.8 | 104 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 51.7 | 103 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 52.7 | 105 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 48.3 | 97 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 43.6 | 87 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 53.3 | 107 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 50.7 | 101 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 55.3 | 111 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 50.4 | 101 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 45.4 | 91 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 52.6 | 105 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 48.3 | 97 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 292 | 117 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 299 | 120 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 283 | 113 | 66-134 | |
| Acetone | ug/L | 250 | 254 | 102 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 187 | 94 | 64-133 | |
| Benzene | ug/L | 50 | 48.3 | 97 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 50.1 | 100 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 53.1 | 106 | 71-124 | |
| Bromoform | ug/L | 50 | 48.0 | 96 | 60-125 | |
| Bromomethane | ug/L | 50 | 48.6 | 97 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 43.1 | 86 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 52.9 | 106 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 49.0 | 98 | 76-118 | |
| Chloroethane | ug/L | 50 | 41.8 | 84 | 50-147 | |
| Chloroform | ug/L | 50 | 47.4 | 95 | 70-119 | |
| Chloromethane | ug/L | 50 | 41.4 | 83 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 51.5 | 103 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 55.4 | 111 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1616000

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 58.1 | 116 | 73-127 | |
| Dibromomethane | ug/L | 50 | 52.2 | 104 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 51.5 | 103 | 75-123 | |
| Iodomethane | ug/L | 100 | 87.2 | 87 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 45.0 | 90 | 66-130 | |
| Styrene | ug/L | 50 | 53.5 | 107 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 46.2 | 92 | 69-119 | |
| Toluene | ug/L | 50 | 49.7 | 99 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 47.6 | 95 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 63.1 | 126 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 206 | 103 | 39-153 | |
| Trichloroethene | ug/L | 50 | 49.3 | 99 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 48.9 | 98 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 217 | 109 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 43.0 | 86 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 156 | 104 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 98 | 84-118 | |
| Toluene-d8 (S) | %. | | | 100 | 86-110 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349537
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50152744020

METHOD BLANK: 1616347
Matrix: Water
Associated Lab Samples: 50152744020

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Acetone | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Acrylonitrile | ug/L | ND | 100 | 09/01/16 23:53 | |
| Benzene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Bromoform | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Bromomethane | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Chloroethane | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Chloroform | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Chloromethane | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Iodomethane | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Styrene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Toluene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/01/16 23:53 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1616347 Matrix: Water
Associated Lab Samples: 50152744020

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/01/16 23:53 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/01/16 23:53 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/01/16 23:53 | |
| 4-Bromofluorobenzene (S) | %. | 95 | 79-116 | 09/01/16 23:53 | |
| Dibromofluoromethane (S) | %. | 102 | 84-118 | 09/01/16 23:53 | |
| Toluene-d8 (S) | %. | 101 | 86-110 | 09/01/16 23:53 | |

LABORATORY CONTROL SAMPLE: 1616348

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 53.1 | 106 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 48.6 | 97 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 52.5 | 105 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 51.2 | 102 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 51.9 | 104 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 51.0 | 102 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 54.7 | 109 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 54.9 | 110 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 50.2 | 100 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 50.1 | 100 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 47.5 | 95 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 52.2 | 104 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 48.2 | 96 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 263 | 105 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 264 | 105 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 259 | 104 | 66-134 | |
| Acetone | ug/L | 250 | 230 | 92 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 194 | 97 | 64-133 | |
| Benzene | ug/L | 50 | 51.5 | 103 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 54.7 | 109 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 50.2 | 100 | 71-124 | |
| Bromoform | ug/L | 50 | 46.5 | 93 | 60-125 | |
| Bromomethane | ug/L | 50 | 62.3 | 125 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 50.3 | 101 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 50.2 | 100 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 47.8 | 96 | 76-118 | |
| Chloroethane | ug/L | 50 | 44.2 | 88 | 50-147 | |
| Chloroform | ug/L | 50 | 50.5 | 101 | 70-119 | |
| Chloromethane | ug/L | 50 | 40.9 | 82 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 50.6 | 101 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 53.6 | 107 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1616348

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 53.4 | 107 | 73-127 | |
| Dibromomethane | ug/L | 50 | 51.3 | 103 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 51.6 | 103 | 75-123 | |
| Iodomethane | ug/L | 100 | 110 | 110 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 47.0 | 94 | 66-130 | |
| Styrene | ug/L | 50 | 52.9 | 106 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 48.3 | 97 | 69-119 | |
| Toluene | ug/L | 50 | 51.1 | 102 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 48.4 | 97 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 47.7 | 95 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 198 | 99 | 39-153 | |
| Trichloroethene | ug/L | 50 | 48.2 | 96 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 49.3 | 99 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 211 | 105 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 49.4 | 99 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 153 | 102 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 100 | 84-118 | |
| Toluene-d8 (S) | %. | | | 99 | 86-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1616352 1616353

| Parameter | Units | 50152928012 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 51.7 | 47.1 | 103 | 94 | 44-142 | 9 | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 47.3 | 42.8 | 95 | 86 | 51-140 | 10 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 47.4 | 45.7 | 95 | 91 | 49-138 | 4 | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 50 | 47.4 | 46.5 | 95 | 93 | 51-138 | 2 | 20 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 50 | 47.7 | 47.9 | 95 | 96 | 48-137 | 1 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 49.3 | 43.2 | 99 | 86 | 51-144 | 13 | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 50 | 46.6 | 46.4 | 93 | 93 | 51-139 | 0 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 50 | 47.1 | 47.8 | 94 | 96 | 37-127 | 1 | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 50 | 48.0 | 46.1 | 96 | 92 | 52-134 | 4 | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 50 | 46.9 | 41.1 | 94 | 82 | 38-136 | 13 | 20 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 50 | 43.7 | 43.7 | 87 | 87 | 44-144 | 0 | 20 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 50 | 50.5 | 49.2 | 101 | 98 | 56-138 | 3 | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 50 | 46.5 | 39.7 | 93 | 79 | 34-134 | 16 | 20 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 250 | 233 | 235 | 93 | 94 | 44-142 | 1 | 20 | |
| 2-Hexanone | ug/L | ND | 250 | 250 | 237 | 241 | 95 | 96 | 43-150 | 2 | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 250 | 237 | 237 | 95 | 95 | 46-143 | 0 | 20 | |
| Acetone | ug/L | ND | 250 | 250 | 194 | 196 | 78 | 79 | 33-150 | 1 | 20 | |
| Acrylonitrile | ug/L | ND | 200 | 200 | 178 | 181 | 89 | 90 | 47-143 | 1 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 48.7 | 45.7 | 97 | 91 | 51-140 | 6 | 20 | |
| Bromochloromethane | ug/L | ND | 50 | 50 | 51.3 | 50.9 | 103 | 102 | 53-148 | 1 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1616352 1616353

| Parameter | Units | 50152928012 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ug/L | ND | 50 | 50 | 48.3 | 47.0 | 97 | 94 | 46-137 | 3 | 20 | |
| Bromoform | ug/L | ND | 50 | 50 | 43.1 | 42.1 | 86 | 84 | 36-127 | 2 | 20 | |
| Bromomethane | ug/L | ND | 50 | 50 | 52.6 | 55.0 | 105 | 110 | 10-188 | 4 | 20 | |
| Carbon disulfide | ug/L | ND | 50 | 50 | 50.0 | 43.1 | 100 | 86 | 35-148 | 15 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 50.1 | 40.8 | 100 | 82 | 45-151 | 21 | 20 | R1 |
| Chlorobenzene | ug/L | ND | 50 | 50 | 46.6 | 42.1 | 93 | 84 | 45-138 | 10 | 20 | |
| Chloroethane | ug/L | ND | 50 | 50 | 44.2 | 41.9 | 88 | 84 | 33-164 | 5 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 48.1 | 47.6 | 96 | 95 | 50-135 | 1 | 20 | |
| Chloromethane | ug/L | ND | 50 | 50 | 41.5 | 40.4 | 83 | 81 | 38-146 | 3 | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 47.6 | 44.9 | 95 | 90 | 43-144 | 6 | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 46.2 | 44.1 | 92 | 88 | 42-136 | 5 | 20 | |
| Dibromochloromethane | ug/L | ND | 50 | 50 | 50.3 | 47.1 | 101 | 94 | 45-136 | 7 | 20 | |
| Dibromomethane | ug/L | ND | 50 | 50 | 50.1 | 48.6 | 100 | 97 | 51-139 | 3 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 50.0 | 41.3 | 100 | 83 | 36-146 | 19 | 20 | |
| Iodomethane | ug/L | ND | 100 | 100 | 99.8 | 99.5 | 100 | 99 | 28-153 | 0 | 20 | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 44.4 | 44.0 | 89 | 88 | 48-140 | 1 | 20 | |
| Styrene | ug/L | ND | 50 | 50 | 50.7 | 44.3 | 101 | 89 | 31-148 | 14 | 20 | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 46.3 | 36.0 | 93 | 72 | 38-139 | 25 | 20 | R1 |
| Toluene | ug/L | ND | 50 | 50 | 49.7 | 43.9 | 99 | 87 | 44-140 | 12 | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 47.5 | 43.7 | 95 | 87 | 50-139 | 8 | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 39.9 | 39.3 | 80 | 79 | 37-138 | 1 | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 200 | 144 | 145 | 72 | 72 | 10-157 | 0 | 20 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 45.8 | 41.1 | 92 | 82 | 44-146 | 11 | 20 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 50 | 49.3 | 39.1 | 99 | 78 | 41-164 | 23 | 20 | R1 |
| Vinyl acetate | ug/L | ND | 200 | 200 | 87.2 | 112 | 44 | 56 | 15-146 | 25 | 20 | R1 |
| Vinyl chloride | ug/L | ND | 50 | 50 | 49.7 | 45.8 | 99 | 92 | 43-166 | 8 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 145 | 124 | 97 | 83 | 35-146 | 15 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 99 | 99 | 79-116 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 99 | 100 | 84-118 | | | |
| Toluene-d8 (S) | %. | | | | | | 101 | 101 | 86-110 | | | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349906 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50152744015, 50152744017, 50152744018, 50152744019, 50152744021, 50152744022, 50152744023

METHOD BLANK: 1618321 Matrix: Water
Associated Lab Samples: 50152744015, 50152744017, 50152744018, 50152744019, 50152744021, 50152744022, 50152744023

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Acetone | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Acrylonitrile | ug/L | ND | 100 | 09/02/16 13:06 | |
| Benzene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Bromoform | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Bromomethane | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Chloroethane | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Chloroform | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Chloromethane | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Iodomethane | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Styrene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Toluene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/02/16 13:06 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1618321 Matrix: Water
Associated Lab Samples: 50152744015, 50152744017, 50152744018, 50152744019, 50152744021, 50152744022, 50152744023

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/02/16 13:06 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/02/16 13:06 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/02/16 13:06 | |
| 4-Bromofluorobenzene (S) | %. | 99 | 79-116 | 09/02/16 13:06 | |
| Dibromofluoromethane (S) | %. | 100 | 84-118 | 09/02/16 13:06 | |
| Toluene-d8 (S) | %. | 99 | 86-110 | 09/02/16 13:06 | |

LABORATORY CONTROL SAMPLE: 1618322

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 52.3 | 105 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 49.5 | 99 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 51.3 | 103 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 50.4 | 101 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 51.5 | 103 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 51.5 | 103 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 50.4 | 101 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 53.4 | 107 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 49.5 | 99 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 49.5 | 99 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 45.6 | 91 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 51.8 | 104 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 48.5 | 97 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 280 | 112 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 272 | 109 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 255 | 102 | 66-134 | |
| Acetone | ug/L | 250 | 266 | 106 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 192 | 96 | 64-133 | |
| Benzene | ug/L | 50 | 49.9 | 100 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 54.0 | 108 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 49.5 | 99 | 71-124 | |
| Bromoform | ug/L | 50 | 46.7 | 93 | 60-125 | |
| Bromomethane | ug/L | 50 | 61.4 | 123 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 50.0 | 100 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 50.5 | 101 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 47.1 | 94 | 76-118 | |
| Chloroethane | ug/L | 50 | 43.2 | 86 | 50-147 | |
| Chloroform | ug/L | 50 | 50.2 | 100 | 70-119 | |
| Chloromethane | ug/L | 50 | 40.8 | 82 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 48.6 | 97 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 53.8 | 108 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1618322

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 51.2 | 102 | 73-127 | |
| Dibromomethane | ug/L | 50 | 49.3 | 99 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 50.6 | 101 | 75-123 | |
| Iodomethane | ug/L | 100 | 112 | 112 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 46.4 | 93 | 66-130 | |
| Styrene | ug/L | 50 | 52.8 | 106 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 49.7 | 99 | 69-119 | |
| Toluene | ug/L | 50 | 50.9 | 102 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 47.3 | 95 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 47.3 | 95 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 201 | 100 | 39-153 | |
| Trichloroethene | ug/L | 50 | 47.6 | 95 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 48.6 | 97 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 220 | 110 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 49.6 | 99 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 151 | 101 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 98 | 84-118 | |
| Toluene-d8 (S) | %. | | | 100 | 86-110 | |

MATRIX SPIKE SAMPLE: 1618323

| Parameter | Units | 50152744018 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 50.3 | 101 | 44-142 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 47.1 | 94 | 51-140 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 45.5 | 91 | 49-138 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 51.8 | 104 | 51-138 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 48.1 | 96 | 48-137 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 48.4 | 97 | 51-144 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 46.4 | 93 | 51-139 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 47.7 | 95 | 37-127 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 47.3 | 95 | 52-134 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 43.4 | 87 | 38-138 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 42.7 | 85 | 44-144 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 48.7 | 97 | 56-138 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 44.9 | 87 | 34-134 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 243 | 97 | 44-142 | |
| 2-Hexanone | ug/L | ND | 250 | 243 | 97 | 43-150 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 238 | 95 | 46-143 | |
| Acetone | ug/L | ND | 250 | 192 | 76 | 33-150 | |
| Acrylonitrile | ug/L | ND | 200 | 173 | 86 | 47-143 | |
| Benzene | ug/L | ND | 50 | 48.9 | 97 | 51-140 | |
| Bromochloromethane | ug/L | ND | 50 | 49.5 | 99 | 53-148 | |
| Bromodichloromethane | ug/L | ND | 50 | 45.6 | 91 | 46-137 | |
| Bromoform | ug/L | ND | 50 | 40.2 | 80 | 36-127 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE SAMPLE: 1618323

| Parameter | Units | 50152744018 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Bromomethane | ug/L | ND | 50 | 44.8 | 90 | 10-188 | |
| Carbon disulfide | ug/L | ND | 50 | 49.7 | 99 | 35-148 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50.0 | 100 | 45-151 | |
| Chlorobenzene | ug/L | 11.2 | 50 | 57.1 | 92 | 45-138 | |
| Chloroethane | ug/L | ND | 50 | 45.5 | 91 | 33-164 | |
| Chloroform | ug/L | ND | 50 | 46.7 | 93 | 50-135 | |
| Chloromethane | ug/L | ND | 50 | 36.9 | 74 | 38-146 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 47.5 | 94 | 43-144 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50.5 | 101 | 42-136 | |
| Dibromochloromethane | ug/L | ND | 50 | 47.6 | 95 | 45-136 | |
| Dibromomethane | ug/L | ND | 50 | 46.6 | 93 | 51-139 | |
| Ethylbenzene | ug/L | ND | 50 | 49.0 | 98 | 36-146 | |
| Iodomethane | ug/L | ND | 100 | 87.3 | 84 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 42.4 | 85 | 48-140 | |
| Styrene | ug/L | ND | 50 | 49.7 | 99 | 31-148 | |
| Tetrachloroethene | ug/L | ND | 50 | 48.3 | 97 | 38-139 | |
| Toluene | ug/L | ND | 50 | 50.0 | 100 | 44-140 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 46.7 | 93 | 50-139 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 43.5 | 87 | 37-138 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 187 | 94 | 10-157 | |
| Trichloroethene | ug/L | ND | 50 | 44.8 | 90 | 44-146 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 48.6 | 97 | 41-164 | |
| Vinyl acetate | ug/L | ND | 200 | 180 | 90 | 15-146 | |
| Vinyl chloride | ug/L | ND | 50 | 48.8 | 97 | 43-166 | |
| Xylene (Total) | ug/L | ND | 150 | 145 | 97 | 35-146 | |
| 4-Bromofluorobenzene (S) | %. | | | | 101 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | | 99 | 84-118 | |
| Toluene-d8 (S) | %. | | | | 103 | 86-110 | |

SAMPLE DUPLICATE: 1618324

| Parameter | Units | 50152744019 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethene | ug/L | ND | ND | | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | ND | | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 1,2-Dichloroethane | ug/L | ND | ND | | 20 | |
| 1,2-Dichloropropane | ug/L | ND | ND | | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | ND | | 20 | |

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7726 Moller Road
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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

SAMPLE DUPLICATE: 1618324

| Parameter | Units | 50152744019 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | ug/L | ND | ND | | 20 | |
| 2-Hexanone | ug/L | ND | ND | | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | ND | | 20 | |
| Acetone | ug/L | ND | ND | | 20 | |
| Acrylonitrile | ug/L | ND | ND | | 20 | |
| Benzene | ug/L | ND | ND | | 20 | |
| Bromochloromethane | ug/L | ND | ND | | 20 | |
| Bromodichloromethane | ug/L | ND | ND | | 20 | |
| Bromoform | ug/L | ND | ND | | 20 | |
| Bromomethane | ug/L | ND | ND | | 20 | |
| Carbon disulfide | ug/L | ND | ND | | 20 | |
| Carbon tetrachloride | ug/L | ND | ND | | 20 | |
| Chlorobenzene | ug/L | ND | ND | | 20 | |
| Chloroethane | ug/L | ND | ND | | 20 | |
| Chloroform | ug/L | ND | ND | | 20 | |
| Chloromethane | ug/L | ND | ND | | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| Dibromochloromethane | ug/L | ND | ND | | 20 | |
| Dibromomethane | ug/L | ND | ND | | 20 | |
| Ethylbenzene | ug/L | ND | ND | | 20 | |
| Iodomethane | ug/L | ND | 2.5J | | 20 | |
| Methylene Chloride | ug/L | ND | ND | | 20 | |
| Styrene | ug/L | ND | ND | | 20 | |
| Tetrachloroethene | ug/L | ND | ND | | 20 | |
| Toluene | ug/L | ND | ND | | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | ND | | 20 | |
| Trichloroethene | ug/L | ND | ND | | 20 | |
| Trichlorofluoromethane | ug/L | ND | ND | | 20 | |
| Vinyl acetate | ug/L | ND | ND | | 20 | |
| Vinyl chloride | ug/L | ND | ND | | 20 | |
| Xylene (Total) | ug/L | ND | ND | | 20 | |
| 4-Bromofluorobenzene (S) | %. | 94 | 98 | 4 | | |
| Dibromofluoromethane (S) | %. | 102 | 101 | 1 | | |
| Toluene-d8 (S) | %. | 98 | 97 | 1 | | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349907 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50152744024, 50152744025, 50152744026, 50152744027, 50152744028, 50152744029, 50152744030, 50152744031

METHOD BLANK: 1618325 Matrix: Water
Associated Lab Samples: 50152744024, 50152744025, 50152744026, 50152744027, 50152744028, 50152744029, 50152744030, 50152744031

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Acetone | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Acrylonitrile | ug/L | ND | 100 | 09/03/16 01:22 | |
| Benzene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Bromoform | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Bromomethane | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Chloroethane | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Chloroform | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Chloromethane | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Iodomethane | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Styrene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Toluene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/03/16 01:22 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1618325 Matrix: Water
Associated Lab Samples: 50152744024, 50152744025, 50152744026, 50152744027, 50152744028, 50152744029, 50152744030, 50152744031

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/03/16 01:22 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/03/16 01:22 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/03/16 01:22 | |
| 4-Bromofluorobenzene (S) | %. | 96 | 79-116 | 09/03/16 01:22 | |
| Dibromofluoromethane (S) | %. | 100 | 84-118 | 09/03/16 01:22 | |
| Toluene-d8 (S) | %. | 98 | 86-110 | 09/03/16 01:22 | |

LABORATORY CONTROL SAMPLE: 1618326

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 52.4 | 105 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 49.4 | 99 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 51.2 | 102 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 50.4 | 101 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 51.1 | 102 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 51.5 | 103 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 52.1 | 104 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 54.4 | 109 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 51.2 | 102 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 51.4 | 103 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 47.0 | 94 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 53.4 | 107 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 49.6 | 99 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 306 | 123 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 281 | 112 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 253 | 101 | 66-134 | |
| Acetone | ug/L | 250 | 305 | 122 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 196 | 98 | 64-133 | |
| Benzene | ug/L | 50 | 51.5 | 103 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 55.0 | 110 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 49.9 | 100 | 71-124 | |
| Bromoform | ug/L | 50 | 48.2 | 96 | 60-125 | |
| Bromomethane | ug/L | 50 | 49.0 | 98 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 50.7 | 101 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 53.1 | 106 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 49.0 | 98 | 76-118 | |
| Chloroethane | ug/L | 50 | 44.4 | 89 | 50-147 | |
| Chloroform | ug/L | 50 | 50.7 | 101 | 70-119 | |
| Chloromethane | ug/L | 50 | 39.1 | 78 | 52-136 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1618326

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ug/L | 50 | 50.5 | 101 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 51.2 | 102 | 71-134 | |
| Dibromochloromethane | ug/L | 50 | 52.0 | 104 | 73-127 | |
| Dibromomethane | ug/L | 50 | 52.9 | 106 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 51.6 | 103 | 75-123 | |
| Iodomethane | ug/L | 100 | 98.1 | 98 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 47.1 | 94 | 66-130 | |
| Styrene | ug/L | 50 | 52.4 | 105 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 48.2 | 96 | 69-119 | |
| Toluene | ug/L | 50 | 51.6 | 103 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 50.7 | 101 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 45.6 | 91 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 182 | 91 | 39-153 | |
| Trichloroethene | ug/L | 50 | 48.4 | 97 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 49.8 | 100 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 177 | 88 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 50.7 | 101 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 154 | 102 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 99 | 84-118 | |
| Toluene-d8 (S) | %. | | | 99 | 86-110 | |

MATRIX SPIKE SAMPLE: 1618327

| Parameter | Units | 50152929001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 52.2 | 104 | 44-142 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 51.0 | 102 | 51-140 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 48.7 | 97 | 49-138 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 48.8 | 98 | 51-138 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 52.0 | 102 | 48-137 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50.8 | 102 | 51-144 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 48.2 | 96 | 51-139 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 49.5 | 99 | 37-127 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 51.3 | 103 | 52-134 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 48.0 | 96 | 38-138 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 45.7 | 91 | 44-144 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 53.7 | 107 | 56-138 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 46.9 | 94 | 34-134 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 257 | 103 | 44-142 | |
| 2-Hexanone | ug/L | ND | 250 | 261 | 105 | 43-150 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 251 | 100 | 46-143 | |
| Acetone | ug/L | ND | 250 | 210 | 84 | 33-150 | |
| Acrylonitrile | ug/L | ND | 200 | 190 | 95 | 47-143 | |
| Benzene | ug/L | ND | 50 | 52.9 | 102 | 51-140 | |
| Bromochloromethane | ug/L | ND | 50 | 52.8 | 106 | 53-148 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE SAMPLE: 1618327

| Parameter | Units | 50152929001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ug/L | ND | 50 | 49.7 | 99 | 46-137 | |
| Bromoform | ug/L | ND | 50 | 44.5 | 89 | 36-127 | |
| Bromomethane | ug/L | ND | 50 | 43.7 | 87 | 10-188 | |
| Carbon disulfide | ug/L | ND | 50 | 53.1 | 106 | 35-148 | |
| Carbon tetrachloride | ug/L | ND | 50 | 54.2 | 108 | 45-151 | |
| Chlorobenzene | ug/L | ND | 50 | 50.2 | 96 | 45-138 | |
| Chloroethane | ug/L | ND | 50 | 48.7 | 93 | 33-164 | |
| Chloroform | ug/L | ND | 50 | 50.9 | 102 | 50-135 | |
| Chloromethane | ug/L | ND | 50 | 40.1 | 80 | 38-146 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 50.6 | 100 | 43-144 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 49.4 | 99 | 42-136 | |
| Dibromochloromethane | ug/L | ND | 50 | 50.8 | 102 | 45-136 | |
| Dibromomethane | ug/L | ND | 50 | 50.7 | 101 | 51-139 | |
| Ethylbenzene | ug/L | ND | 50 | 51.7 | 103 | 36-146 | |
| Iodomethane | ug/L | ND | 100 | 95.8 | 93 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 46.4 | 93 | 48-140 | |
| Styrene | ug/L | ND | 50 | 52.5 | 105 | 31-148 | |
| Tetrachloroethene | ug/L | ND | 50 | 50.1 | 100 | 38-139 | |
| Toluene | ug/L | ND | 50 | 50.3 | 100 | 44-140 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 51.2 | 102 | 50-139 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 42.9 | 86 | 37-138 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 177 | 88 | 10-157 | |
| Trichloroethene | ug/L | ND | 50 | 49.9 | 100 | 44-146 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 51.7 | 103 | 41-164 | |
| Vinyl acetate | ug/L | ND | 200 | 152 | 76 | 15-146 | |
| Vinyl chloride | ug/L | ND | 50 | 52.5 | 104 | 43-166 | |
| Xylene (Total) | ug/L | ND | 150 | 151 | 101 | 35-146 | |
| 4-Bromofluorobenzene (S) | %. | | | | 102 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | | 101 | 84-118 | |
| Toluene-d8 (S) | %. | | | | 99 | 86-110 | |

SAMPLE DUPLICATE: 1618328

| Parameter | Units | 50152929002 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethane | ug/L | ND | .91J | | 20 | |
| 1,1-Dichloroethene | ug/L | ND | ND | | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | ND | | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 1,2-Dichloroethane | ug/L | ND | ND | | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

SAMPLE DUPLICATE: 1618328

| Parameter | Units | 50152929002 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ug/L | ND | ND | | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 2-Butanone (MEK) | ug/L | ND | ND | | 20 | |
| 2-Hexanone | ug/L | ND | ND | | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | ND | | 20 | |
| Acetone | ug/L | ND | 2.9J | | 20 | |
| Acrylonitrile | ug/L | ND | ND | | 20 | |
| Benzene | ug/L | ND | 2.1J | | 20 | |
| Bromochloromethane | ug/L | ND | ND | | 20 | |
| Bromodichloromethane | ug/L | ND | ND | | 20 | |
| Bromoform | ug/L | ND | ND | | 20 | |
| Bromomethane | ug/L | ND | ND | | 20 | |
| Carbon disulfide | ug/L | ND | ND | | 20 | |
| Carbon tetrachloride | ug/L | ND | ND | | 20 | |
| Chlorobenzene | ug/L | ND | .57J | | 20 | |
| Chloroethane | ug/L | ND | 1.9J | | 20 | |
| Chloroform | ug/L | ND | ND | | 20 | |
| Chloromethane | ug/L | ND | ND | | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| Dibromochloromethane | ug/L | ND | ND | | 20 | |
| Dibromomethane | ug/L | ND | ND | | 20 | |
| Ethylbenzene | ug/L | ND | ND | | 20 | |
| Iodomethane | ug/L | ND | 2.5J | | 20 | |
| Methylene Chloride | ug/L | ND | ND | | 20 | |
| Styrene | ug/L | ND | ND | | 20 | |
| Tetrachloroethene | ug/L | ND | ND | | 20 | |
| Toluene | ug/L | ND | ND | | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | ND | | 20 | |
| Trichloroethene | ug/L | ND | ND | | 20 | |
| Trichlorofluoromethane | ug/L | ND | ND | | 20 | |
| Vinyl acetate | ug/L | ND | ND | | 20 | |
| Vinyl chloride | ug/L | ND | ND | | 20 | |
| Xylene (Total) | ug/L | ND | ND | | 20 | |
| 4-Bromofluorobenzene (S) | %. | 99 | 95 | 4 | | |
| Dibromofluoromethane (S) | %. | 103 | 99 | 5 | | |
| Toluene-d8 (S) | %. | 100 | 99 | 1 | | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350153 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50152744032, 50152744033, 50152744034, 50152744035, 50152744036

METHOD BLANK: 1619910 Matrix: Water
Associated Lab Samples: 50152744032, 50152744033, 50152744034, 50152744035, 50152744036

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Acetone | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Acrylonitrile | ug/L | ND | 100 | 09/06/16 12:47 | |
| Benzene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Bromoform | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Bromomethane | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Chloroethane | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Chloroform | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Chloromethane | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Iodomethane | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Styrene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Toluene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/06/16 12:47 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1619910 Matrix: Water
Associated Lab Samples: 50152744032, 50152744033, 50152744034, 50152744035, 50152744036

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/06/16 12:47 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/06/16 12:47 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/06/16 12:47 | |
| 4-Bromofluorobenzene (S) | %. | 98 | 79-116 | 09/06/16 12:47 | |
| Dibromofluoromethane (S) | %. | 101 | 84-118 | 09/06/16 12:47 | |
| Toluene-d8 (S) | %. | 97 | 86-110 | 09/06/16 12:47 | |

LABORATORY CONTROL SAMPLE: 1619911

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 49.0 | 98 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 50.4 | 101 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 48.5 | 97 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 50.1 | 100 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 51.0 | 102 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 49.0 | 98 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 50.9 | 102 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 48.5 | 97 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 50.5 | 101 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 48.1 | 96 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 48.8 | 98 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 50.0 | 100 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 47.9 | 96 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 304 | 121 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 292 | 117 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 272 | 109 | 66-134 | |
| Acetone | ug/L | 250 | 340 | 136 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 207 | 104 | 64-133 | |
| Benzene | ug/L | 50 | 50.3 | 101 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 54.2 | 108 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 52.9 | 106 | 71-124 | |
| Bromoform | ug/L | 50 | 47.1 | 94 | 60-125 | |
| Bromomethane | ug/L | 50 | 48.0 | 96 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 50.4 | 101 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 51.8 | 104 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 46.5 | 93 | 76-118 | |
| Chloroethane | ug/L | 50 | 43.4 | 87 | 50-147 | |
| Chloroform | ug/L | 50 | 50.2 | 100 | 70-119 | |
| Chloromethane | ug/L | 50 | 45.0 | 90 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 52.0 | 104 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 53.7 | 107 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1619911

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 53.1 | 106 | 73-127 | |
| Dibromomethane | ug/L | 50 | 49.8 | 100 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 51.5 | 103 | 75-123 | |
| Iodomethane | ug/L | 100 | 161 | 161 | 56-142 | L3 |
| Methylene Chloride | ug/L | 50 | 46.1 | 92 | 66-130 | |
| Styrene | ug/L | 50 | 52.6 | 105 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 48.0 | 96 | 69-119 | |
| Toluene | ug/L | 50 | 49.9 | 100 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 48.0 | 96 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 55.8 | 112 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 220 | 110 | 39-153 | |
| Trichloroethene | ug/L | 50 | 48.5 | 97 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 49.6 | 99 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 234 | 117 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 52.8 | 106 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 150 | 100 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 101 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 100 | 84-118 | |
| Toluene-d8 (S) | %. | | | 100 | 86-110 | |

MATRIX SPIKE SAMPLE: 1619913

| Parameter | Units | 50152994009 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 48.3 | 97 | 44-142 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 51.9 | 104 | 51-140 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 45.1 | 90 | 49-138 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 49.8 | 100 | 51-138 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 52.5 | 105 | 48-137 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 53.4 | 107 | 51-144 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 47.9 | 96 | 51-139 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 43.7 | 87 | 37-127 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 48.8 | 98 | 52-134 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 47.1 | 94 | 38-138 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 45.9 | 92 | 44-144 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 51.0 | 102 | 56-138 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 46.9 | 94 | 34-134 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 250 | 100 | 44-142 | |
| 2-Hexanone | ug/L | ND | 250 | 249 | 100 | 43-150 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 246 | 98 | 46-143 | |
| Acetone | ug/L | ND | 250 | 244 | 95 | 33-150 | |
| Acrylonitrile | ug/L | ND | 200 | 201 | 101 | 47-143 | |
| Benzene | ug/L | 174 | 50 | 229 | 109 | 51-140 | |
| Bromochloromethane | ug/L | ND | 50 | 52.8 | 106 | 53-148 | |
| Bromodichloromethane | ug/L | ND | 50 | 52.1 | 104 | 46-137 | |
| Bromoform | ug/L | ND | 50 | 44.7 | 89 | 36-127 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE SAMPLE: 1619913

| Parameter | Units | 50152994009 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Bromomethane | ug/L | ND | 50 | 33.2 | 66 | 10-188 | |
| Carbon disulfide | ug/L | ND | 50 | 53.2 | 106 | 35-148 | |
| Carbon tetrachloride | ug/L | ND | 50 | 53.0 | 106 | 45-151 | |
| Chlorobenzene | ug/L | ND | 50 | 46.8 | 94 | 45-138 | |
| Chloroethane | ug/L | ND | 50 | 46.7 | 93 | 33-164 | |
| Chloroform | ug/L | ND | 50 | 51.0 | 102 | 50-135 | |
| Chloromethane | ug/L | ND | 50 | 44.9 | 90 | 38-146 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 52.4 | 105 | 43-144 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50.0 | 100 | 42-136 | |
| Dibromochloromethane | ug/L | ND | 50 | 50.5 | 101 | 45-136 | |
| Dibromomethane | ug/L | ND | 50 | 48.1 | 96 | 51-139 | |
| Ethylbenzene | ug/L | ND | 50 | 51.0 | 102 | 36-146 | |
| Iodomethane | ug/L | ND | 100 | 95.3 | 95 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 46.6 | 93 | 48-140 | |
| Styrene | ug/L | ND | 50 | 52.2 | 104 | 31-148 | |
| Tetrachloroethene | ug/L | ND | 50 | 47.8 | 96 | 38-139 | |
| Toluene | ug/L | ND | 50 | 50.3 | 100 | 44-140 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 51.6 | 103 | 50-139 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 51.7 | 103 | 37-138 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 193 | 97 | 10-157 | |
| Trichloroethene | ug/L | ND | 50 | 50.6 | 101 | 44-146 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 55.2 | 110 | 41-164 | |
| Vinyl acetate | ug/L | ND | 200 | 189 | 95 | 15-146 | |
| Vinyl chloride | ug/L | ND | 50 | 57.1 | 114 | 43-166 | |
| Xylene (Total) | ug/L | ND | 150 | 152 | 101 | 35-146 | |
| 4-Bromofluorobenzene (S) | %. | | | | 99 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | | 102 | 84-118 | |
| Toluene-d8 (S) | %. | | | | 97 | 86-110 | |

SAMPLE DUPLICATE: 1619912

| Parameter | Units | 50152994003 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethene | ug/L | ND | ND | | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | ND | | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 1,2-Dichloroethane | ug/L | ND | ND | | 20 | |
| 1,2-Dichloropropane | ug/L | ND | ND | | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | ND | | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

SAMPLE DUPLICATE: 1619912

| Parameter | Units | 50152994003 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | ug/L | ND | ND | | 20 | |
| 2-Hexanone | ug/L | ND | ND | | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | ND | | 20 | |
| Acetone | ug/L | ND | ND | | 20 | |
| Acrylonitrile | ug/L | ND | ND | | 20 | |
| Benzene | ug/L | ND | ND | | 20 | |
| Bromochloromethane | ug/L | ND | ND | | 20 | |
| Bromodichloromethane | ug/L | ND | ND | | 20 | |
| Bromoform | ug/L | ND | ND | | 20 | |
| Bromomethane | ug/L | ND | ND | | 20 | |
| Carbon disulfide | ug/L | ND | ND | | 20 | |
| Carbon tetrachloride | ug/L | ND | ND | | 20 | |
| Chlorobenzene | ug/L | ND | ND | | 20 | |
| Chloroethane | ug/L | ND | ND | | 20 | |
| Chloroform | ug/L | ND | ND | | 20 | |
| Chloromethane | ug/L | ND | ND | | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| Dibromochloromethane | ug/L | ND | ND | | 20 | |
| Dibromomethane | ug/L | ND | ND | | 20 | |
| Ethylbenzene | ug/L | ND | .58J | | 20 | |
| Iodomethane | ug/L | ND | ND | | 20 | |
| Methylene Chloride | ug/L | ND | ND | | 20 | |
| Styrene | ug/L | ND | ND | | 20 | |
| Tetrachloroethene | ug/L | ND | ND | | 20 | |
| Toluene | ug/L | ND | ND | | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | ND | | 20 | |
| Trichloroethene | ug/L | ND | ND | | 20 | |
| Trichlorofluoromethane | ug/L | ND | ND | | 20 | |
| Vinyl acetate | ug/L | ND | ND | | 20 | |
| Vinyl chloride | ug/L | ND | ND | | 20 | |
| Xylene (Total) | ug/L | ND | ND | | 20 | |
| 4-Bromofluorobenzene (S) | %. | 100 | 100 | 0 | | |
| Dibromofluoromethane (S) | %. | 97 | 101 | 4 | | |
| Toluene-d8 (S) | %. | 96 | 97 | 1 | | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350420
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50152744038, 50152744048

METHOD BLANK: 1620805
Matrix: Water
Associated Lab Samples: 50152744038, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Acetone | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Acrylonitrile | ug/L | ND | 100 | 09/07/16 13:55 | |
| Benzene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Bromoform | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Bromomethane | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Chloroethane | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Chloroform | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Chloromethane | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Iodomethane | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Styrene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Toluene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/07/16 13:55 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1620805 Matrix: Water
Associated Lab Samples: 50152744038, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/07/16 13:55 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/07/16 13:55 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/07/16 13:55 | |
| 4-Bromofluorobenzene (S) | %. | 98 | 79-116 | 09/07/16 13:55 | |
| Dibromofluoromethane (S) | %. | 98 | 84-118 | 09/07/16 13:55 | |
| Toluene-d8 (S) | %. | 102 | 86-110 | 09/07/16 13:55 | |

LABORATORY CONTROL SAMPLE: 1620806

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 48.3 | 97 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 47.0 | 94 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 47.4 | 95 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 49.4 | 99 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 47.7 | 95 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 46.7 | 93 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 48.3 | 97 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 46.5 | 93 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 50.7 | 101 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 49.5 | 99 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 44.4 | 89 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 46.9 | 94 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 49.4 | 99 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 273 | 109 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 283 | 113 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 258 | 103 | 66-134 | |
| Acetone | ug/L | 250 | 343 | 137 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 187 | 94 | 64-133 | |
| Benzene | ug/L | 50 | 47.4 | 95 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 49.8 | 100 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 49.2 | 98 | 71-124 | |
| Bromoform | ug/L | 50 | 45.3 | 91 | 60-125 | |
| Bromomethane | ug/L | 50 | 42.2 | 84 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 46.0 | 92 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 46.2 | 92 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 47.1 | 94 | 76-118 | |
| Chloroethane | ug/L | 50 | 39.2 | 78 | 50-147 | |
| Chloroform | ug/L | 50 | 47.2 | 94 | 70-119 | |
| Chloromethane | ug/L | 50 | 40.9 | 82 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 47.1 | 94 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 53.7 | 107 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1620806

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 52.1 | 104 | 73-127 | |
| Dibromomethane | ug/L | 50 | 45.7 | 91 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 51.1 | 102 | 75-123 | |
| Iodomethane | ug/L | 100 | 131 | 131 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 41.8 | 84 | 66-130 | |
| Styrene | ug/L | 50 | 54.4 | 109 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 47.4 | 95 | 69-119 | |
| Toluene | ug/L | 50 | 48.7 | 97 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 44.8 | 90 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 52.5 | 105 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 207 | 103 | 39-153 | |
| Trichloroethene | ug/L | 50 | 45.1 | 90 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 46.6 | 93 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 207 | 104 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 47.9 | 96 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 152 | 101 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 98 | 84-118 | |
| Toluene-d8 (S) | %. | | | 102 | 86-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620807 1620808

| Parameter | Units | 50153087008 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 48.1 | 45.4 | 96 | 91 | 44-142 | 6 | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 46.8 | 45.3 | 94 | 91 | 51-140 | 3 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 46.4 | 44.5 | 93 | 89 | 49-138 | 4 | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 50 | 49.7 | 47.2 | 99 | 94 | 51-138 | 5 | 20 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 50 | 47.7 | 46.2 | 95 | 92 | 48-137 | 3 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 46.5 | 46.7 | 93 | 93 | 51-144 | 0 | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 50 | 48.8 | 47.5 | 98 | 95 | 51-139 | 3 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 50 | 44.2 | 44.6 | 88 | 89 | 37-127 | 1 | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 50 | 49.8 | 46.8 | 100 | 94 | 52-134 | 6 | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 50 | 47.7 | 46.3 | 95 | 93 | 38-138 | 3 | 20 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 50 | 42.9 | 40.7 | 86 | 81 | 44-144 | 5 | 20 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 50 | 46.5 | 44.4 | 93 | 89 | 56-138 | 4 | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 50 | 47.7 | 46.1 | 95 | 92 | 34-134 | 3 | 20 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 250 | 233 | 225 | 93 | 90 | 44-142 | 3 | 20 | |
| 2-Hexanone | ug/L | ND | 250 | 250 | 259 | 244 | 103 | 98 | 43-150 | 6 | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 250 | 253 | 234 | 101 | 94 | 46-143 | 8 | 20 | |
| Acetone | ug/L | ND | 250 | 250 | 218 | 208 | 87 | 83 | 33-150 | 5 | 20 | |
| Acrylonitrile | ug/L | ND | 200 | 200 | 184 | 175 | 92 | 87 | 47-143 | 5 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 46.8 | 44.9 | 93 | 90 | 51-140 | 4 | 20 | |
| Bromochloromethane | ug/L | ND | 50 | 50 | 48.7 | 46.6 | 97 | 93 | 53-148 | 5 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620807 1620808

| Parameter | Units | 50153087008 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ug/L | ND | 50 | 50 | 47.8 | 45.4 | 96 | 91 | 46-137 | 5 | 20 | |
| Bromoform | ug/L | ND | 50 | 50 | 43.7 | 43.2 | 87 | 86 | 36-127 | 1 | 20 | |
| Bromomethane | ug/L | ND | 50 | 50 | 46.4 | 51.0 | 93 | 102 | 10-188 | 10 | 20 | |
| Carbon disulfide | ug/L | ND | 50 | 50 | 47.3 | 45.8 | 95 | 92 | 35-148 | 3 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 47.9 | 46.5 | 96 | 93 | 45-151 | 3 | 20 | |
| Chlorobenzene | ug/L | ND | 50 | 50 | 47.3 | 43.8 | 95 | 88 | 45-138 | 8 | 20 | |
| Chloroethane | ug/L | ND | 50 | 50 | 39.7 | 38.9 | 79 | 78 | 33-164 | 2 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 46.3 | 44.6 | 93 | 89 | 50-135 | 4 | 20 | |
| Chloromethane | ug/L | ND | 50 | 50 | 41.8 | 39.8 | 84 | 80 | 38-146 | 5 | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 47.9 | 46.6 | 96 | 93 | 43-144 | 3 | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 52.1 | 48.4 | 104 | 97 | 42-136 | 7 | 20 | |
| Dibromochloromethane | ug/L | ND | 50 | 50 | 51.2 | 48.4 | 102 | 97 | 45-136 | 6 | 20 | |
| Dibromomethane | ug/L | ND | 50 | 50 | 45.1 | 43.5 | 90 | 87 | 51-139 | 4 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 52.0 | 48.5 | 103 | 96 | 36-146 | 7 | 20 | |
| Iodomethane | ug/L | ND | 100 | 100 | 139 | 138 | 139 | 138 | 28-153 | 1 | 20 | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 40.8 | 39.3 | 82 | 79 | 48-140 | 4 | 20 | |
| Styrene | ug/L | ND | 50 | 50 | 53.5 | 48.7 | 107 | 97 | 31-148 | 9 | 20 | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 49.2 | 46.2 | 98 | 92 | 38-139 | 6 | 20 | |
| Toluene | ug/L | ND | 50 | 50 | 49.7 | 46.6 | 99 | 93 | 44-140 | 6 | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 45.8 | 45.2 | 92 | 90 | 50-139 | 1 | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 52.3 | 49.6 | 105 | 99 | 37-138 | 5 | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 200 | 191 | 181 | 95 | 90 | 10-157 | 5 | 20 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 45.6 | 43.6 | 91 | 87 | 44-146 | 5 | 20 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 50 | 48.4 | 47.4 | 97 | 95 | 41-164 | 2 | 20 | |
| Vinyl acetate | ug/L | ND | 200 | 200 | 178 | 165 | 89 | 83 | 15-146 | 7 | 20 | |
| Vinyl chloride | ug/L | ND | 50 | 50 | 48.8 | 49.0 | 98 | 98 | 43-166 | 0 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 158 | 145 | 105 | 97 | 35-146 | 9 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 99 | 97 | 79-116 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 98 | 97 | 84-118 | | | |
| Toluene-d8 (S) | %. | | | | | | 105 | 102 | 86-110 | | | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350421
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50152744037

METHOD BLANK: 1620809
Matrix: Water
Associated Lab Samples: 50152744037

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Acetone | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Acrylonitrile | ug/L | ND | 100 | 09/07/16 13:38 | |
| Benzene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Bromoform | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Bromomethane | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Chloroethane | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Chloroform | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Chloromethane | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Iodomethane | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Styrene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Toluene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/07/16 13:38 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1620809 Matrix: Water
Associated Lab Samples: 50152744037

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/07/16 13:38 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/07/16 13:38 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/07/16 13:38 | |
| 4-Bromofluorobenzene (S) | %. | 95 | 79-116 | 09/07/16 13:38 | |
| Dibromofluoromethane (S) | %. | 100 | 84-118 | 09/07/16 13:38 | |
| Toluene-d8 (S) | %. | 104 | 86-110 | 09/07/16 13:38 | |

LABORATORY CONTROL SAMPLE: 1620810

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 54.4 | 109 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 46.0 | 92 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 52.9 | 106 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 51.3 | 103 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 47.4 | 95 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 44.1 | 88 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 53.8 | 108 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 54.4 | 109 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 52.9 | 106 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 49.0 | 98 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 44.5 | 89 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 50.0 | 100 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 49.6 | 99 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 282 | 113 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 288 | 115 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 260 | 104 | 66-134 | |
| Acetone | ug/L | 250 | 271 | 108 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 189 | 95 | 64-133 | |
| Benzene | ug/L | 50 | 47.3 | 95 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 52.6 | 105 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 47.5 | 95 | 71-124 | |
| Bromoform | ug/L | 50 | 47.2 | 94 | 60-125 | |
| Bromomethane | ug/L | 50 | 39.6 | 79 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 43.8 | 88 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 47.7 | 95 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 47.4 | 95 | 76-118 | |
| Chloroethane | ug/L | 50 | 39.3 | 79 | 50-147 | |
| Chloroform | ug/L | 50 | 47.1 | 94 | 70-119 | |
| Chloromethane | ug/L | 50 | 33.9 | 68 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 45.4 | 91 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 53.8 | 108 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1620810

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 52.7 | 105 | 73-127 | |
| Dibromomethane | ug/L | 50 | 49.5 | 99 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 49.7 | 99 | 75-123 | |
| Iodomethane | ug/L | 100 | 79.2 | 79 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 43.6 | 87 | 66-130 | |
| Styrene | ug/L | 50 | 51.6 | 103 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 48.5 | 97 | 69-119 | |
| Toluene | ug/L | 50 | 51.6 | 103 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 45.5 | 91 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 48.3 | 97 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 202 | 101 | 39-153 | |
| Trichloroethene | ug/L | 50 | 44.1 | 88 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 43.2 | 86 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 209 | 104 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 42.7 | 85 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 148 | 99 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 98 | 84-118 | |
| Toluene-d8 (S) | %. | | | 102 | 86-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620811 1620812

| Parameter | Units | 50153153002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 49.2 | 55.1 | 98 | 110 | 44-142 | 11 | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 45.1 | 50.0 | 90 | 100 | 51-140 | 10 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 47.2 | 53.0 | 94 | 106 | 49-138 | 12 | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 50 | 45.6 | 50.5 | 91 | 101 | 51-138 | 10 | 20 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 50 | 45.9 | 50.6 | 92 | 101 | 48-137 | 10 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 46.1 | 51.0 | 92 | 102 | 51-144 | 10 | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 50 | 51.2 | 53.4 | 102 | 107 | 51-139 | 4 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 50 | 52.2 | 57.1 | 104 | 114 | 37-127 | 9 | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 50 | 46.4 | 52.6 | 93 | 105 | 52-134 | 13 | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 50 | 47.6 | 54.1 | 95 | 108 | 38-138 | 13 | 20 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 50 | 41.2 | 45.8 | 82 | 92 | 44-144 | 11 | 20 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 50 | 48.1 | 52.2 | 96 | 104 | 56-138 | 8 | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 50 | 46.1 | 51.3 | 92 | 103 | 34-134 | 11 | 20 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 250 | 229 | 252 | 91 | 101 | 44-142 | 10 | 20 | |
| 2-Hexanone | ug/L | ND | 250 | 250 | 243 | 272 | 97 | 109 | 43-150 | 11 | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 250 | 236 | 262 | 94 | 105 | 46-143 | 11 | 20 | |
| Acetone | ug/L | ND | 250 | 250 | 185 | 200 | 72 | 78 | 33-150 | 8 | 20 | |
| Acrylonitrile | ug/L | ND | 200 | 200 | 167 | 183 | 84 | 91 | 47-143 | 9 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 46.8 | 49.9 | 93 | 99 | 51-140 | 6 | 20 | |
| Bromochloromethane | ug/L | ND | 50 | 50 | 48.7 | 52.6 | 97 | 105 | 53-148 | 8 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620811 1620812

| Parameter | Units | 50153153002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ug/L | ND | 50 | 50 | 44.6 | 49.5 | 89 | 99 | 46-137 | 11 | 20 | |
| Bromoform | ug/L | ND | 50 | 50 | 43.0 | 49.4 | 86 | 99 | 36-127 | 14 | 20 | |
| Bromomethane | ug/L | ND | 50 | 50 | 28.6 | 39.5 | 57 | 79 | 10-188 | 32 | 20 | M0 |
| Carbon disulfide | ug/L | ND | 50 | 50 | 45.5 | 49.9 | 90 | 99 | 35-148 | 9 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 48.2 | 53.2 | 96 | 106 | 45-151 | 10 | 20 | |
| Chlorobenzene | ug/L | ND | 50 | 50 | 44.7 | 49.8 | 89 | 100 | 45-138 | 11 | 20 | |
| Chloroethane | ug/L | ND | 50 | 50 | 41.7 | 44.4 | 83 | 89 | 33-164 | 6 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 46.2 | 50.6 | 92 | 101 | 50-135 | 9 | 20 | |
| Chloromethane | ug/L | ND | 50 | 50 | 31.2 | 35.8 | 62 | 72 | 38-146 | 14 | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 45.4 | 50.2 | 91 | 100 | 43-144 | 10 | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 50.1 | 55.5 | 100 | 111 | 42-136 | 10 | 20 | |
| Dibromochloromethane | ug/L | ND | 50 | 50 | 48.0 | 53.5 | 96 | 107 | 45-136 | 11 | 20 | |
| Dibromomethane | ug/L | ND | 50 | 50 | 46.9 | 50.2 | 94 | 100 | 51-139 | 7 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 49.2 | 54.0 | 97 | 106 | 36-146 | 9 | 20 | |
| Iodomethane | ug/L | ND | 100 | 100 | 68.1 | 87.2 | 66 | 85 | 28-153 | 25 | 20 | M0 |
| Methylene Chloride | ug/L | ND | 50 | 50 | 41.5 | 44.8 | 83 | 90 | 48-140 | 8 | 20 | |
| Styrene | ug/L | ND | 50 | 50 | 48.9 | 53.9 | 98 | 108 | 31-148 | 10 | 20 | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 46.1 | 51.4 | 92 | 103 | 38-139 | 11 | 20 | |
| Toluene | ug/L | ND | 50 | 50 | 50.9 | 56.3 | 98 | 109 | 44-140 | 10 | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 44.4 | 48.5 | 89 | 97 | 50-139 | 9 | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 43.8 | 48.9 | 88 | 98 | 37-138 | 11 | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 200 | 186 | 207 | 93 | 104 | 10-157 | 11 | 20 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 42.6 | 46.6 | 85 | 93 | 44-146 | 9 | 20 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 50 | 45.2 | 48.9 | 90 | 98 | 41-164 | 8 | 20 | |
| Vinyl acetate | ug/L | ND | 200 | 200 | 171 | 189 | 86 | 95 | 15-146 | 10 | 20 | |
| Vinyl chloride | ug/L | ND | 50 | 50 | 43.8 | 48.5 | 88 | 97 | 43-166 | 10 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 157 | 173 | 100 | 112 | 35-146 | 10 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 96 | 97 | 79-116 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 98 | 95 | 84-118 | | | |
| Toluene-d8 (S) | %. | | | | | | 100 | 103 | 86-110 | | | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350429 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744049

METHOD BLANK: 1620843 Matrix: Water
Associated Lab Samples: 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744049

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Acetone | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Acrylonitrile | ug/L | ND | 100 | 09/08/16 01:07 | |
| Benzene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Bromoform | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Bromomethane | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Chloroethane | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Chloroform | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Chloromethane | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Iodomethane | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Styrene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Toluene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/08/16 01:07 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1620843 Matrix: Water

Associated Lab Samples: 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744049

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/08/16 01:07 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/08/16 01:07 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/08/16 01:07 | |
| 4-Bromofluorobenzene (S) | %. | 96 | 79-116 | 09/08/16 01:07 | |
| Dibromofluoromethane (S) | %. | 101 | 84-118 | 09/08/16 01:07 | |
| Toluene-d8 (S) | %. | 101 | 86-110 | 09/08/16 01:07 | |

LABORATORY CONTROL SAMPLE: 1620844

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 55.8 | 112 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 48.9 | 98 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 53.3 | 107 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 53.3 | 107 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 50.1 | 100 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 49.0 | 98 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 55.2 | 110 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 58.2 | 116 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 54.4 | 109 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 51.5 | 103 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 44.9 | 90 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 52.0 | 104 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 52.6 | 105 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 293 | 117 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 290 | 116 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 274 | 110 | 66-134 | |
| Acetone | ug/L | 250 | 273 | 109 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 186 | 93 | 64-133 | |
| Benzene | ug/L | 50 | 50.8 | 102 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 53.8 | 108 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 48.5 | 97 | 71-124 | |
| Bromoform | ug/L | 50 | 50.6 | 101 | 60-125 | |
| Bromomethane | ug/L | 50 | 39.1 | 78 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 47.6 | 95 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 51.6 | 103 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 51.3 | 103 | 76-118 | |
| Chloroethane | ug/L | 50 | 42.5 | 85 | 50-147 | |
| Chloroform | ug/L | 50 | 50.7 | 101 | 70-119 | |
| Chloromethane | ug/L | 50 | 34.5 | 69 | 52-136 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1620844

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ug/L | 50 | 49.9 | 100 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 54.0 | 108 | 71-134 | |
| Dibromochloromethane | ug/L | 50 | 56.1 | 112 | 73-127 | |
| Dibromomethane | ug/L | 50 | 52.0 | 104 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 54.2 | 108 | 75-123 | |
| Iodomethane | ug/L | 100 | 85.3 | 85 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 44.7 | 89 | 66-130 | |
| Styrene | ug/L | 50 | 53.4 | 107 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 51.4 | 103 | 69-119 | |
| Toluene | ug/L | 50 | 53.3 | 107 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 48.0 | 96 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 47.3 | 95 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 199 | 99 | 39-153 | |
| Trichloroethene | ug/L | 50 | 48.9 | 98 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 46.8 | 94 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 176 | 88 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 45.3 | 91 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 158 | 105 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 97 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 97 | 84-118 | |
| Toluene-d8 (S) | %. | | | 106 | 86-110 | |

MATRIX SPIKE SAMPLE: 1620845

| Parameter | Units | 50152744047 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 52.5 | 105 | 44-142 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 48.7 | 97 | 51-140 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 52.2 | 104 | 49-138 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 52.0 | 104 | 51-138 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 49.4 | 99 | 48-137 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50.6 | 101 | 51-144 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 52.7 | 105 | 51-139 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 53.8 | 108 | 37-127 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 50.8 | 102 | 52-134 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 52.4 | 105 | 38-138 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 44.5 | 89 | 44-144 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 52.3 | 105 | 56-138 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 50.0 | 100 | 34-134 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 241 | 96 | 44-142 | |
| 2-Hexanone | ug/L | ND | 250 | 254 | 101 | 43-150 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 253 | 101 | 46-143 | |
| Acetone | ug/L | ND | 250 | 196 | 79 | 33-150 | |
| Acrylonitrile | ug/L | ND | 200 | 181 | 90 | 47-143 | |
| Benzene | ug/L | ND | 50 | 50.7 | 99 | 51-140 | |
| Bromochloromethane | ug/L | ND | 50 | 53.4 | 107 | 53-148 | |

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7726 Moller Road
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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE SAMPLE: 1620845

| Parameter | Units | 50152744047 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ug/L | ND | 50 | 48.4 | 97 | 46-137 | |
| Bromoform | ug/L | ND | 50 | 46.9 | 94 | 36-127 | |
| Bromomethane | ug/L | ND | 50 | 32.5 | 65 | 10-188 | |
| Carbon disulfide | ug/L | ND | 50 | 47.9 | 96 | 35-148 | |
| Carbon tetrachloride | ug/L | ND | 50 | 52.3 | 105 | 45-151 | |
| Chlorobenzene | ug/L | ND | 50 | 49.1 | 98 | 45-138 | |
| Chloroethane | ug/L | ND | 50 | 43.6 | 87 | 33-164 | |
| Chloroform | ug/L | ND | 50 | 49.0 | 98 | 50-135 | |
| Chloromethane | ug/L | ND | 50 | 32.7 | 65 | 38-146 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 47.4 | 95 | 43-144 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50.5 | 101 | 42-136 | |
| Dibromochloromethane | ug/L | ND | 50 | 52.7 | 105 | 45-136 | |
| Dibromomethane | ug/L | ND | 50 | 49.2 | 98 | 51-139 | |
| Ethylbenzene | ug/L | ND | 50 | 50.2 | 100 | 36-146 | |
| Iodomethane | ug/L | ND | 100 | 69.0 | 66 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 44.7 | 89 | 48-140 | |
| Styrene | ug/L | ND | 50 | 51.4 | 103 | 31-148 | |
| Tetrachloroethene | ug/L | ND | 50 | 50.6 | 101 | 38-139 | |
| Toluene | ug/L | ND | 50 | 53.0 | 106 | 44-140 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 48.5 | 97 | 50-139 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 45.1 | 90 | 37-138 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 175 | 88 | 10-157 | |
| Trichloroethene | ug/L | ND | 50 | 46.7 | 93 | 44-146 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 49.4 | 99 | 41-164 | |
| Vinyl acetate | ug/L | ND | 200 | 127 | 63 | 15-146 | |
| Vinyl chloride | ug/L | ND | 50 | 46.8 | 94 | 43-166 | |
| Xylene (Total) | ug/L | ND | 150 | 154 | 102 | 35-146 | |
| 4-Bromofluorobenzene (S) | %. | | | | 98 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | | 99 | 84-118 | |
| Toluene-d8 (S) | %. | | | | 102 | 86-110 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350624
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50152744016

METHOD BLANK: 1621659
Matrix: Water
Associated Lab Samples: 50152744016

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Acetone | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Acrylonitrile | ug/L | ND | 100 | 09/08/16 14:08 | |
| Benzene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Bromoform | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Bromomethane | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Chloroethane | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Chloroform | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Chloromethane | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Iodomethane | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Styrene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Toluene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/08/16 14:08 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1621659 Matrix: Water
Associated Lab Samples: 50152744016

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/08/16 14:08 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/08/16 14:08 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/08/16 14:08 | |
| 4-Bromofluorobenzene (S) | %. | 95 | 79-116 | 09/08/16 14:08 | |
| Dibromofluoromethane (S) | %. | 100 | 84-118 | 09/08/16 14:08 | |
| Toluene-d8 (S) | %. | 102 | 86-110 | 09/08/16 14:08 | |

LABORATORY CONTROL SAMPLE: 1621660

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 54.8 | 110 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 47.9 | 96 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 52.4 | 105 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 53.0 | 106 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 49.4 | 99 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 47.2 | 94 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 54.8 | 110 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 54.4 | 109 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 51.7 | 103 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 51.8 | 104 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 44.3 | 89 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 53.1 | 106 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 51.6 | 103 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 267 | 107 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 275 | 110 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 263 | 105 | 66-134 | |
| Acetone | ug/L | 250 | 248 | 99 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 184 | 92 | 64-133 | |
| Benzene | ug/L | 50 | 48.7 | 97 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 55.6 | 111 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 48.4 | 97 | 71-124 | |
| Bromoform | ug/L | 50 | 48.0 | 96 | 60-125 | |
| Bromomethane | ug/L | 50 | 35.7 | 71 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 46.2 | 92 | 63-130 | |
| Carbon tetrachloride | ug/L | 50 | 50.5 | 101 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 48.3 | 97 | 76-118 | |
| Chloroethane | ug/L | 50 | 40.8 | 82 | 50-147 | |
| Chloroform | ug/L | 50 | 49.6 | 99 | 70-119 | |
| Chloromethane | ug/L | 50 | 32.3 | 65 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 48.2 | 96 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 57.0 | 114 | 71-134 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1621660

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Dibromochloromethane | ug/L | 50 | 53.1 | 106 | 73-127 | |
| Dibromomethane | ug/L | 50 | 49.7 | 99 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 52.7 | 105 | 75-123 | |
| Iodomethane | ug/L | 100 | 79.6 | 80 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 45.3 | 91 | 66-130 | |
| Styrene | ug/L | 50 | 52.3 | 105 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 49.2 | 98 | 69-119 | |
| Toluene | ug/L | 50 | 53.4 | 107 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 46.6 | 93 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 50.5 | 101 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 221 | 110 | 39-153 | |
| Trichloroethene | ug/L | 50 | 46.2 | 92 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 46.0 | 92 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 213 | 106 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 43.6 | 87 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 152 | 101 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 96 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 97 | 84-118 | |
| Toluene-d8 (S) | %. | | | 104 | 86-110 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351441 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50152744050, 50152744051, 50152744052, 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063, 50152744064

METHOD BLANK: 1625331 Matrix: Water
Associated Lab Samples: 50152744050, 50152744051, 50152744052, 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063, 50152744064

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 2-Butanone (MEK) | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| 2-Hexanone | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Acetone | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Acrylonitrile | ug/L | ND | 100 | 09/15/16 01:02 | |
| Benzene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Bromochloromethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Bromoform | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Bromomethane | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Carbon disulfide | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Chlorobenzene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Chloroethane | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Chloroform | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Chloromethane | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Dibromomethane | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Ethylbenzene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Iodomethane | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Methylene Chloride | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| p-Isopropyltoluene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Styrene | ug/L | ND | 5.0 | 09/15/16 01:02 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

METHOD BLANK: 1625331 Matrix: Water

Associated Lab Samples: 50152744050, 50152744051, 50152744052, 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063, 50152744064

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Tetrachloroethene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Tetrahydrofuran | ug/L | ND | 100 | 09/15/16 01:02 | N2 |
| Toluene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Trichloroethene | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| Trichlorofluoromethane | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Vinyl acetate | ug/L | ND | 10.0 | 09/15/16 01:02 | |
| Vinyl chloride | ug/L | ND | 2.0 | 09/15/16 01:02 | |
| Xylene (Total) | ug/L | ND | 5.0 | 09/15/16 01:02 | |
| 4-Bromofluorobenzene (S) | %. | 99 | 79-116 | 09/15/16 01:02 | |
| Dibromofluoromethane (S) | %. | 96 | 84-118 | 09/15/16 01:02 | |
| Toluene-d8 (S) | %. | 100 | 86-110 | 09/15/16 01:02 | |

LABORATORY CONTROL SAMPLE: 1625332

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 45.4 | 91 | 74-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 43.9 | 88 | 72-123 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 46.2 | 92 | 72-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 47.3 | 95 | 75-125 | |
| 1,1-Dichloroethane | ug/L | 50 | 45.8 | 92 | 70-120 | |
| 1,1-Dichloroethene | ug/L | 50 | 48.2 | 96 | 69-127 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 49.1 | 98 | 77-127 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 41.8 | 84 | 67-123 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 45.6 | 91 | 76-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 43.8 | 88 | 77-122 | |
| 1,2-Dichloroethane | ug/L | 50 | 40.5 | 81 | 70-123 | |
| 1,2-Dichloropropane | ug/L | 50 | 44.8 | 90 | 77-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 41.6 | 83 | 75-117 | |
| 2-Butanone (MEK) | ug/L | 250 | 237 | 95 | 60-135 | |
| 2-Hexanone | ug/L | 250 | 244 | 98 | 65-139 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 238 | 95 | 66-134 | |
| Acetone | ug/L | 250 | 211 | 84 | 47-144 | |
| Acrylonitrile | ug/L | 200 | 181 | 90 | 64-133 | |
| Benzene | ug/L | 50 | 45.5 | 91 | 76-122 | |
| Bromochloromethane | ug/L | 50 | 46.0 | 92 | 74-134 | |
| Bromodichloromethane | ug/L | 50 | 46.5 | 93 | 71-124 | |
| Bromoform | ug/L | 50 | 43.7 | 87 | 60-125 | |
| Bromomethane | ug/L | 50 | 41.1 | 82 | 23-194 | |
| Carbon disulfide | ug/L | 50 | 44.5 | 89 | 63-130 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

LABORATORY CONTROL SAMPLE: 1625332

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Carbon tetrachloride | ug/L | 50 | 45.4 | 91 | 73-133 | |
| Chlorobenzene | ug/L | 50 | 41.6 | 83 | 76-118 | |
| Chloroethane | ug/L | 50 | 40.8 | 82 | 50-147 | |
| Chloroform | ug/L | 50 | 43.3 | 87 | 70-119 | |
| Chloromethane | ug/L | 50 | 39.4 | 79 | 52-136 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 45.0 | 90 | 74-120 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 43.5 | 87 | 71-134 | |
| Dibromochloromethane | ug/L | 50 | 47.1 | 94 | 73-127 | |
| Dibromomethane | ug/L | 50 | 42.9 | 86 | 75-124 | |
| Ethylbenzene | ug/L | 50 | 46.2 | 92 | 75-123 | |
| Iodomethane | ug/L | 100 | 99.3 | 99 | 56-142 | |
| Methylene Chloride | ug/L | 50 | 36.8 | 74 | 66-130 | |
| p-Isopropyltoluene | ug/L | 50 | 44.3 | 89 | 75-124 | |
| Styrene | ug/L | 50 | 46.8 | 94 | 78-128 | |
| Tetrachloroethene | ug/L | 50 | 42.6 | 85 | 69-119 | |
| Tetrahydrofuran | ug/L | 50 | 41.8J | 84 | 50-150 | N2 |
| Toluene | ug/L | 50 | 44.1 | 88 | 74-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 43.6 | 87 | 72-122 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 44.5 | 89 | 66-135 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 142 | 71 | 39-153 | |
| Trichloroethene | ug/L | 50 | 41.7 | 83 | 75-123 | |
| Trichlorofluoromethane | ug/L | 50 | 45.7 | 91 | 58-148 | |
| Vinyl acetate | ug/L | 200 | 198 | 99 | 67-154 | |
| Vinyl chloride | ug/L | 50 | 45.8 | 92 | 61-147 | |
| Xylene (Total) | ug/L | 150 | 137 | 92 | 75-127 | |
| 4-Bromofluorobenzene (S) | %. | | | 101 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 95 | 84-118 | |
| Toluene-d8 (S) | %. | | | 97 | 86-110 | |

MATRIX SPIKE SAMPLE: 1625333

| Parameter | Units | 50152744053 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 34.8 | 70 | 44-142 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 36.4 | 73 | 51-140 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 38.1 | 76 | 49-138 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 37.9 | 76 | 51-138 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 37.4 | 75 | 48-137 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 37.4 | 75 | 51-144 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 40.9 | 82 | 51-139 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 37.0 | 74 | 37-127 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 37.0 | 74 | 52-134 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 34.2 | 68 | 38-138 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 33.8 | 68 | 44-144 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 36.5 | 73 | 56-138 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 31.9 | 64 | 34-134 | |

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(317)228-3100

## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

MATRIX SPIKE SAMPLE: 1625333

| Parameter | Units | 50152744053 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | ug/L | ND | 250 | 205 | 82 | 44-142 | |
| 2-Hexanone | ug/L | ND | 250 | 202 | 81 | 43-150 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 201 | 80 | 46-143 | |
| Acetone | ug/L | ND | 250 | 201 | 80 | 33-150 | |
| Acrylonitrile | ug/L | ND | 200 | 156 | 78 | 47-143 | |
| Benzene | ug/L | ND | 50 | 37.8 | 74 | 51-140 | |
| Bromochloromethane | ug/L | ND | 50 | 38.0 | 76 | 53-148 | |
| Bromodichloromethane | ug/L | ND | 50 | 36.0 | 72 | 46-137 | |
| Bromoform | ug/L | ND | 50 | 31.2 | 62 | 36-127 | |
| Bromomethane | ug/L | ND | 50 | 35.2 | 70 | 10-188 | |
| Carbon disulfide | ug/L | ND | 50 | 30.6 | 61 | 35-148 | |
| Carbon tetrachloride | ug/L | ND | 50 | 33.2 | 66 | 45-151 | |
| Chlorobenzene | ug/L | 6.8 | 50 | 40.4 | 67 | 45-138 | |
| Chloroethane | ug/L | ND | 50 | 35.9 | 72 | 33-164 | |
| Chloroform | ug/L | ND | 50 | 36.3 | 73 | 50-135 | |
| Chloromethane | ug/L | ND | 50 | 28.4 | 57 | 38-146 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 36.5 | 73 | 43-144 | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 31.1 | 62 | 42-136 | |
| Dibromochloromethane | ug/L | ND | 50 | 34.9 | 70 | 45-136 | |
| Dibromomethane | ug/L | ND | 50 | 35.6 | 71 | 51-139 | |
| Ethylbenzene | ug/L | ND | 50 | 35.9 | 72 | 36-146 | |
| Iodomethane | ug/L | ND | 100 | 73.6 | 74 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 31.3 | 63 | 48-140 | |
| p-Isopropyltoluene | ug/L | ND | 50 | 33.3 | 67 | 21-151 | |
| Styrene | ug/L | ND | 50 | 28.6 | 57 | 31-148 | |
| Tetrachloroethene | ug/L | ND | 50 | 33.8 | 68 | 38-139 | |
| Tetrahydrofuran | ug/L | ND | 50 | 37.2J | 74 | 50-150 | N2 |
| Toluene | ug/L | ND | 50 | 35.1 | 69 | 44-140 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 36.7 | 73 | 50-139 | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 31.2 | 62 | 37-138 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 64.2 | 32 | 10-157 | |
| Trichloroethene | ug/L | ND | 50 | 32.7 | 65 | 44-146 | |
| Trichlorofluoromethane | ug/L | ND | 50 | 33.4 | 67 | 41-164 | |
| Vinyl acetate | ug/L | ND | 200 | 108 | 54 | 15-146 | |
| Vinyl chloride | ug/L | ND | 50 | 37.9 | 76 | 43-166 | |
| Xylene (Total) | ug/L | ND | 150 | 105 | 70 | 35-146 | |
| 4-Bromofluorobenzene (S) | %. | | | | 99 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | | 95 | 84-118 | |
| Toluene-d8 (S) | %. | | | | 97 | 86-110 | |

SAMPLE DUPLICATE: 1626188

| Parameter | Units | 50152744054 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | ND | | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

SAMPLE DUPLICATE: 1626188

| Parameter | Units | 50152744054 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ug/L | ND | ND | | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethane | ug/L | ND | ND | | 20 | |
| 1,1-Dichloroethene | ug/L | ND | ND | | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | ND | | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | ND | | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 1,2-Dichloroethane | ug/L | ND | ND | | 20 | |
| 1,2-Dichloropropane | ug/L | ND | ND | | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | ND | | 20 | |
| 2-Butanone (MEK) | ug/L | ND | ND | | 20 | |
| 2-Hexanone | ug/L | ND | ND | | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | ND | | 20 | |
| Acetone | ug/L | ND | 1.5J | | 20 | |
| Acrylonitrile | ug/L | ND | ND | | 20 | |
| Benzene | ug/L | ND | .29J | | 20 | |
| Bromochloromethane | ug/L | ND | ND | | 20 | |
| Bromodichloromethane | ug/L | ND | ND | | 20 | |
| Bromoform | ug/L | ND | ND | | 20 | |
| Bromomethane | ug/L | ND | ND | | 20 | |
| Carbon disulfide | ug/L | ND | ND | | 20 | |
| Carbon tetrachloride | ug/L | ND | ND | | 20 | |
| Chlorobenzene | ug/L | 51.7 | 52.0 | 1 | 20 | |
| Chloroethane | ug/L | ND | ND | | 20 | |
| Chloroform | ug/L | ND | ND | | 20 | |
| Chloromethane | ug/L | ND | ND | | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| Dibromochloromethane | ug/L | ND | ND | | 20 | |
| Dibromomethane | ug/L | ND | ND | | 20 | |
| Ethylbenzene | ug/L | ND | ND | | 20 | |
| Iodomethane | ug/L | ND | ND | | 20 | |
| Methylene Chloride | ug/L | ND | ND | | 20 | |
| p-Isopropyltoluene | ug/L | ND | ND | | 20 | |
| Styrene | ug/L | ND | ND | | 20 | |
| Tetrachloroethene | ug/L | ND | ND | | 20 | |
| Tetrahydrofuran | ug/L | ND | ND | | 20 | N2 |
| Toluene | ug/L | ND | .47J | | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | ND | | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | ND | | 20 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | ND | | 20 | |
| Trichloroethene | ug/L | ND | ND | | 20 | |
| Trichlorofluoromethane | ug/L | ND | ND | | 20 | |
| Vinyl acetate | ug/L | ND | ND | | 20 | |
| Vinyl chloride | ug/L | ND | ND | | 20 | |
| Xylene (Total) | ug/L | ND | ND | | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

SAMPLE DUPLICATE: 1626188

| Parameter | Units | 50152744054 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (S) | %. | 103 | 100 | 3 | | |
| Dibromofluoromethane (S) | %. | 97 | 100 | 3 | | |
| Toluene-d8 (S) | %. | 98 | 101 | 3 | | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 348958 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005

METHOD BLANK: 1614381 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 08/28/16 08:42 | |

LABORATORY CONTROL SAMPLE: 1614382

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 287 | 96 | 80-120 | |

SAMPLE DUPLICATE: 1614383

| Parameter | Units | 50152732016 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 619 | 635 | 3 | 10 | |

SAMPLE DUPLICATE: 1614384

| Parameter | Units | 50152744005 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 608 | 623 | 2 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 348961
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744006

METHOD BLANK: 1614389 Matrix: Water
Associated Lab Samples: 50152744006

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 08/29/16 08:06 | |

LABORATORY CONTROL SAMPLE: 1614390

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 293 | 98 | 80-120 | |

SAMPLE DUPLICATE: 1614391

| Parameter | Units | 50152744006 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 346 | 339 | 2 | 10 | |

SAMPLE DUPLICATE: 1614392

| Parameter | Units | 50152718005 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 3200 | 3480 | 8 | 10 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349060 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

METHOD BLANK: 1614700 Matrix: Water
Associated Lab Samples: 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 08/31/16 07:16 | |

LABORATORY CONTROL SAMPLE: 1614701

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 284 | 95 | 80-120 | |

SAMPLE DUPLICATE: 1614702

| Parameter | Units | 50152744007 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 4920 | 4840 | 2 | 10 | |

SAMPLE DUPLICATE: 1614703

| Parameter | Units | 50152823004 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 1720 | 1720 | 0 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349398 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019

METHOD BLANK: 1615834 Matrix: Water
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 08/31/16 09:01 | |

LABORATORY CONTROL SAMPLE: 1615835

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 283 | 94 | 80-120 | |

SAMPLE DUPLICATE: 1615836

| Parameter | Units | 50152830002 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 501 | 492 | 2 | 10 | |

SAMPLE DUPLICATE: 1615837

| Parameter | Units | 50152744016 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 1710 | 1750 | 2 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349593 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025

METHOD BLANK: 1616588 Matrix: Water
Associated Lab Samples: 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 09/01/16 06:59 | |

LABORATORY CONTROL SAMPLE: 1616589

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 286 | 95 | 80-120 | |

SAMPLE DUPLICATE: 1616590

| Parameter | Units | 50152916019 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 501 | 503 | 0 | 10 | |

SAMPLE DUPLICATE: 1616591

| Parameter | Units | 50152744025 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 1910 | 1920 | 0 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349594 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032

METHOD BLANK: 1616592 Matrix: Water
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 09/01/16 08:48 | |

LABORATORY CONTROL SAMPLE: 1616593

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 279 | 93 | 80-120 | |

SAMPLE DUPLICATE: 1616594

| Parameter | Units | 50152744027 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 829 | 841 | 1 | 10 | |

SAMPLE DUPLICATE: 1616595

| Parameter | Units | 50153114005 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 196 | 174 | 12 | 10 | R1 |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349647
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744033, 50152744034, 50152744035

METHOD BLANK: 1616860 Matrix: Water
Associated Lab Samples: 50152744033, 50152744034, 50152744035

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 09/01/16 11:00 | |

LABORATORY CONTROL SAMPLE: 1616861

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 284 | 95 | 80-120 | |

SAMPLE DUPLICATE: 1616862

| Parameter | Units | 50153101001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 4440 | 4490 | 1 | 10 | |

SAMPLE DUPLICATE: 1616863

| Parameter | Units | 50153123006 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 658 | 645 | 2 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350061 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040

METHOD BLANK: 1619518 Matrix: Water
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 09/06/16 10:16 | |

LABORATORY CONTROL SAMPLE: 1619519

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 290 | 97 | 80-120 | |

SAMPLE DUPLICATE: 1619520

| Parameter | Units | 50153202002 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 820 | 833 | 2 | 10 | |

SAMPLE DUPLICATE: 1619521

| Parameter | Units | 50153272003 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 1810 | 1800 | 0 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350063
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

METHOD BLANK: 1619539
Matrix: Water
Associated Lab Samples: 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 09/06/16 10:42 | |

LABORATORY CONTROL SAMPLE: 1619540

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 294 | 98 | 80-120 | |

SAMPLE DUPLICATE: 1619541

| Parameter | Units | 50153272010 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 1670 | 1680 | 0 | 10 | |

SAMPLE DUPLICATE: 1619542

| Parameter | Units | 50153272011 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 1800 | 1800 | 0 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350730 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059

METHOD BLANK: 1622193 Matrix: Water
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 09/09/16 10:25 | |

LABORATORY CONTROL SAMPLE: 1622194

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 294 | 98 | 80-120 | |

SAMPLE DUPLICATE: 1622195

| Parameter | Units | 50153717001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 270 | 261 | 3 | 10 | |

SAMPLE DUPLICATE: 1622196

| Parameter | Units | 50153717005 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 258 | 251 | 3 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350948
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1623588 Matrix: Water
Associated Lab Samples: 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | ND | 10.0 | 09/12/16 10:00 | |

LABORATORY CONTROL SAMPLE: 1623589

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 300 | 288 | 96 | 80-120 | |

SAMPLE DUPLICATE: 1623590

| Parameter | Units | 50153717003 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 243 | 261 | 7 | 10 | |

SAMPLE DUPLICATE: 1623591

| Parameter | Units | 50153717011 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Dissolved Solids | mg/L | 272 | 266 | 2 | 10 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350516 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006

METHOD BLANK: 1621097 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/08/16 11:29 | |

LABORATORY CONTROL SAMPLE: 1621098

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 50 | 50.5 | 101 | 90-110 | |

MATRIX SPIKE SAMPLE: 1621099

| Parameter | Units | 50152744002 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 50 | 62.5 | 109 | 90-110 | |

MATRIX SPIKE SAMPLE: 1621100

| Parameter | Units | 50153025001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 50 | 60.6 | 105 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350645
QC Batch Method: EPA 410.4
Associated Lab Samples: 50152744007

Analysis Method: EPA 410.4
Analysis Description: 410.4 COD

METHOD BLANK: 1621860 Matrix: Water
Associated Lab Samples: 50152744007

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/09/16 09:08 | |

LABORATORY CONTROL SAMPLE: 1621861

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 500 | 507 | 101 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1621862 1621863

| Parameter | Units | 50153160001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 2420 | 2500 | 2500 | 4740 | 4720 | 93 | 92 | 90-110 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1621864

| Parameter | Units | 50153579001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 2770 | 2500 | 5160 | 96 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350716
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Associated Lab Samples: 50152744008, 50152744009

METHOD BLANK: 1622119
Matrix: Water
Associated Lab Samples: 50152744008, 50152744009

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/09/16 11:29 | |

LABORATORY CONTROL SAMPLE: 1622120

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 50 | 49.5 | 99 | 90-110 | |

MATRIX SPIKE SAMPLE: 1622121

| Parameter | Units | 50153343001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 12.1 | 50 | 62.0 | 100 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622122 1622123

| Parameter | Units | 50153369001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 60.6 | 50 | 50 | 106 | 114 | 92 | 107 | 90-110 | 7 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351202
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Associated Lab Samples: 50152744012, 50152744013, 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028

METHOD BLANK: 1624428
Matrix: Water
Associated Lab Samples: 50152744012, 50152744013, 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/14/16 10:21 | |

LABORATORY CONTROL SAMPLE: 1624429

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 50 | 46.1 | 92 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1624430 1624431

| Parameter | Units | 50152744024 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 17.4 | 50 | 50 | 68.7 | 69.7 | 102 | 104 | 90-110 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 1624432

| Parameter | Units | 50153759001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 50 | 54.8 | 110 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351516 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 50152744020, 50152744029, 50152744030, 50152744031, 50152744032, 50152744035, 50152744040, 50152744043, 50152744044, 50152744045, 50152744046

METHOD BLANK: 1625820 Matrix: Water
Associated Lab Samples: 50152744020, 50152744029, 50152744030, 50152744031, 50152744032, 50152744035, 50152744040, 50152744043, 50152744044, 50152744045, 50152744046

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/15/16 11:23 | |

LABORATORY CONTROL SAMPLE: 1625821

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 50 | 47.8 | 96 | 90-110 | |

MATRIX SPIKE SAMPLE: 1625824

| Parameter | Units | 50152744044 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 10.1 | 50 | 71.0 | 122 | 90-110 | M0 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1625877 1625878

| Parameter | Units | 50152744030 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 19.7 | 50 | 50 | 85.2 | 84.8 | 131 | 130 | 90-110 | 0 | 20 | M3 |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351655 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 50152744010, 50152744011, 50152744033, 50152744034, 50152744037, 50152744038, 50152744039, 50152744048

METHOD BLANK: 1626431 Matrix: Water
Associated Lab Samples: 50152744010, 50152744011, 50152744033, 50152744034, 50152744037, 50152744038, 50152744039, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/19/16 14:13 | |

LABORATORY CONTROL SAMPLE: 1626432

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 500 | 497 | 99 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1626433 1626434

| Parameter | Units | 50152744033 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 597 | 500 | 500 | 1020 | 1020 | 85 | 84 | 90-110 | 0 | 20 | M3 |

MATRIX SPIKE SAMPLE: 1626435

| Parameter | Units | 50153865004 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 427 | 500 | 861 | 87 | 90-110 | M0 |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 352202
QC Batch Method: EPA 410.4
Associated Lab Samples: 50152744047

Analysis Method: EPA 410.4
Analysis Description: 410.4 COD

METHOD BLANK: 1629286
Matrix: Water
Associated Lab Samples: 50152744047

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/20/16 17:41 | |

LABORATORY CONTROL SAMPLE: 1629287

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 50 | 53.9 | 108 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 352302 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 50152744041, 50152744042, 50152744057

METHOD BLANK: 1629689 Matrix: Water
Associated Lab Samples: 50152744041, 50152744042, 50152744057

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/21/16 11:51 | |

LABORATORY CONTROL SAMPLE: 1629690

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 500 | 513 | 103 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 352505 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1630481 Matrix: Water
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 10.0 | 09/21/16 16:26 | |

LABORATORY CONTROL SAMPLE: 1630482

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 50 | 46.7 | 93 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1630483 1630484

| Parameter | Units | 50153717011 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | 10.2 | 50 | 50 | 58.5 | 60.1 | 97 | 100 | 90-110 | 3 | 20 | |

MATRIX SPIKE SAMPLE: 1630485

| Parameter | Units | 50152744060 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | mg/L | ND | 50 | 60.0 | 116 | 90-110 | M0 |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349635 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004

METHOD BLANK: 1616751 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/01/16 11:55 | |

LABORATORY CONTROL SAMPLE: 1616752

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 1.9 | 94 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1616753 1616754

| Parameter | Units | 50152656005 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 2 | 1.9 | 1.9 | 96 | 96 | 90-110 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 1616755

| Parameter | Units | 50152744004 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 1.9 | 90 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349636 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

METHOD BLANK: 1616756 Matrix: Water
Associated Lab Samples: 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/01/16 12:51 | |

LABORATORY CONTROL SAMPLE: 1616757

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 1.9 | 94 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1616758 1616759

| Parameter | Units | 50152744005 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 2 | 1.7 | 1.7 | 86 | 86 | 90-110 | 0 | 20 | M3 |

MATRIX SPIKE SAMPLE: 1616760

| Parameter | Units | 50152629011 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 1.9 | 93 | 90-110 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349838 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021

METHOD BLANK: 1617899 Matrix: Water
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/02/16 10:46 | |

LABORATORY CONTROL SAMPLE: 1617900

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 1.9 | 94 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617901 1617902

| Parameter | Units | 50152629012 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 1.1 | 2 | 2 | 3.0 | 3.0 | 96 | 97 | 90-110 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 1617903

| Parameter | Units | 50152744021 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 1 | 0.99 | 99 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349839 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744022, 50152744023, 50152744024, 50152744025

METHOD BLANK: 1617904 Matrix: Water
Associated Lab Samples: 50152744022, 50152744023, 50152744024, 50152744025

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/06/16 14:03 | |

LABORATORY CONTROL SAMPLE: 1617905

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 2.0 | 100 | 90-110 | |

MATRIX SPIKE SAMPLE: 1617908

| Parameter | Units | 50153026012 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 4.4 | 20 | 13.0 | 43 | 90-110 | M0 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1618401 1618402

| Parameter | Units | 50152744023 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 2 | 0.63 | 0.65 | 32 | 32 | 90-110 | 2 | 20 | M3 |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349915
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

METHOD BLANK: 1618347 Matrix: Water
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/06/16 13:15 | |

LABORATORY CONTROL SAMPLE: 1618348

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 2.0 | 100 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1618349 1618350

| Parameter | Units | 50153080002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 2 | 1.8 | 1.8 | 92 | 92 | 90-110 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1618351

| Parameter | Units | 50152744035 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 1.1 | 56 | 90-110 | M0 |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351157 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047

METHOD BLANK: 1624272 Matrix: Water
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/13/16 13:39 | |

LABORATORY CONTROL SAMPLE: 1624273

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 1.9 | 96 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1624274 1624275

| Parameter | Units | 50153212023 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 2 | 1.4 | 1.4 | 71 | 72 | 90-110 | 1 | 20 | M3 |

MATRIX SPIKE SAMPLE: 1624276

| Parameter | Units | 50152744047 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 1.9 | 93 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351207 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744048, 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058

METHOD BLANK: 1624442 Matrix: Water
Associated Lab Samples: 50152744048, 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/14/16 10:27 | |

LABORATORY CONTROL SAMPLE: 1624443

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 2.0 | 98 | 90-110 | |

MATRIX SPIKE SAMPLE: 1624446

| Parameter | Units | 50153733001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 0.14 | 20 | 20.4 | 101 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1625042 1625043

| Parameter | Units | 50153390001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 0.36 | 2 | 2 | 2.3 | 2.3 | 96 | 96 | 90-110 | 0 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351363 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1624989 Matrix: Water
Associated Lab Samples: 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 0.10 | 09/14/16 11:26 | |

LABORATORY CONTROL SAMPLE: 1624990

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | 2 | 2.0 | 99 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1624991 1624992

| Parameter | Units | 50152744059 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 2 | 1.5 | 1.5 | 73 | 73 | 90-110 | 0 | 20 | M3 |

MATRIX SPIKE SAMPLE: 1624993

| Parameter | Units | 50153717010 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, NO2 plus NO3 | mg/L | ND | 2 | 1.9 | 93 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349853 Analysis Method: EPA 365.1
QC Batch Method: EPA 365.1 Analysis Description: 365.1 Total Phosphorus
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

METHOD BLANK: 1617990 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Phosphorus | mg/L | ND | 0.050 | 09/02/16 13:55 | |

LABORATORY CONTROL SAMPLE: 1617991

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Phosphorus | mg/L | .5 | 0.50 | 99 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617992 1617993

| Parameter | Units | 50152744001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 0.15 | .5 | .5 | 0.64 | 0.65 | 97 | 99 | 90-110 | 2 | 20 | |

MATRIX SPIKE SAMPLE: 1617994

| Parameter | Units | 50152840001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 0.12 | .5 | 0.57 | 91 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350325 Analysis Method: EPA 365.1
QC Batch Method: EPA 365.1 Analysis Description: 365.1 Total Phosphorus
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025

METHOD BLANK: 1620432 Matrix: Water
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Phosphorus | mg/L | ND | 0.050 | 09/08/16 11:07 | |

LABORATORY CONTROL SAMPLE: 1620433

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Phosphorus | mg/L | .5 | 0.49 | 98 | 90-110 | |

MATRIX SPIKE SAMPLE: 1620434

| Parameter | Units | 50152744022 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 1.4 | .5 | 1.9 | 102 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620435 1620436

| Parameter | Units | 50153080002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 0.094 | .5 | .5 | 0.60 | 0.58 | 100 | 97 | 90-110 | 3 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350725 Analysis Method: EPA 365.1
QC Batch Method: EPA 365.1 Analysis Description: 365.1 Total Phosphorus
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035, 50152744037, 50152744038

METHOD BLANK: 1622171 Matrix: Water
Associated Lab Samples: 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035, 50152744037, 50152744038

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Phosphorus | mg/L | ND | 0.050 | 09/12/16 09:27 | |

LABORATORY CONTROL SAMPLE: 1622172

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Phosphorus | mg/L | .5 | 0.49 | 99 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622173 1622174

| Parameter | Units | 50153085002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 1.5 | .5 | .5 | 2.1 | 2.1 | 108 | 107 | 90-110 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1622175

| Parameter | Units | 50153247002 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 0.21 | .5 | 0.67 | 92 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351326 Analysis Method: EPA 365.1
QC Batch Method: EPA 365.1 Analysis Description: 365.1 Total Phosphorus
Associated Lab Samples: 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

METHOD BLANK: 1624866 Matrix: Water
Associated Lab Samples: 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Phosphorus | mg/L | ND | 0.050 | 09/14/16 14:14 | |

LABORATORY CONTROL SAMPLE: 1624867

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Phosphorus | mg/L | .5 | 0.49 | 98 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1624868 1624869

| Parameter | Units | 50152744039 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 0.74 | .5 | .5 | 1.3 | 1.3 | 110 | 112 | 90-110 | 1 | 20 | M0 |

MATRIX SPIKE SAMPLE: 1624870

| Parameter | Units | 50153495001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 2.1 | .5 | 2.6 | 108 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351385
QC Batch Method: EPA 365.1
Analysis Method: EPA 365.1
Analysis Description: 365.1 Total Phosphorus
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1625053
Matrix: Water
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Phosphorus | mg/L | ND | 0.050 | 09/15/16 09:15 | |

LABORATORY CONTROL SAMPLE: 1625054

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Phosphorus | mg/L | .5 | 0.49 | 97 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1625055 1625056

| Parameter | Units | 50153627001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | 0.25 | .5 | .5 | 0.74 | 0.72 | 98 | 93 | 90-110 | 3 | 20 | |

MATRIX SPIKE SAMPLE: 1625057

| Parameter | Units | 50152744062 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Phosphorus | mg/L | ND | .5 | 0.48 | 95 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349232 Analysis Method: SM 4500-NH3 G
QC Batch Method: SM 4500-NH3 G Analysis Description: 4500 Ammonia
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013, 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021

METHOD BLANK: 1615345 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004, 50152744005, 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013, 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 0.10 | 08/30/16 11:40 | |

LABORATORY CONTROL SAMPLE: 1615346

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 1 | 1.1 | 107 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1615347 1615348

| Parameter | Units | 50152744001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 0.40 | 1 | 1 | 1.4 | 1.4 | 97 | 96 | 90-110 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1615349

| Parameter | Units | 50152744002 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 1 | 1.1 | 102 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349674 Analysis Method: SM 4500-NH3 G
QC Batch Method: SM 4500-NH3 G Analysis Description: 4500 Ammonia
Associated Lab Samples: 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

METHOD BLANK: 1617008 Matrix: Water
Associated Lab Samples: 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028, 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 0.10 | 09/01/16 13:57 | |

LABORATORY CONTROL SAMPLE: 1617009

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 1 | 1.1 | 107 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617010 1617011

| Parameter | Units | 50152744022 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 0.47 | 1 | 1 | 1.4 | 1.4 | 92 | 94 | 90-110 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 1617012

| Parameter | Units | 50153008001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 0.18 | 1 | 1.2 | 107 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350995 Analysis Method: SM 4500-NH3 G
QC Batch Method: SM 4500-NH3 G Analysis Description: 4500 Ammonia
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047

METHOD BLANK: 1623794 Matrix: Water
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 0.10 | 09/12/16 14:35 | |

LABORATORY CONTROL SAMPLE: 1623795

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 1 | 1.1 | 105 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1623796 1623797

| Parameter | Units | 50153862001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 0.95 | 1 | 1 | 2.0 | 2.0 | 105 | 105 | 90-110 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1623798

| Parameter | Units | 50152744037 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 237 | 40 | 273 | 90 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 352154 Analysis Method: SM 4500-NH3 G
QC Batch Method: SM 4500-NH3 G Analysis Description: 4500 Ammonia
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1629157 Matrix: Water
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056, 50152744057, 50152744058, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 0.10 | 09/19/16 16:19 | |

LABORATORY CONTROL SAMPLE: 1629158

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 1 | 1.0 | 105 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1629159 1629160

| Parameter | Units | 50152744053 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 1.4 | 1 | 1 | 2.4 | 2.4 | 99 | 98 | 90-11 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1629161

| Parameter | Units | 50154033001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 10.5 | 2 | 12.3 | 91 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351834
QC Batch Method: SM 4500-NH3 B
Analysis Method: SM 4500-NH3 G
Analysis Description: 4500 Ammonia, Distilled
Associated Lab Samples: 50152744048

METHOD BLANK: 1627522 Matrix: Water
Associated Lab Samples: 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 0.10 | 09/19/16 11:44 | |

LABORATORY CONTROL SAMPLE: 1627523

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | 1.7 | 1.8 | 108 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1627524 1627525

| Parameter | Units | 50154120002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 1.7 | 1.7 | 1.6 | 1.6 | 92 | 91 | 90-110 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 1627526

| Parameter | Units | 50154120010 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia | mg/L | ND | 1.7 | 1.7 | 97 | 90-110 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 348843 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004

METHOD BLANK: 1613707 Matrix: Water
Associated Lab Samples: 50152744001, 50152744002, 50152744003, 50152744004

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 08/29/16 22:14 | |

LABORATORY CONTROL SAMPLE: 1613708

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.6 | 106 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1613709 1613710

| Parameter | Units | 50152704005 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 10 | 10 | 11.6 | 11.7 | 107 | 108 | 80-120 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 1613711

| Parameter | Units | 50152744004 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 40 | 45.9 | 106 | 80-120 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349339
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744005

METHOD BLANK: 1615658
Matrix: Water
Associated Lab Samples: 50152744005

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/01/16 13:00 | |

LABORATORY CONTROL SAMPLE: 1615659

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.6 | 106 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1615660 1615661

| Parameter | Units | 50152744005 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 40 | 40 | 44.0 | 44.1 | 107 | 107 | 80-120 | 0 | 20 | |

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## QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 349840 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

METHOD BLANK: 1617909 Matrix: Water
Associated Lab Samples: 50152744006, 50152744007, 50152744008, 50152744009, 50152744010, 50152744011, 50152744012, 50152744013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/03/16 09:00 | |

LABORATORY CONTROL SAMPLE: 1617910

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.5 | 105 | 90-110 | |

MATRIX SPIKE SAMPLE: 1617913

| Parameter | Units | 50152704014 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 10 | 10.6 | 106 | 80-120 | 2d |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1618014 1618015

| Parameter | Units | 50152744009 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 40 | 40 | 44.5 | 44.6 | 107 | 108 | 80-120 | 0 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350112 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028

METHOD BLANK: 1619739 Matrix: Water
Associated Lab Samples: 50152744015, 50152744016, 50152744017, 50152744018, 50152744019, 50152744020, 50152744021, 50152744022, 50152744023, 50152744024, 50152744025, 50152744027, 50152744028

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/08/16 14:37 | |

LABORATORY CONTROL SAMPLE: 1619740

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.5 | 105 | 90-110 | |

MATRIX SPIKE SAMPLE: 1619743

| Parameter | Units | 50152744022 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 8.3 | 40 | 51.3 | 107 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1620742 1620743

| Parameter | Units | 50152704011 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 40 | 40 | 43.1 | 43.4 | 108 | 108 | 80-120 | 1 | 20 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350766 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

METHOD BLANK: 1622329 Matrix: Water
Associated Lab Samples: 50152744029, 50152744030, 50152744031, 50152744032, 50152744033, 50152744034, 50152744035

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/12/16 18:47 | |

LABORATORY CONTROL SAMPLE: 1622330

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.3 | 103 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622331 1622332

| Parameter | Units | 50152744029 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 400 | 400 | 445 | 447 | 102 | 102 | 80-120 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 1622333

| Parameter | Units | 50153343002 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 40 | 39.2 | 98 | 80-120 | 2d |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 350767 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

METHOD BLANK: 1622334 Matrix: Water
Associated Lab Samples: 50152744037, 50152744038, 50152744039, 50152744040, 50152744041, 50152744042, 50152744043, 50152744044, 50152744045, 50152744046, 50152744047, 50152744048

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/12/16 18:47 | |

LABORATORY CONTROL SAMPLE: 1622335

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.4 | 104 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622336 1622337

| Parameter | Units | 50153343003 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 10 | 10 | 9.9 | 10.1 | 99 | 101 | 80-120 | 2 | 20 | 1d,2d |

MATRIX SPIKE SAMPLE: 1622338

| Parameter | Units | 50153357045 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 1.7 | 10 | 12.2 | 105 | 80-120 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351071 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056

METHOD BLANK: 1624029 Matrix: Water
Associated Lab Samples: 50152744053, 50152744054, 50152744055, 50152744056

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/14/16 23:17 | |

LABORATORY CONTROL SAMPLE: 1624030

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10 | 100 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1624031 1624032

| Parameter | Units | 50153759001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 40 | 40 | 40.2 | 40.1 | 100 | 100 | 80-120 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1624033

| Parameter | Units | 50153868003 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 173 | 1000 | 1220 | 104 | 80-120 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 351617 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744057, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

METHOD BLANK: 1626247 Matrix: Water
Associated Lab Samples: 50152744057, 50152744059, 50152744060, 50152744061, 50152744062, 50152744063

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/17/16 09:23 | |

LABORATORY CONTROL SAMPLE: 1626248

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.1 | 101 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1626249 1626250

| Parameter | Units | 50154034002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 113 | 400 | 400 | 516 | 517 | 101 | 101 | 80-120 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 1626251

| Parameter | Units | 50153717001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 2.4 | 10 | 12.5 | 101 | 80-120 | |

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# QUALITY CONTROL DATA

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

QC Batch: 352053
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50152744058

METHOD BLANK: 1628850 Matrix: Water
Associated Lab Samples: 50152744058

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 1.0 | 09/19/16 23:13 | |

LABORATORY CONTROL SAMPLE: 1628851

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 10 | 10.1 | 101 | 90-110 | |

MATRIX SPIKE SAMPLE: 1628854

| Parameter | Units | 50154193001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 10 | 11.1 | 103 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1628867 1628868

| Parameter | Units | 50154172002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 40 | 40 | 41.6 | 41.4 | 103 | 103 | 80-120 | 0 | 20 | |

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# QUALIFIERS

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

## DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| 1d | Analysis exceeded maximum integration time before the sample peak returned to baseline. The reported result is estimated |
| 2d | Analysis exceeded maximum integration time before the sample peak returned to baseline. The reported result is estimated. |
| B | Analyte was detected in the associated method blank. |
| CH | The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high. |
| CU | The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |
| D3 | Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference. |
| E | Analyte concentration exceeded the calibration range. The reported result is estimated. |
| L3 | Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |
| M1 | Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. |
| M3 | Matrix spike recovery was outside laboratory control limits due to matrix interferences. |
| N2 | The lab does not hold TNI accreditation for this parameter. |
| P6 | Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level. |
| P8 | Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit. |
| R1 | RPD value was outside control limits. |



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744001 | PZ-110-SS | | 352067 | | |
| 50152744002 | PZ-109-SS | | 352067 | | |
| 50152744003 | PZ-106-SD | | 352067 | | |
| 50152744004 | PZ-106-SS | | 352067 | | |
| 50152744005 | PZ-105-SS | | 352067 | | |
| 50152744006 | PZ-116-SS | | 352067 | | |
| 50152744007 | PZ-202-SS | | 352067 | | |
| 50152744008 | FB @ PZ-104-SS | | 352067 | | |
| 50152744009 | PZ-104-SS | | 352067 | | |
| 50152744010 | PZ-104-SD | | 352067 | | |
| 50152744012 | PZ-212-SD | | 352067 | | |
| 50152744013 | PZ-201A-SS | | 352067 | | |
| 50152744015 | PZ-207-AS | | 352067 | | |
| 50152744016 | D-87 | | 352067 | | |
| 50152744017 | LR-103 | | 352067 | | |
| 50152744018 | PZ-101-SS | | 352067 | | |
| 50152744019 | PZ-102R-SS | | 352067 | | |
| 50152744020 | PZ-304-AS | | 352067 | | |
| 50152744021 | PZ-304-AI | | 352067 | | |
| 50152744022 | MW-104 | | 352067 | | |
| 50152744023 | D-81 | | 352067 | | |
| 50152744024 | PZ-302-AI | | 352067 | | |
| 50152744025 | PZ-200-SS | | 352067 | | |
| 50152744027 | PZ-206-SS | | 352067 | | |
| 50152744028 | PZ-113-SS | | 352067 | | |
| 50152744029 | PZ-113-AD | | 352067 | | |
| 50152744030 | PZ-113-AS | | 352067 | | |
| 50152744031 | PZ-103-SS | | 352067 | | |
| 50152744032 | PZ-203-SS | | 352067 | | |
| 50152744033 | PZ-205-AS | | 352067 | | |
| 50152744034 | PZ-107-SS | | 352067 | | |
| 50152744035 | LR-100 | | 352067 | | |
| 50152744037 | S-5 | | 352067 | | |
| 50152744038 | I-4 | | 352067 | | |
| 50152744039 | D-3 | | 352067 | | |
| 50152744040 | I-73 | | 352067 | | |
| 50152744041 | MW-1204 | | 352067 | | |
| 50152744043 | PZ-112-AS | | 352067 | | |
| 50152744044 | I-68 | | 352067 | | |
| 50152744045 | PZ-204A-SS | | 352067 | | |
| 50152744046 | PZ-302-AS | | 352067 | | |
| 50152744047 | S-53 | | 352067 | | |
| 50152744048 | LCS-6B | | 352067 | | |
| 50152744051 | PZ-104-KS | | 352067 | | |
| 50152744053 | S-84 | | 352067 | | |
| 50152744054 | D-85 | | 352067 | | |
| 50152744056 | PZ-208-SS | | 352067 | | |
| 50152744057 | PZ-303-AS | | 352067 | | |
| 50152744058 | PZ-114-AS | | 352067 | | |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744059 | PZ-115-SS | | 352067 | | |
| 50152744060 | PZ-100-SD | | 352067 | | |
| 50152744061 | PZ-100-SS | | 352067 | | |
| 50152744062 | PZ-111-SD | | 352067 | | |
| 50152744063 | PZ-205-SS | | 352067 | | |
| 50152744001 | PZ-110-SS | EPA 9056 | 348633 | | |
| 50152744002 | PZ-109-SS | EPA 9056 | 348633 | | |
| 50152744003 | PZ-106-SD | EPA 9056 | 348633 | | |
| 50152744004 | PZ-106-SS | EPA 9056 | 348633 | | |
| 50152744005 | PZ-105-SS | EPA 9056 | 348633 | | |
| 50152744006 | PZ-116-SS | EPA 9056 | 348633 | | |
| 50152744007 | PZ-202-SS | EPA 9056 | 348633 | | |
| 50152744008 | FB @ PZ-104-SS | EPA 9056 | 348633 | | |
| 50152744009 | PZ-104-SS | EPA 9056 | 348633 | | |
| 50152744010 | PZ-104-SD | EPA 9056 | 348633 | | |
| 50152744011 | PZ-104-SD DUP | EPA 9056 | 348633 | | |
| 50152744012 | PZ-212-SD | EPA 9056 | 348633 | | |
| 50152744013 | PZ-201A-SS | EPA 9056 | 348633 | | |
| 50152744015 | PZ-207-AS | EPA 9056 | 349074 | | |
| 50152744016 | D-87 | EPA 9056 | 349074 | | |
| 50152744017 | LR-103 | EPA 9056 | 349074 | | |
| 50152744018 | PZ-101-SS | EPA 9056 | 349074 | | |
| 50152744019 | PZ-102R-SS | EPA 9056 | 349074 | | |
| 50152744020 | PZ-304-AS | EPA 9056 | 349074 | | |
| 50152744021 | PZ-304-AI | EPA 9056 | 349074 | | |
| 50152744022 | MW-104 | EPA 9056 | 349074 | | |
| 50152744023 | D-81 | EPA 9056 | 349074 | | |
| 50152744024 | PZ-302-AI | EPA 9056 | 349074 | | |
| 50152744025 | PZ-200-SS | EPA 9056 | 349074 | | |
| 50152744027 | PZ-206-SS | EPA 9056 | 349846 | | |
| 50152744028 | PZ-113-SS | EPA 9056 | 349846 | | |
| 50152744029 | PZ-113-AD | EPA 9056 | 349846 | | |
| 50152744030 | PZ-113-AS | EPA 9056 | 349846 | | |
| 50152744031 | PZ-103-SS | EPA 9056 | 349846 | | |
| 50152744032 | PZ-203-SS | EPA 9056 | 349846 | | |
| 50152744033 | PZ-205-AS | EPA 9056 | 349846 | | |
| 50152744034 | PZ-107-SS | EPA 9056 | 349846 | | |
| 50152744035 | LR-100 | EPA 9056 | 349846 | | |
| 50152744037 | S-5 | EPA 9056 | 350065 | | |
| 50152744038 | I-4 | EPA 9056 | 350065 | | |
| 50152744039 | D-3 | EPA 9056 | 350065 | | |
| 50152744040 | I-73 | EPA 9056 | 350065 | | |
| 50152744041 | MW-1204 | EPA 9056 | 350065 | | |
| 50152744042 | MW-1204 DUP | EPA 9056 | 350065 | | |
| 50152744043 | PZ-112-AS | EPA 9056 | 350065 | | |
| 50152744044 | I-68 | EPA 9056 | 350065 | | |
| 50152744045 | PZ-204A-SS | EPA 9056 | 350065 | | |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744046 | PZ-302-AS | EPA 9056 | 350065 | | |
| 50152744047 | S-53 | EPA 9056 | 350065 | | |
| 50152744048 | LCS-6B | EPA 9056 | 350065 | | |
| 50152744050 | FB@PZ-104-KS | EPA 9056 | 350591 | | |
| 50152744051 | PZ-104-KS | EPA 9056 | 350591 | | |
| 50152744053 | S-84 | EPA 9056 | 350591 | | |
| 50152744054 | D-85 | EPA 9056 | 350591 | | |
| 50152744055 | D-85 DUP | EPA 9056 | 350591 | | |
| 50152744056 | PZ-208-SS | EPA 9056 | 350591 | | |
| 50152744057 | PZ-303-AS | EPA 9056 | 350591 | | |
| 50152744058 | PZ-114-AS | EPA 9056 | 350591 | | |
| 50152744059 | PZ-115-SS | EPA 9056 | 350591 | | |
| 50152744060 | PZ-100-SD | EPA 9056 | 350591 | | |
| 50152744061 | PZ-100-SS | EPA 9056 | 350591 | | |
| 50152744062 | PZ-111-SD | EPA 9056 | 350591 | | |
| 50152744063 | PZ-205-SS | EPA 9056 | 350591 | | |
| 50152744001 | PZ-110-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744001 | PZ-110-SS | EPA 3010 | 349814 | EPA 6010 | 350240 |
| 50152744002 | PZ-109-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744003 | PZ-106-SD | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744003 | PZ-106-SD | EPA 3010 | 349814 | EPA 6010 | 350240 |
| 50152744004 | PZ-106-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744005 | PZ-105-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744006 | PZ-116-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744007 | PZ-202-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744007 | PZ-202-SS | EPA 3010 | 349814 | EPA 6010 | 350240 |
| 50152744008 | FB @ PZ-104-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744009 | PZ-104-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744010 | PZ-104-SD | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744010 | PZ-104-SD | EPA 3010 | 349814 | EPA 6010 | 350240 |
| 50152744011 | PZ-104-SD DUP | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744011 | PZ-104-SD DUP | EPA 3010 | 349814 | EPA 6010 | 350240 |
| 50152744012 | PZ-212-SD | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744013 | PZ-201A-SS | EPA 3010 | 348819 | EPA 6010 | 349405 |
| 50152744015 | PZ-207-AS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744016 | D-87 | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744017 | LR-103 | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744018 | PZ-101-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744019 | PZ-102R-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744020 | PZ-304-AS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744021 | PZ-304-AI | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744022 | MW-104 | EPA 3010 | 349625 | EPA 6010 | 350621 |



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744023 | D-81 | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744024 | PZ-302-AI | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744025 | PZ-200-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744027 | PZ-206-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744028 | PZ-113-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744029 | PZ-113-AD | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744030 | PZ-113-AS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744031 | PZ-103-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744032 | PZ-203-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744033 | PZ-205-AS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744034 | PZ-107-SS | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744035 | LR-100 | EPA 3010 | 349625 | EPA 6010 | 350621 |
| 50152744037 | S-5 | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744038 | I-4 | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744039 | D-3 | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744040 | I-73 | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744041 | MW-1204 | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744042 | MW-1204 DUP | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744043 | PZ-112-AS | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744044 | I-68 | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744045 | PZ-204A-SS | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744046 | PZ-302-AS | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744047 | S-53 | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744048 | LCS-6B | EPA 3010 | 350324 | EPA 6010 | 350801 |
| 50152744053 | S-84 | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744054 | D-85 | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744055 | D-85 DUP | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744056 | PZ-208-SS | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744057 | PZ-303-AS | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744058 | PZ-114-AS | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744059 | PZ-115-SS | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744060 | PZ-100-SD | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744061 | PZ-100-SS | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744062 | PZ-111-SD | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744063 | PZ-205-SS | EPA 3010 | 350738 | EPA 6010 | 351840 |
| 50152744001 | PZ-110-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744002 | PZ-109-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744003 | PZ-106-SD | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744004 | PZ-106-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744005 | PZ-105-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744006 | PZ-116-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744007 | PZ-202-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744008 | FB @ PZ-104-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744009 | PZ-104-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744010 | PZ-104-SD | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744011 | PZ-104-SD DUP | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744012 | PZ-212-SD | EPA 200.2 | 348789 | EPA 6020 | 349261 |



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Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744013 | PZ-201A-SS | EPA 200.2 | 348789 | EPA 6020 | 349261 |
| 50152744015 | PZ-207-AS | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744016 | D-87 | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744017 | LR-103 | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744018 | PZ-101-SS | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744019 | PZ-102R-SS | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744020 | PZ-304-AS | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744021 | PZ-304-AI | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744022 | MW-104 | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744023 | D-81 | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744024 | PZ-302-AI | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744025 | PZ-200-SS | EPA 200.2 | 349039 | EPA 6020 | 349555 |
| 50152744027 | PZ-206-SS | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744028 | PZ-113-SS | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744029 | PZ-113-AD | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744030 | PZ-113-AS | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744031 | PZ-103-SS | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744032 | PZ-203-SS | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744033 | PZ-205-AS | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744034 | PZ-107-SS | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744035 | LR-100 | EPA 200.2 | 349841 | EPA 6020 | 349958 |
| 50152744037 | S-5 | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744038 | I-4 | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744039 | D-3 | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744040 | I-73 | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744041 | MW-1204 | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744042 | MW-1204 DUP | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744043 | PZ-112-AS | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744044 | I-68 | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744045 | PZ-204A-SS | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744046 | PZ-302-AS | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744047 | S-53 | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744048 | LCS-6B | EPA 200.2 | 350094 | EPA 6020 | 350548 |
| 50152744053 | S-84 | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744054 | D-85 | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744055 | D-85 DUP | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744056 | PZ-208-SS | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744057 | PZ-303-AS | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744058 | PZ-114-AS | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744059 | PZ-115-SS | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744060 | PZ-100-SD | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744061 | PZ-100-SS | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744062 | PZ-111-SD | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744063 | PZ-205-SS | EPA 200.2 | 350759 | EPA 6020 | 351278 |
| 50152744001 | PZ-110-SS | EPA 7470 | 351755 | EPA 7470 | 351940 |
| 50152744002 | PZ-109-SS | EPA 7470 | 351755 | EPA 7470 | 351940 |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744003 | PZ-106-SD | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744004 | PZ-106-SS | EPA 7470 | 351755 | EPA 7470 | 351940 |
| 50152744005 | PZ-105-SS | EPA 7470 | 351755 | EPA 7470 | 351940 |
| 50152744006 | PZ-116-SS | EPA 7470 | 351755 | EPA 7470 | 351940 |
| 50152744007 | PZ-202-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744008 | FB @ PZ-104-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744009 | PZ-104-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744010 | PZ-104-SD | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744011 | PZ-104-SD DUP | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744012 | PZ-212-SD | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744013 | PZ-201A-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744015 | PZ-207-AS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744016 | D-87 | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744017 | LR-103 | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744018 | PZ-101-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744019 | PZ-102R-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744020 | PZ-304-AS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744021 | PZ-304-AI | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744022 | MW-104 | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744023 | D-81 | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744024 | PZ-302-AI | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744025 | PZ-200-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744027 | PZ-206-SS | EPA 7470 | 351902 | EPA 7470 | 351996 |
| 50152744028 | PZ-113-SS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744029 | PZ-113-AD | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744030 | PZ-113-AS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744031 | PZ-103-SS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744032 | PZ-203-SS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744033 | PZ-205-AS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744034 | PZ-107-SS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744035 | LR-100 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744037 | S-5 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744038 | I-4 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744039 | D-3 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744040 | I-73 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744041 | MW-1204 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744042 | MW-1204 DUP | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744043 | PZ-112-AS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744044 | I-68 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744045 | PZ-204A-SS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744046 | PZ-302-AS | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744047 | S-53 | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744048 | LCS-6B | EPA 7470 | 351903 | EPA 7470 | 352168 |
| 50152744053 | S-84 | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744054 | D-85 | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744055 | D-85 DUP | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744056 | PZ-208-SS | EPA 7470 | 351946 | EPA 7470 | 352169 |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744057 | PZ-303-AS | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744058 | PZ-114-AS | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744059 | PZ-115-SS | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744060 | PZ-100-SD | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744061 | PZ-100-SS | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744062 | PZ-111-SD | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744063 | PZ-205-SS | EPA 7470 | 351946 | EPA 7470 | 352169 |
| 50152744001 | PZ-110-SS | EPA 8260 | 349160 | | |
| 50152744002 | PZ-109-SS | EPA 8260 | 349160 | | |
| 50152744003 | PZ-106-SD | EPA 8260 | 349160 | | |
| 50152744004 | PZ-106-SS | EPA 8260 | 349160 | | |
| 50152744005 | PZ-105-SS | EPA 8260 | 349160 | | |
| 50152744006 | PZ-116-SS | EPA 8260 | 349160 | | |
| 50152744007 | PZ-202-SS | EPA 8260 | 349160 | | |
| 50152744008 | FB @ PZ-104-SS | EPA 8260 | 349160 | | |
| 50152744009 | PZ-104-SS | EPA 8260 | 349160 | | |
| 50152744010 | PZ-104-SD | EPA 8260 | 349462 | | |
| 50152744011 | PZ-104-SD DUP | EPA 8260 | 349111 | | |
| 50152744012 | PZ-212-SD | EPA 8260 | 349111 | | |
| 50152744013 | PZ-201A-SS | EPA 8260 | 349170 | | |
| 50152744014 | TRIP BLANK | EPA 8260 | 349160 | | |
| 50152744015 | PZ-207-AS | EPA 8260 | 349906 | | |
| 50152744016 | D-87 | EPA 8260 | 350624 | | |
| 50152744017 | LR-103 | EPA 8260 | 349906 | | |
| 50152744018 | PZ-101-SS | EPA 8260 | 349906 | | |
| 50152744019 | PZ-102R-SS | EPA 8260 | 349906 | | |
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| 50152744021 | PZ-304-AI | EPA 8260 | 349906 | | |
| 50152744022 | MW-104 | EPA 8260 | 349906 | | |
| 50152744023 | D-81 | EPA 8260 | 349906 | | |
| 50152744024 | PZ-302-AI | EPA 8260 | 349907 | | |
| 50152744025 | PZ-200-SS | EPA 8260 | 349907 | | |
| 50152744026 | TRIP BLANK | EPA 8260 | 349907 | | |
| 50152744027 | PZ-206-SS | EPA 8260 | 349907 | | |
| 50152744028 | PZ-113-SS | EPA 8260 | 349907 | | |
| 50152744029 | PZ-113-AD | EPA 8260 | 349907 | | |
| 50152744030 | PZ-113-AS | EPA 8260 | 349907 | | |
| 50152744031 | PZ-103-SS | EPA 8260 | 349907 | | |
| 50152744032 | PZ-203-SS | EPA 8260 | 350153 | | |
| 50152744033 | PZ-205-AS | EPA 8260 | 350153 | | |
| 50152744034 | PZ-107-SS | EPA 8260 | 350153 | | |
| 50152744035 | LR-100 | EPA 8260 | 350153 | | |
| 50152744036 | TRIP BLANK | EPA 8260 | 350153 | | |

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| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744037 | S-5 | EPA 8260 | 350421 | | |
| 50152744038 | I-4 | EPA 8260 | 350420 | | |
| 50152744039 | D-3 | EPA 8260 | 350429 | | |
| 50152744040 | I-73 | EPA 8260 | 350429 | | |
| 50152744041 | MW-1204 | EPA 8260 | 350429 | | |
| 50152744042 | MW-1204 DUP | EPA 8260 | 350429 | | |
| 50152744043 | PZ-112-AS | EPA 8260 | 350429 | | |
| 50152744044 | I-68 | EPA 8260 | 350429 | | |
| 50152744045 | PZ-204A-SS | EPA 8260 | 350429 | | |
| 50152744046 | PZ-302-AS | EPA 8260 | 350429 | | |
| 50152744047 | S-53 | EPA 8260 | 350429 | | |
| 50152744048 | LCS-6B | EPA 8260 | 350420 | | |
| 50152744049 | TRIP BLANK | EPA 8260 | 350429 | | |
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| 50152744051 | PZ-104-KS | EPA 8260 | 351441 | | |
| 50152744052 | Trip Blank | EPA 8260 | 351441 | | |
| 50152744053 | S-84 | EPA 8260 | 351441 | | |
| 50152744054 | D-85 | EPA 8260 | 351441 | | |
| 50152744055 | D-85 DUP | EPA 8260 | 351441 | | |
| 50152744056 | PZ-208-SS | EPA 8260 | 351441 | | |
| 50152744057 | PZ-303-AS | EPA 8260 | 351441 | | |
| 50152744058 | PZ-114-AS | EPA 8260 | 351441 | | |
| 50152744059 | PZ-115-SS | EPA 8260 | 351441 | | |
| 50152744060 | PZ-100-SD | EPA 8260 | 351441 | | |
| 50152744061 | PZ-100-SS | EPA 8260 | 351441 | | |
| 50152744062 | PZ-111-SD | EPA 8260 | 351441 | | |
| 50152744063 | PZ-205-SS | EPA 8260 | 351441 | | |
| 50152744064 | TRIP BLANK | EPA 8260 | 351441 | | |
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| 50152744002 | PZ-109-SS | SM 2540C | 348958 | | |
| 50152744003 | PZ-106-SD | SM 2540C | 348958 | | |
| 50152744004 | PZ-106-SS | SM 2540C | 348958 | | |
| 50152744005 | PZ-105-SS | SM 2540C | 348958 | | |
| 50152744006 | PZ-116-SS | SM 2540C | 348961 | | |
| 50152744007 | PZ-202-SS | SM 2540C | 349060 | | |
| 50152744008 | FB @ PZ-104-SS | SM 2540C | 349060 | | |
| 50152744009 | PZ-104-SS | SM 2540C | 349060 | | |
| 50152744010 | PZ-104-SD | SM 2540C | 349060 | | |
| 50152744011 | PZ-104-SD DUP | SM 2540C | 349060 | | |
| 50152744012 | PZ-212-SD | SM 2540C | 349060 | | |
| 50152744013 | PZ-201A-SS | SM 2540C | 349060 | | |
| 50152744015 | PZ-207-AS | SM 2540C | 349398 | | |
| 50152744016 | D-87 | SM 2540C | 349398 | | |
| 50152744017 | LR-103 | SM 2540C | 349398 | | |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744018 | PZ-101-SS | SM 2540C | 349398 | | |
| 50152744019 | PZ-102R-SS | SM 2540C | 349398 | | |
| 50152744020 | PZ-304-AS | SM 2540C | 349593 | | |
| 50152744021 | PZ-304-AI | SM 2540C | 349593 | | |
| 50152744022 | MW-104 | SM 2540C | 349593 | | |
| 50152744023 | D-81 | SM 2540C | 349593 | | |
| 50152744024 | PZ-302-AI | SM 2540C | 349593 | | |
| 50152744025 | PZ-200-SS | SM 2540C | 349593 | | |
| 50152744027 | PZ-206-SS | SM 2540C | 349594 | | |
| 50152744028 | PZ-113-SS | SM 2540C | 349594 | | |
| 50152744029 | PZ-113-AD | SM 2540C | 349594 | | |
| 50152744030 | PZ-113-AS | SM 2540C | 349594 | | |
| 50152744031 | PZ-103-SS | SM 2540C | 349594 | | |
| 50152744032 | PZ-203-SS | SM 2540C | 349594 | | |
| 50152744033 | PZ-205-AS | SM 2540C | 349647 | | |
| 50152744034 | PZ-107-SS | SM 2540C | 349647 | | |
| 50152744035 | LR-100 | SM 2540C | 349647 | | |
| 50152744037 | S-5 | SM 2540C | 350061 | | |
| 50152744038 | I-4 | SM 2540C | 350061 | | |
| 50152744039 | D-3 | SM 2540C | 350061 | | |
| 50152744040 | I-73 | SM 2540C | 350061 | | |
| 50152744041 | MW-1204 | SM 2540C | 350063 | | |
| 50152744042 | MW-1204 DUP | SM 2540C | 350063 | | |
| 50152744043 | PZ-112-AS | SM 2540C | 350063 | | |
| 50152744044 | I-68 | SM 2540C | 350063 | | |
| 50152744045 | PZ-204A-SS | SM 2540C | 350063 | | |
| 50152744046 | PZ-302-AS | SM 2540C | 350063 | | |
| 50152744047 | S-53 | SM 2540C | 350063 | | |
| 50152744048 | LCS-6B | SM 2540C | 350063 | | |
| 50152744053 | S-84 | SM 2540C | 350730 | | |
| 50152744054 | D-85 | SM 2540C | 350730 | | |
| 50152744055 | D-85 DUP | SM 2540C | 350730 | | |
| 50152744056 | PZ-208-SS | SM 2540C | 350730 | | |
| 50152744057 | PZ-303-AS | SM 2540C | 350730 | | |
| 50152744058 | PZ-114-AS | SM 2540C | 350730 | | |
| 50152744059 | PZ-115-SS | SM 2540C | 350730 | | |
| 50152744060 | PZ-100-SD | SM 2540C | 350948 | | |
| 50152744061 | PZ-100-SS | SM 2540C | 350948 | | |
| 50152744062 | PZ-111-SD | SM 2540C | 350948 | | |
| 50152744063 | PZ-205-SS | SM 2540C | 350948 | | |
| 50152744001 | PZ-110-SS | EPA 410.4 | 350516 | EPA 410.4 | 350558 |
| 50152744002 | PZ-109-SS | EPA 410.4 | 350516 | EPA 410.4 | 350558 |
| 50152744003 | PZ-106-SD | EPA 410.4 | 350516 | EPA 410.4 | 350558 |
| 50152744004 | PZ-106-SS | EPA 410.4 | 350516 | EPA 410.4 | 350558 |
| 50152744005 | PZ-105-SS | EPA 410.4 | 350516 | EPA 410.4 | 350558 |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744006 | PZ-116-SS | EPA 410.4 | 350516 | EPA 410.4 | 350558 |
| 50152744007 | PZ-202-SS | EPA 410.4 | 350645 | EPA 410.4 | 350740 |
| 50152744008 | FB @ PZ-104-SS | EPA 410.4 | 350716 | EPA 410.4 | 350777 |
| 50152744009 | PZ-104-SS | EPA 410.4 | 350716 | EPA 410.4 | 350777 |
| 50152744010 | PZ-104-SD | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744011 | PZ-104-SD DUP | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744012 | PZ-212-SD | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744013 | PZ-201A-SS | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744015 | PZ-207-AS | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744016 | D-87 | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744017 | LR-103 | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744018 | PZ-101-SS | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744019 | PZ-102R-SS | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744020 | PZ-304-AS | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744021 | PZ-304-AI | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744022 | MW-104 | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744023 | D-81 | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744024 | PZ-302-AI | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744025 | PZ-200-SS | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744027 | PZ-206-SS | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744028 | PZ-113-SS | EPA 410.4 | 351202 | EPA 410.4 | 351460 |
| 50152744029 | PZ-113-AD | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744030 | PZ-113-AS | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744031 | PZ-103-SS | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744032 | PZ-203-SS | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744033 | PZ-205-AS | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744034 | PZ-107-SS | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744035 | LR-100 | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744037 | S-5 | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744038 | I-4 | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744039 | D-3 | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744040 | I-73 | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744041 | MW-1204 | EPA 410.4 | 352302 | EPA 410.4 | 352506 |
| 50152744042 | MW-1204 DUP | EPA 410.4 | 352302 | EPA 410.4 | 352506 |
| 50152744043 | PZ-112-AS | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744044 | I-68 | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744045 | PZ-204A-SS | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744046 | PZ-302-AS | EPA 410.4 | 351516 | EPA 410.4 | 351674 |
| 50152744047 | S-53 | EPA 410.4 | 352202 | EPA 410.4 | 352484 |
| 50152744048 | LCS-6B | EPA 410.4 | 351655 | EPA 410.4 | 352218 |
| 50152744053 | S-84 | EPA 410.4 | 352505 | EPA 410.4 | 352675 |



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744054 | D-85 | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744055 | D-85 DUP | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744056 | PZ-208-SS | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744057 | PZ-303-AS | EPA 410.4 | 352302 | EPA 410.4 | 352506 |
| 50152744058 | PZ-114-AS | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744059 | PZ-115-SS | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744060 | PZ-100-SD | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744061 | PZ-100-SS | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744062 | PZ-111-SD | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744063 | PZ-205-SS | EPA 410.4 | 352505 | EPA 410.4 | 352675 |
| 50152744001 | PZ-110-SS | EPA 353.2 | 349635 | | |
| 50152744002 | PZ-109-SS | EPA 353.2 | 349635 | | |
| 50152744003 | PZ-106-SD | EPA 353.2 | 349635 | | |
| 50152744004 | PZ-106-SS | EPA 353.2 | 349635 | | |
| 50152744005 | PZ-105-SS | EPA 353.2 | 349636 | | |
| 50152744006 | PZ-116-SS | EPA 353.2 | 349636 | | |
| 50152744007 | PZ-202-SS | EPA 353.2 | 349636 | | |
| 50152744008 | FB @ PZ-104-SS | EPA 353.2 | 349636 | | |
| 50152744009 | PZ-104-SS | EPA 353.2 | 349636 | | |
| 50152744010 | PZ-104-SD | EPA 353.2 | 349636 | | |
| 50152744011 | PZ-104-SD DUP | EPA 353.2 | 349636 | | |
| 50152744012 | PZ-212-SD | EPA 353.2 | 349636 | | |
| 50152744013 | PZ-201A-SS | EPA 353.2 | 349636 | | |
| 50152744015 | PZ-207-AS | EPA 353.2 | 349838 | | |
| 50152744016 | D-87 | EPA 353.2 | 349838 | | |
| 50152744017 | LR-103 | EPA 353.2 | 349838 | | |
| 50152744018 | PZ-101-SS | EPA 353.2 | 349838 | | |
| 50152744019 | PZ-102R-SS | EPA 353.2 | 349838 | | |
| 50152744020 | PZ-304-AS | EPA 353.2 | 349838 | | |
| 50152744021 | PZ-304-AI | EPA 353.2 | 349838 | | |
| 50152744022 | MW-104 | EPA 353.2 | 349839 | | |
| 50152744023 | D-81 | EPA 353.2 | 349839 | | |
| 50152744024 | PZ-302-AI | EPA 353.2 | 349839 | | |
| 50152744025 | PZ-200-SS | EPA 353.2 | 349839 | | |
| 50152744027 | PZ-206-SS | EPA 353.2 | 349915 | | |
| 50152744028 | PZ-113-SS | EPA 353.2 | 349915 | | |
| 50152744029 | PZ-113-AD | EPA 353.2 | 349915 | | |
| 50152744030 | PZ-113-AS | EPA 353.2 | 349915 | | |
| 50152744031 | PZ-103-SS | EPA 353.2 | 349915 | | |
| 50152744032 | PZ-203-SS | EPA 353.2 | 349915 | | |
| 50152744033 | PZ-205-AS | EPA 353.2 | 349915 | | |
| 50152744034 | PZ-107-SS | EPA 353.2 | 349915 | | |
| 50152744035 | LR-100 | EPA 353.2 | 349915 | | |
| 50152744037 | S-5 | EPA 353.2 | 351157 | | |
| 50152744038 | I-4 | EPA 353.2 | 351157 | | |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744039 | D-3 | EPA 353.2 | 351157 | | |
| 50152744040 | I-73 | EPA 353.2 | 351157 | | |
| 50152744041 | MW-1204 | EPA 353.2 | 351157 | | |
| 50152744042 | MW-1204 DUP | EPA 353.2 | 351157 | | |
| 50152744043 | PZ-112-AS | EPA 353.2 | 351157 | | |
| 50152744044 | I-68 | EPA 353.2 | 351157 | | |
| 50152744045 | PZ-204A-SS | EPA 353.2 | 351157 | | |
| 50152744046 | PZ-302-AS | EPA 353.2 | 351157 | | |
| 50152744047 | S-53 | EPA 353.2 | 351157 | | |
| 50152744048 | LCS-6B | EPA 353.2 | 351207 | | |
| 50152744053 | S-84 | EPA 353.2 | 351207 | | |
| 50152744054 | D-85 | EPA 353.2 | 351207 | | |
| 50152744055 | D-85 DUP | EPA 353.2 | 351207 | | |
| 50152744056 | PZ-208-SS | EPA 353.2 | 351207 | | |
| 50152744057 | PZ-303-AS | EPA 353.2 | 351207 | | |
| 50152744058 | PZ-114-AS | EPA 353.2 | 351207 | | |
| 50152744059 | PZ-115-SS | EPA 353.2 | 351363 | | |
| 50152744060 | PZ-100-SD | EPA 353.2 | 351363 | | |
| 50152744061 | PZ-100-SS | EPA 353.2 | 351363 | | |
| 50152744062 | PZ-111-SD | EPA 353.2 | 351363 | | |
| 50152744063 | PZ-205-SS | EPA 353.2 | 351363 | | |
| 50152744001 | PZ-110-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744002 | PZ-109-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744003 | PZ-106-SD | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744004 | PZ-106-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744005 | PZ-105-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744006 | PZ-116-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744007 | PZ-202-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744008 | FB @ PZ-104-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744009 | PZ-104-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744010 | PZ-104-SD | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744011 | PZ-104-SD DUP | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744012 | PZ-212-SD | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744013 | PZ-201A-SS | EPA 365.1 | 349853 | EPA 365.1 | 349885 |
| 50152744015 | PZ-207-AS | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744016 | D-87 | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744017 | LR-103 | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744018 | PZ-101-SS | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744019 | PZ-102R-SS | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744020 | PZ-304-AS | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744021 | PZ-304-AI | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744022 | MW-104 | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744023 | D-81 | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744024 | PZ-302-AI | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744025 | PZ-200-SS | EPA 365.1 | 350325 | EPA 365.1 | 350386 |
| 50152744027 | PZ-206-SS | EPA 365.1 | 350725 | EPA 365.1 | 350934 |



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744028 | PZ-113-SS | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744029 | PZ-113-AD | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744030 | PZ-113-AS | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744031 | PZ-103-SS | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744032 | PZ-203-SS | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744033 | PZ-205-AS | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744034 | PZ-107-SS | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744035 | LR-100 | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744037 | S-5 | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744038 | I-4 | EPA 365.1 | 350725 | EPA 365.1 | 350934 |
| 50152744039 | D-3 | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744040 | I-73 | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744041 | MW-1204 | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744042 | MW-1204 DUP | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744043 | PZ-112-AS | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744044 | I-68 | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744045 | PZ-204A-SS | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744046 | PZ-302-AS | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744047 | S-53 | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744048 | LCS-6B | EPA 365.1 | 351326 | EPA 365.1 | 351414 |
| 50152744053 | S-84 | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744054 | D-85 | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744055 | D-85 DUP | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744056 | PZ-208-SS | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744057 | PZ-303-AS | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744058 | PZ-114-AS | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744059 | PZ-115-SS | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744060 | PZ-100-SD | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744061 | PZ-100-SS | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744062 | PZ-111-SD | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744063 | PZ-205-SS | EPA 365.1 | 351385 | EPA 365.1 | 351427 |
| 50152744001 | PZ-110-SS | SM 4500-NH3 G | 349232 | | |
| 50152744002 | PZ-109-SS | SM 4500-NH3 G | 349232 | | |
| 50152744003 | PZ-106-SD | SM 4500-NH3 G | 349232 | | |
| 50152744004 | PZ-106-SS | SM 4500-NH3 G | 349232 | | |
| 50152744005 | PZ-105-SS | SM 4500-NH3 G | 349232 | | |
| 50152744006 | PZ-116-SS | SM 4500-NH3 G | 349232 | | |
| 50152744007 | PZ-202-SS | SM 4500-NH3 G | 349232 | | |
| 50152744008 | FB @ PZ-104-SS | SM 4500-NH3 G | 349232 | | |
| 50152744009 | PZ-104-SS | SM 4500-NH3 G | 349232 | | |
| 50152744010 | PZ-104-SD | SM 4500-NH3 G | 349232 | | |
| 50152744011 | PZ-104-SD DUP | SM 4500-NH3 G | 349232 | | |
| 50152744012 | PZ-212-SD | SM 4500-NH3 G | 349232 | | |
| 50152744013 | PZ-201A-SS | SM 4500-NH3 G | 349232 | | |
| 50152744015 | PZ-207-AS | SM 4500-NH3 G | 349232 | | |
| 50152744016 | D-87 | SM 4500-NH3 G | 349232 | | |
| 50152744017 | LR-103 | SM 4500-NH3 G | 349232 | | |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744018 | PZ-101-SS | SM 4500-NH3 G | 349232 | | |
| 50152744019 | PZ-102R-SS | SM 4500-NH3 G | 349232 | | |
| 50152744020 | PZ-304-AS | SM 4500-NH3 G | 349232 | | |
| 50152744021 | PZ-304-AI | SM 4500-NH3 G | 349232 | | |
| 50152744022 | MW-104 | SM 4500-NH3 G | 349674 | | |
| 50152744023 | D-81 | SM 4500-NH3 G | 349674 | | |
| 50152744024 | PZ-302-AI | SM 4500-NH3 G | 349674 | | |
| 50152744025 | PZ-200-SS | SM 4500-NH3 G | 349674 | | |
| 50152744027 | PZ-206-SS | SM 4500-NH3 G | 349674 | | |
| 50152744028 | PZ-113-SS | SM 4500-NH3 G | 349674 | | |
| 50152744029 | PZ-113-AD | SM 4500-NH3 G | 349674 | | |
| 50152744030 | PZ-113-AS | SM 4500-NH3 G | 349674 | | |
| 50152744031 | PZ-103-SS | SM 4500-NH3 G | 349674 | | |
| 50152744032 | PZ-203-SS | SM 4500-NH3 G | 349674 | | |
| 50152744033 | PZ-205-AS | SM 4500-NH3 G | 349674 | | |
| 50152744034 | PZ-107-SS | SM 4500-NH3 G | 349674 | | |
| 50152744035 | LR-100 | SM 4500-NH3 G | 349674 | | |
| 50152744037 | S-5 | SM 4500-NH3 G | 350995 | | |
| 50152744038 | I-4 | SM 4500-NH3 G | 350995 | | |
| 50152744039 | D-3 | SM 4500-NH3 G | 350995 | | |
| 50152744040 | I-73 | SM 4500-NH3 G | 350995 | | |
| 50152744041 | MW-1204 | SM 4500-NH3 G | 350995 | | |
| 50152744042 | MW-1204 DUP | SM 4500-NH3 G | 350995 | | |
| 50152744043 | PZ-112-AS | SM 4500-NH3 G | 350995 | | |
| 50152744044 | I-68 | SM 4500-NH3 G | 350995 | | |
| 50152744045 | PZ-204A-SS | SM 4500-NH3 G | 350995 | | |
| 50152744046 | PZ-302-AS | SM 4500-NH3 G | 350995 | | |
| 50152744047 | S-53 | SM 4500-NH3 G | 350995 | | |
| 50152744053 | S-84 | SM 4500-NH3 G | 352154 | | |
| 50152744054 | D-85 | SM 4500-NH3 G | 352154 | | |
| 50152744055 | D-85 DUP | SM 4500-NH3 G | 352154 | | |
| 50152744056 | PZ-208-SS | SM 4500-NH3 G | 352154 | | |
| 50152744057 | PZ-303-AS | SM 4500-NH3 G | 352154 | | |
| 50152744058 | PZ-114-AS | SM 4500-NH3 G | 352154 | | |
| 50152744059 | PZ-115-SS | SM 4500-NH3 G | 352154 | | |
| 50152744060 | PZ-100-SD | SM 4500-NH3 G | 352154 | | |
| 50152744061 | PZ-100-SS | SM 4500-NH3 G | 352154 | | |
| 50152744062 | PZ-111-SD | SM 4500-NH3 G | 352154 | | |
| 50152744063 | PZ-205-SS | SM 4500-NH3 G | 352154 | | |
| 50152744048 | LCS-6B | SM 4500-NH3 B | 351834 | SM 4500-NH3 G | 352072 |
| 50152744001 | PZ-110-SS | SM 5310C | 348843 | | |
| 50152744002 | PZ-109-SS | SM 5310C | 348843 | | |
| 50152744003 | PZ-106-SD | SM 5310C | 348843 | | |
| 50152744004 | PZ-106-SS | SM 5310C | 348843 | | |
| 50152744005 | PZ-105-SS | SM 5310C | 349339 | | |

## REPORT OF LABORATORY ANALYSIS

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(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744006 | PZ-116-SS | SM 5310C | 349840 | | |
| 50152744007 | PZ-202-SS | SM 5310C | 349840 | | |
| 50152744008 | FB @ PZ-104-SS | SM 5310C | 349840 | | |
| 50152744009 | PZ-104-SS | SM 5310C | 349840 | | |
| 50152744010 | PZ-104-SD | SM 5310C | 349840 | | |
| 50152744011 | PZ-104-SD DUP | SM 5310C | 349840 | | |
| 50152744012 | PZ-212-SD | SM 5310C | 349840 | | |
| 50152744013 | PZ-201A-SS | SM 5310C | 349840 | | |
| 50152744015 | PZ-207-AS | SM 5310C | 350112 | | |
| 50152744016 | D-87 | SM 5310C | 350112 | | |
| 50152744017 | LR-103 | SM 5310C | 350112 | | |
| 50152744018 | PZ-101-SS | SM 5310C | 350112 | | |
| 50152744019 | PZ-102R-SS | SM 5310C | 350112 | | |
| 50152744020 | PZ-304-AS | SM 5310C | 350112 | | |
| 50152744021 | PZ-304-AI | SM 5310C | 350112 | | |
| 50152744022 | MW-104 | SM 5310C | 350112 | | |
| 50152744023 | D-81 | SM 5310C | 350112 | | |
| 50152744024 | PZ-302-AI | SM 5310C | 350112 | | |
| 50152744025 | PZ-200-SS | SM 5310C | 350112 | | |
| 50152744027 | PZ-206-SS | SM 5310C | 350112 | | |
| 50152744028 | PZ-113-SS | SM 5310C | 350112 | | |
| 50152744029 | PZ-113-AD | SM 5310C | 350766 | | |
| 50152744030 | PZ-113-AS | SM 5310C | 350766 | | |
| 50152744031 | PZ-103-SS | SM 5310C | 350766 | | |
| 50152744032 | PZ-203-SS | SM 5310C | 350766 | | |
| 50152744033 | PZ-205-AS | SM 5310C | 350766 | | |
| 50152744034 | PZ-107-SS | SM 5310C | 350766 | | |
| 50152744035 | LR-100 | SM 5310C | 350766 | | |
| 50152744037 | S-5 | SM 5310C | 350767 | | |
| 50152744038 | I-4 | SM 5310C | 350767 | | |
| 50152744039 | D-3 | SM 5310C | 350767 | | |
| 50152744040 | I-73 | SM 5310C | 350767 | | |
| 50152744041 | MW-1204 | SM 5310C | 350767 | | |
| 50152744042 | MW-1204 DUP | SM 5310C | 350767 | | |
| 50152744043 | PZ-112-AS | SM 5310C | 350767 | | |
| 50152744044 | I-68 | SM 5310C | 350767 | | |
| 50152744045 | PZ-204A-SS | SM 5310C | 350767 | | |
| 50152744046 | PZ-302-AS | SM 5310C | 350767 | | |
| 50152744047 | S-53 | SM 5310C | 350767 | | |
| 50152744048 | LCS-6B | SM 5310C | 350767 | | |
| 50152744053 | S-84 | SM 5310C | 351071 | | |
| 50152744054 | D-85 | SM 5310C | 351071 | | |
| 50152744055 | D-85 DUP | SM 5310C | 351071 | | |
| 50152744056 | PZ-208-SS | SM 5310C | 351071 | | |
| 50152744057 | PZ-303-AS | SM 5310C | 351617 | | |
| 50152744058 | PZ-114-AS | SM 5310C | 352053 | | |

## REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Landfill GW 3Q 2016
Pace Project No.: 50152744

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50152744059 | PZ-115-SS | SM 5310C | 351617 | | |
| 50152744060 | PZ-100-SD | SM 5310C | 351617 | | |
| 50152744061 | PZ-100-SS | SM 5310C | 351617 | | |
| 50152744062 | PZ-111-SD | SM 5310C | 351617 | | |
| 50152744063 | PZ-205-SS | SM 5310C | 351617 | | |



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# CHAIN-OF-CUSTODY / Analytical Request Document

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



2096071

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Bridgeton LF |
| Address: | |
| Email To: | |
| Phone: | Fax: |
| Requested Due Date/TAT: | Std |

**Section B** Required Project Information:

| | |
|---|---|
| Report To: | Bridgeton LF |
| Copy To: | |
| Purchase Order No.: | |
| Project Name: | Bridgeton 2016 Q3 GW |
| Project Number: | |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | |
| Company Name: | |
| Address: | |
| Pace Quote Reference: | |
| Pace Project Manager: | Chris Boyle |
| Pace Profile #: | |

REGULATORY AGENCY

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

Site Location STATE: MO

**Section D** Required Client Information

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

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | VOC 8260 | Total Metals | $NH_3$, COD, $SO_4$ | TOC, Cl, F | $NO_3$, $NO_2$, P | Hardness, TDS | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PZ-110-SS | WT | G | | | 8/23/16 | 0842 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 001 |
| 2 | PZ-109-SS | WT | G | | | | 0945 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 002 |
| 3 | PZ-106-SD | WT | G | | | | 1131 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 003 |
| 4 | PZ-106-SS | WT | G | | | | 1226 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 004 |
| 5 | PZ-105-SS | WT | G | | | | 1439 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 005 |
| 6 | PZ-116-SS | WT | G | | | 8/23/16 | 1555 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 006 |
| 7 | PZ-202-SS | WT | G | | | 8/24/16 | 0834 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 007 |
| 8 | FB@PZ-104-SS | WT | G | | | | 0925 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 008 |
| 9 | PZ-104-SS | WT | G | | | | 1012 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 009 |
| 10 | PZ-104-SD | WT | G | | | | 1054 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 010 |
| 11 | PZ-104-SD DUP | WT | G | | | | 1054 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 011 |
| 12 | PZ-212-SD | WT | G | | | 8/24/16 | 1326 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 012 |

SAB 8/29/16

50.152744

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FEI | 8/24/16 | 1600 | FedEx | 8/24/16 | 1600 | | | | |
| | FedEx | | | Elaine Jones | 8/25/16 | 830 | 3.2 | Y | Y | Y |
| | | | | | | | 0.6 | | | |
| | | | | | | | 2.8 | | | |

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonathan Wilkinson

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/24/2016

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Import[illegible]: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for a[illegible]ces not paid within 30 days.

F-ALL-Q-020rev.07, 15-M[illegible]2007

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# CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

2096072

**Section A** Required Client Information:
Company: Bridgeton LF
Address:
Email To:
Phone: Fax:
Requested Due Date/TAT: Std

**Section B** Required Project Information:
Report To: Bridgeton LF
Copy To:
Purchase Order No.:
Project Name: Bridgeton 2016Q3 GW
Project Number:

**Section C** Invoice Information:
Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Chris Boyle
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER
Site Location STATE: MO

**Section D** Required Client Information

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

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Y/N | Analysis Test ↓ | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PZ-201A-SS | WT | G | | | 8/24/16 | 1411 | | 7 | 1 | 2 | 1 | 3 | | | | | X | VOC 8260 Total Metals NH3, COD, SO4 TOC, Cl, F, P Alk, TDS, Hardness, TDS | | 50152744 |
| 2 | Trip Blank | WT | G | | | 8/24/16 | — | | 3 | | | | 3 | | | | | X | | | 013 |
| 3 | | | | | | | | | | | | | | | | | | | | | 014 |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FedEx | 8/24/16 | 1600 | FedEx | 8/24/16 | 1600 | | | | |
| | | | | Alainajones | 8/25/16 | 830 | 3.2 | Y | Y | Y |
| | | | | | | | 0.6 | | | |
| | | | | | | | 2.8 | | | |

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jonathan Wilkins
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 08/24/16

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

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

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# CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 1

2096073

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Bridgeton LF |
| Address: | |
| Email To: | |
| Phone: | Fax: |
| Requested Due Date/TAT: | Std |

**Section B** Required Project Information:

| | |
|---|---|
| Report To: | Bridgeton LF |
| Copy To: | |
| Purchase Order No.: | |
| Project Name: | Bridgeton 2016Q3 GW |
| Project Number: | |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | |
| Company Name: | |
| Address: | |
| Pace Quote Reference: | |
| Pace Project Manager: | Chris Boyle |
| Pace Profile #: | |

REGULATORY AGENCY

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

Site Location STATE: MO

**Section D** Required Client Information

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

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COLLECTED COMPOSITE START TIME | COLLECTED COMPOSITE END/GRAB DATE | COLLECTED COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test (Y/N) | VOC 8260 | Total Metals | $NH_3$, COD, $SO_4$ | $NO_2$/$NO_3$, P | Hardness, TDS | TOC, Cl, F | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PZ-207-AS | WT | G | | | 8/25/16 | 0917 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 015 |
| 2 | D-87 | WT | G | | | | 1017 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 016 |
| 3 | LR-103 | WT | G | | | | 1141 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 017 |
| 4 | PZ-101-SS | WT | G | | | | 1318 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 018 |
| 5 | PZ-102R-SS | WT | G | | | 8/25/16 | 1427 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 019 |
| 6 | PZ-304-AS | WT | G | | | 8/26/16 | 0833 | | 7 | 4 | 2 | 1 | 3 | 8/25/16 | | | | | X | X | X | X | X | VOC's unpreserved + 2 w/bubble | | 020 |
| 7 | PZ-304-AI | WT | G | | | | 0924 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 021 |
| 8 | MW-104 | WT | G | | | | 1009 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 022 |
| 9 | D-81 | WT | G | | | | 1058 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 023 |
| 10 | PZ-302-AT | WT | G | | | | 1224 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 024 |
| 11 | PZ-200-~~AS~~ SS | WT | G | | | | 1427 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | | | 025 |
| 12 | Trip Blank | WT | G | | | 8/26/16 | N/A | | 3 | | | | 3 | | | | | | X | | | | | | | 026 |

50152744

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| | [signature] /FEI | 8/26/16 | 1630 | Fed Ex | 8/26/16 | 1630 | | | | |
| | Fed Ex. Kee 8-27-16 | | | Kathy Eck/Pace | 8/27/16 | 0845 | 1.1 0.3 | Y | Y | Y |

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonathan Wilkinson

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 08/26/16

*Impo[illegible]: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for [illegible] ices not paid within 30 days.

F-ALL-Q-020rev.07, 15-M[illegible]007

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# CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 1

2095995

**Section A** Required Client Information:
Company: Bridgeton LF
Address:
Email To:
Phone: Fax:
Requested Due Date/TAT: Std

**Section B** Required Project Information:
Report To: Bridgeton LF
Copy To:
Purchase Order No.:
Project Name: Bridgeton 2016Q3 GW
Project Number:

**Section C** Invoice Information:
Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Chris Boyle
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER
Site Location STATE: MO

**Section D** Required Client Information

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

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COLLECTED COMPOSITE START TIME | COLLECTED COMPOSITE END/GRAB DATE | COLLECTED COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test (Y/N) | VOC 8260 | Total Metals | $NH_3$, COD, $SO_4$ | $NO_2$/$NO_3$, P | Hardness, TDS | TOC, Cr | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PZ-206-SS | WT | G | | | 8/29/16 | 0851 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 027 |
| 2 | PZ-113-SS | | | | | | 1014 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 028 |
| 3 | PZ-113-AD | | | | | | 1123 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 029 |
| 4 | PZ-113-AS | | | | | | 1332 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 030 |
| 5 | PZ-103-SS | | | | | | 1448 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 031 |
| 6 | PZ-203-SS | | | | | 8/29/16 | 1602 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 032 |
| 7 | PZ-205-AS | | | | | 8/30/16 | 0845 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 033 |
| 8 | PZ-107-SS | | | | | | 0959 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 034 |
| 9 | LR-100 | | | | | | 1145 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 035 |
| 10 | Trip Blank | WT | G | | | 8/30/16 | NA | | 3 | | | | 3 | | | | | | X | | | | | | | 036 |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | |

50152744

8/31/16

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | [signature] | 8/30/16 | 1630 | Fed Ex | 8/30/16 | 1630 | | | | |
| | Fed Ex. Kee 8-31-16 | | | Kathy Eck/Pace | 8/31/16 | 0825 | 0.0 | Y | Y | Y |

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jonathan Wilkinson
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 08/30/2016

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

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

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

2095996

**Section A** Required Client Information:

Company: Bridgeton LF

Address:

Email To:

Phone: Fax:

Requested Due Date/TAT: Std

**Section B** Required Project Information:

Report To: Bridgeton LF

Copy To:

Purchase Order No.:

Project Name: Bridgeton 20162236W

Project Number:

**Section C** Invoice Information:

Attention:

Company Name:

Address:

Pace Quote Reference:

Pace Project Manager: Chris Boyle

Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MO

**Section D** Required Client Information

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

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COLLECTED COMPOSITE START TIME | COLLECTED COMPOSITE END/GRAB DATE | COLLECTED COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | VOC 8260 | Total Metals | COD, SO4, Cl, TDS, NO3/NH3 | Hardness, TSS | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S-5 | WT | G | | | 8/31/16 | 0943 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 037 |
| 2 | I-4 | | | | | | 1050 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 038 |
| 3 | D-3 | | | | | | 1139 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 039 |
| 4 | I-73 | | | | | 8/31/16 | 1334 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 040 |
| 5 | MW-1204 | | | | | 9/1/16 | 0857 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 041 |
| 6 | MW-1204 DUP | | | | | | 0857 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 042 |
| 7 | PZ-112-A5 | | | | | | 1016 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 043 |
| 8 | I-68 | | | | | | 1123 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 044 |
| 9 | PZ-204A-S5 | | | | | | 1331 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 045 |
| 10 | PZ-302-A5 | | | | | | 1355 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 046 |
| 11 | S-53 | | | | | | 1425 | | 7 | 1 | 2 | 1 | 3 | | | | | Y | X | X | X | X | | 047 |
| 12 | WCS-6B | | | | | 9/1/16 | 0715 | | 7 | 1 | 2 | | | | | | | Y | X | X | X | X | | VOCs unpres. 048 |

5015744 SAB 9/1/16

5015745 SAB 9/1/16

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | FEDEX | 9/1/16 | 1645 | FedEx | 9/1/16 | 1645 | |
| | | | | SAB | 9/2/16 | 0220 | 042 / 043 |

Temp in °C: 2 | Received on Ice (Y/N): Y | Custody Sealed Cooler (Y/N): Y | Samples Intact (Y/N): Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Bradley Wilkin

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 9/1/2016

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

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

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# CHAIN-OF-CUSTODY / Analytical Request Document

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



2095997

**Section A** Required Client Information:

Company: Bridgeton LF
Address:
Email To:
Phone: Fax:
Requested Due Date/TAT: Std

**Section B** Required Project Information:

Report To: Bridgeton LF
Copy To:
Purchase Order No.:
Project Name: Bridgeton 2016Q3EG
Project Number:

**Section C** Invoice Information:

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

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location
STATE:

**Section D** Required Client Information

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

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

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Requested Analysis Filtered (Y/N) | Analysis Test Y/N | VOC 8260 | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LCS-1D | | | | | 9/1/16 | 1543 | | 2 | | | | | | | | | | | X | | |
| 2 | LCS-4B | | | | | " | 1547 | | 2 | | | | | | | | | | | X | | |
| 3 | LCS-3D | | | | | " | 1552 | | 2 | | | | | | | | | | | X | | |
| 4 | LCS-2D | | | | | " | 1550 | | 2 | | | | | | | | | | | X | | |
| 5 | Trip Blank | | | | | 9/1/16 | N/A | | 3 | | | | 3 | | | | | | | X | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |

50.522744

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | FCT PADEP | 9/1/16 | 1645 | FedEx | 9/1/16 | 1645 | |
| | | | | | 9/2/16 | 0820 | 6.2 / 6.4 |

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jonathan Wilkin
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9/1/2016

| Temp In °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|
| | Y | Y | Y |

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

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

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# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

2095999

**Section A** Required Client Information:

Company: Bridgeton LF
Address:
Email To:
Phone: Fax:
Requested Due Date/TAT: Std

**Section B** Required Project Information:

Report To: Bridgeton LF
Copy To:
Purchase Order No.:
Project Name: Bridgeton 2016Q3 PZ104KS
Project Number:

**Section C** Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: MD

**Section D** Required Client Information

**Matrix Codes** MATRIX / CODE

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

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | VOC 8260 | Chloride | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FB@PZ-104-KS | WT | G | | | 9/7/16 | 1405 | | 4 | 1 | | | 3 | | | | | Y | Y | Y | | 050 |
| 2 | PZ-104-KS | WT | G | | | 9/7/16 | 1510 | | 4 | 1 | | | 3 | | | | | Y | Y | Y | | 051 |
| 3 | Trip Blank | WT | G | | | 9/7/16 | NA | | 3 | 1 | | | 3 | | | | | Y | Y | | | 052 |
| 4 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |

SAG 9/8/16

501527 44

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Fed Ex IFEI | 9/7/16 | 1700 | Fed Ex | 9/7/16 | 1700 | | | | |
| | Fed Ex | | | L. Lucas | 9.8.16 | 830 | 0.0 | Y | Y | Y |
| | | | | | | | 0.6 | | | |

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonathan Wilkinson

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 09/07/2016

Temp In °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Import[illegible]: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for a[illegible]ces not paid within 30 days.

F-ALL-Q-020rev.07, 15-M[illegible].2007

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# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

2095998

**Section A** Required Client Information:

| | |
|---|---|
| Company: | Bridgeton LF |
| Address: | |
| Email To: | |
| Phone: | Fax: |
| Requested Due Date/TAT: | Std |

**Section B** Required Project Information:

| | |
|---|---|
| Report To: | Bridgeton LF |
| Copy To: | |
| Purchase Order No.: | |
| Project Name: | Bridgeton 2016 Q3 GW |
| Project Number: | |

**Section C** Invoice Information:

| | |
|---|---|
| Attention: | |
| Company Name: | |
| Address: | |
| Pace Quote Reference: | |
| Pace Project Manager: | Chris Boyle |
| Pace Profile #: | |

**REGULATORY AGENCY**

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

Site Location STATE: MO

**Section D** Required Client Information

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

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

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COLLECTED COMPOSITE START TIME | COLLECTED COMPOSITE END/GRAB DATE | COLLECTED COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test (Y/N) | VOC 8260 | Total Metals | $NH_3$, COD, $SO_4$ | $NO_2/NO_3$, P | Hardness, TDS | TOC, Cl | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S-84 | WT | G | | | 9/6/16 | 0836 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 053 |
| 2 | D-85 | | | | | | 0927 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 054 |
| 3 | D-85 ~~PDR~~ DUP (D) | | | | | | 0929 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 055 |
| 4 | PZ-208-SS | | | | | | 1049 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 056 |
| 5 | PZ-303-AS | | | | | | 1217 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 057 |
| 6 | PZ-114-AS | | | | | | 1530 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 058 |
| 7 | PZ-115-SS | | | | | 9/6/16 | 1609 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 059 |
| 8 | PZ-100-SD | | | | | 9/7/16 | 0858 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 060 |
| 9 | PZ-100-SS | | | | | | 0944 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 061 |
| 10 | PZ-111-SD | | | | | | 1109 | | 7 | 1 | 2 | 1 | 3 | | | | | | X | X | X | X | X | X | | 062 |
| 11 | PZ-205-SS | | | | | | 1250 | | | | | | | | | | | | X | X | X | X | X | X | | 063 |
| 12 | Trip Blank | WT | G | | | 9/7/16 | N/A | | | | | | | | | | | | X | | | | | | | 064 |

SAB 9/8/16

I0152744

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|
| | [signature] / FEI Fed Ex | 9/7/16 | 1700 | Fed Ex | 9/7/16 | 1700 | | | | |
| | | | | [signature] | 9-8-16 | 830 | 0.0 | Y | Y | Y |
| | | | | | | | 0.6 | | | |

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonathan Wilkinson

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 09/07/2016

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

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

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Bridgeton LF  Project # 50522744

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 6907 5118 4342

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

Date/Time 5035A kits placed in freezer: _____

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer 1 2 3 4 5 6 A B C D E F  Type of Ice: (Wet) Blue None  ☐ Samples on ice, cooling process has begun

Cooler Temperature (Initial/Corrected) 3.2/3.2, 0.6/0.6, 2.8/2.8°C  Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AJ 8/25/16

| | | | | Comments: |
|---|---|---|---|---|
| **Are samples from West Virginia?** | ☐Yes | ☑No | | 1. |
| Document any containers out of temp. | | | | |
| Chain of Custody Present: | ☑Yes | ☐No | ☐N/A | 2. |
| Chain of Custody Filled Out: | ☑Yes | ☐No | ☐N/A | 3. |
| Chain of Custody Relinquished: | ☑Yes | ☐No | ☐N/A | 4. |
| Sampler Name & Signature on COC: | ☑Yes | ☐No | ☐N/A | 5. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes | ☑No | ☐N/A | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes | ☑No | ☐N/A | 7. |
| Containers Intact: | ☑Yes | ☐No | ☐N/A | 8. |
| Sample Labels match COC: | ☑Yes | ☐No | ☐N/A | 9. |
| -Includes date/time/ID/Analysis | | | | |
| All containers needing acid/base pres. have been checked? | ☑Yes | ☐No | ☐N/A | 10 (Circle) (HNO3) (H2SO4) NaOH NaOH/ZnAc |
| exceptions: VOA, coliform, TOC, O&G | | | | |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | | | |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | | | 11. Present Absent |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | | | 12. Present Absent |
| Headspace in VOA Vials ( >6mm): | ☑Yes | ☐No | ☐N/A | 13 106-SD (1/3), 105-SS (1/3), 202-SS (1/3) FB 104SS (1/3) |
| Headspace Wisconsin Sulfide | ☐Yes | ☐No | | 14 |
| Trip Blank Present: | ☑Yes | ☐No | ☐N/A | 15 |
| Trip Blank Custody Seals Present | ☑Yes | ☐No | ☐N/A | |
| **Project Manager Review** | | | | |
| Samples Arrived within Hold Time: | ☑Yes | ☐No | ☐N/A | 15. |
| Sufficient Volume: | ☑Yes | ☐No | ☐N/A | 16. |
| Correct Containers Used: | ☑Yes | ☐No | ☐N/A | 17. |

Field Data Required? Y / N

**Client Notification/ Resolution:**

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

**Project Manager Review:** CAB  **Date:** 8-25-16

Form F-IN-Q-290-rev.09, 13Oct2015

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Bridgeton L.F. Project # 50152744

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: Master #810425711275

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

Date/Time 5035A kits placed in freezer:

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer 1 2 3 4 5 6 (A) B C D E F Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 1.1°C/1.1°C, 0.3°C/0.3° Ice Visible in Sample Containers: ☐ yes ☒ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KAA 8-29-16

| | | Comments: |
|---|---|---|
| Chain of Custody Present: | ☒Yes ☐No ☐N/A | 1. |
| Chain of Custody Filled Out: | ☒Yes ☐No ☐N/A | 2. |
| Chain of Custody Relinquished: | ☒Yes ☐No ☐N/A | 3. |
| Sampler Name & Signature on COC: | ☒Yes ☐No ☐N/A | 4. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes ☒No ☐N/A | 5. |
| **Rush Turn Around Time Requested:** | ☐Yes ☒No ☐N/A | 6. |
| Containers Intact: | ☒Yes ☐No ☐N/A | 7. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☒Yes ☐No ☐N/A | 8. |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G | ☒Yes ☐No ☐N/A | 9. (Circle) HNO3 H2SO4 NaOH HCl |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | D-87 #3-4, PZ-304-AS #6-7 |
| Headspace in VOA Vials ( >6mm): | ☒Yes ☐No ☐N/A | 10. 2 vials for D-87; 1 vial ea. for (see below) |
| Trip Blank Present: | ☒Yes ☐No ☐N/A | 11. |
| Trip Blank Custody Seals Present | ☒Yes ☐No ☐N/A | |
| **Project Manager Review** | | |
| Samples Arrived within Hold Time: | ☒Yes ☐No ☐N/A | 12. |
| Sufficient Volume: | ☒Yes ☐No ☐N/A | 13. |
| Correct Containers Used: | ☒Yes ☐No ☐N/A | 14. |

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

Person Contacted: Date/Time:

Comments/ Resolution: (10) PZ-207-AS, PZ-304-AS, PZ-304-AI, T.B.

**Project Manager Review:** CMA **Date:** 9-29-16

Form F-IN-Q-290-rev.06, 05Aug2014

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Bridgeton L.F. Project # 50152744

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 6907 5118 4456

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

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer 1 2 3 4 5 6 A B C D E F Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature (Initial/Corrected) 0.0°c / 0.0°c Ice Visible in Sample Containers: ☐ yes ☒ no

Temp should be above freezing to 6°C

Date and initials of person examining contents: KOO 8-31-16

| | | Comments: |
|---|---|---|
| **Are samples from West Virginia?** Document any containers out of temp. | ☐Yes ☒No | 1. |
| Chain of Custody Present: | ☒Yes ☐No ☐N/A | 2. |
| Chain of Custody Filled Out: | ☒Yes ☐No ☐N/A | 3. |
| Chain of Custody Relinquished: | ☒Yes ☐No ☐N/A | 4. |
| Sampler Name & Signature on COC: | ☒Yes ☐No ☐N/A | 5. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes ☒No ☐N/A | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes ☒No ☐N/A | 7. |
| Containers Intact: | ☒Yes ☐No ☐N/A | 8. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☒Yes ☐No ☐N/A | 9. |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | ☒Yes ☐No ☐N/A | 10 (Circle) HNO3 H2SO4 NaOH NaOH/ZnAc |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | 11. Present Absent |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | 12. Present Absent |
| Headspace in VOA Vials ( >6mm): | ☒Yes ☐No ☐N/A | 13 2 vials ea. for PZ-113-AD + PZ-103-SS (see below) |
| Headspace Wisconsin Sulfide | ☐Yes ☐No | 14 |
| Trip Blank Present: | ☒Yes ☐No ☐N/A | 15 |
| Trip Blank Custody Seals Present | ☒Yes ☐No ☐N/A | |
| **Project Manager Review:** | | |
| Samples Arrived within Hold Time: | ☒Yes ☐No ☐N/A | 15. |
| Sufficient Volume: | ☒Yes ☐No ☐N/A | 16. |
| Correct Containers Used: | ☒Yes ☐No ☐N/A | 17. |

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

Person Contacted: Date/Time:

Comments/ Resolution: 13 1 vial ea. for PZ-206-SS, PZ-107-SS, + T.B.

**Project Manager Review:** CBB **Date:** 8-31-16

Form F-IN-Q-290-rev.09, 13Oct2015

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Republic Mo  Project # 50152744

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

Tracking #: 6807 5118 4353

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

Date/Time 5035A kits placed in freezer:

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

Thermometer 1 2 3 4 5 6 ~~A~~ B C D E F  Type of Ice: ~~Wet~~ Blue None  ☐ Samples on ice, cooling process has begun

Cooler Temperature (Initial/Corrected) 0.2 0.4 / 0.2 0.4  Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 9/2/16

| | | | | Comments |
|---|---|---|---|---|
| **Are samples from West Virginia?** Document any containers out of temp. | ☐Yes | ☑No | | 1. |
| Chain of Custody Present: | ☑Yes | ☐No | ☐N/A | 2. |
| Chain of Custody Filled Out: | ☑Yes | ☐No | ☐N/A | 3. |
| Chain of Custody Relinquished: | ☑Yes | ☐No | ☐N/A | 4. |
| Sampler Name & Signature on COC: | ☑Yes | ☐No | ☐N/A | 5. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes | ☑No | ☐N/A | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes | ☑No | ☐N/A | 7. |
| Containers Intact: | ☑Yes | ☐No | ☐N/A | 8. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☑Yes | ☐No | ☐N/A | 9. |
| All containers needing acid/base pres. have been checked? xceptions: VOA, coliform, TOC, O&G | ☑Yes | ☐No | ☐N/A | 10 (Circle) ~~HNO3~~ ~~H2SO4~~ NaOH NaOH/ZnAc |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | | | S-S BP3S pH 7<br>LCS LB BP3N BP3S pH 7 |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | | | 11. Present Absent |
| ~~Residual Chlorine Check (Total/Amenable/Free Cyanide)~~ | | | | ~~12. Present Absent~~ |
| Headspace in VOA Vials ( >6mm): | ☑Yes | ☐No | ☐N/A | 13 SS - 1/3, Z4 1/3, Z 73 1/3, MW 1204 3/3 LCS LB |
| Headspace Wisconsin Sulfide | ☐Yes | ☐No | | 14 TB - 1/3 |
| Trip Blank Present: | ☑Yes | ☐No | ☐N/A | 15 |
| Trip Blank Custody Seals Present | ☐Yes | ☐No | ☐N/A | |
| **Project Manager Review:** | | | | |
| Samples Arrived within Hold Time: | ☑Yes | ☐No | ☐N/A | 15. |
| Sufficient Volume: | ☑Yes | ☐No | ☐N/A | 16. |
| Correct Containers Used: | ☑Yes | ☐No | ☐N/A | 17. |

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

Person Contacted: _____  Date/Time: _____

Comments/ Resolution:

**Project Manager Review:** CLB  **Date:** 9-2-16

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# Sample Condition Upon Receipt

Pace Analytical

Client Name: Bridgeton  Project # 50152744

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 6907 5118 4386

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

Date/Time 5035A kits placed in freezer: _____

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F  Type of Ice: (Wet) Blue None  ☐ Samples on ice, cooling process has begun

Cooler Temperature (Initial/Corrected): 0.0/0.0  0.6/0.6  Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: H.S. 9-8-16

| | | | | |
|---|---|---|---|---|
| **Are samples from West Virginia?** | ☐Yes | ☑No | | 1. |
| Document any containers out of temp. | | | | |
| Chain of Custody Present: | ☑Yes | ☐No | ☐N/A | 2. |
| Chain of Custody Filled Out: | ☑Yes | ☐No | ☐N/A | 3. |
| Chain of Custody Relinquished: | ☑Yes | ☐No | ☐N/A | 4. |
| Sampler Name & Signature on COC: | ☑Yes | ☐No | ☐N/A | 5. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes | ☑No | ☐N/A | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes | ☑No | ☐N/A | 7. |
| Containers Intact: | ☑Yes | ☐No | ☐N/A | 8. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☑Yes | ☐No | ☐N/A | 9. |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G | ☐Yes | ☐No | ☑N/A | 10 (Circle) HNO3 H2SO4 NaOH NaOH/ZnAc |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | | | |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | | | 11. Present Absent |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | | | 12. Present Absent |
| Headspace in VOA Vials ( >6mm): | ☑Yes | ☐No | ☐N/A | 13 FB0P2 - (3-vials) Trip Blank (2-vials) |
| Headspace Wisconsin Sulfide | ☐Yes | ☐No | | 14 |
| Trip Blank Present: | ☑Yes | ☐No | ☐N/A | 15 |
| Trip Blank Custody Seals Present | ☑Yes | ☐No | ☐N/A | |
| **Project Manager Review:** | | | | |
| Samples Arrived within Hold Time: | ☑Yes | ☐No | ☐N/A | 15. |
| Sufficient Volume: | ☑Yes | ☐No | ☐N/A | 16. |
| Correct Containers Used: | ☑Yes | ☐No | ☐N/A | 17. |

Field Data Required? Y / N

**Client Notification/ Resolution:**

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

**Project Manager Review:** _____ **Date:** 9-8-16

JLK 9-8-16

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## Sample Condition Upon Receipt

Pace Analytical

Client Name: Bridgeton  Project # 50152744

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 690751184375

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

Date/Time 5035A kits placed in freezer: _____

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer 123456 ABCDEF  Type of Ice: (Wet) Blue None  ☐ Samples on ice, cooling process has begun

Cooler Temperature (Initial/Corrected) 0.0/0.0 0.6/0.6  Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: H-S 9-8-16

| | | Comments: |
|---|---|---|
| **Are samples from West Virginia?** Document any containers out of temp. | ☐Yes ☑No | 1. |
| Chain of Custody Present: | ☑Yes ☐No ☐N/A | 2. |
| Chain of Custody Filled Out: | ☑Yes ☐No ☐N/A | 3. |
| Chain of Custody Relinquished: | ☑Yes ☐No ☐N/A | 4. |
| Sampler Name & Signature on COC: | ☑Yes ☐No ☐N/A | 5. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes ☑No ☐N/A | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes ☑No ☐N/A | 7. |
| Containers Intact: | ☑Yes ☐No ☐N/A | 8. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☑Yes ☐No ☐N/A | 9. |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G | ☑Yes ☐No ☐N/A | 10 (Circle) HNO3 H2SO4 NaOH NaOH/ZnAc |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | 11. Present Absent |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | 12. Present Absent |
| Headspace in VOA Vials ( >6mm): | ☑Yes ☐No ☐N/A | 13 |
| Headspace Wisconsin Sulfide | ☐Yes ☐No | 14 |
| Trip Blank Present: | ☑Yes ☐No ☐N/A | 15 |
| Trip Blank Custody Seals Present | ☑Yes ☐No ☐N/A | |
| **Project Manager Review** | | |
| Samples Arrived within Hold Time: | ☑Yes ☐No ☐N/A | 15. |
| Sufficient Volume: | ☑Yes ☐No ☐N/A | 16. |
| Correct Containers Used: | ☑Yes ☐No ☐N/A | 17. |

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Headspace in Vials: S-84 (2-vials) D-85 (1-vial) PZ-303 (1-vial) PZ-100 SD (1-vial)

**Project Manager Review:** CBB  **Date:** 9-8-16

JLK 9-8-16

Form F-IN-Q-290-rev.09, 13Oct2015

# Sample Container Count

CLIENT: Bridgeton LF

COC PAGE 1 of 2

COC ID# 20160711

Project # 50152744

| Sample Line Item | DG9H | VG9H | AG1U | WGFU | AG0U | R | 4 / 6 Bulk Kit | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | Matrix SI/Wt/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | | 1 | | 1 | | 1 | 1 | | | | | | WT | ✓ | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | ✓ | | | | | | | | ✓ | | ✓ | | ✓ | ✓ | | | | | | ✓ | ✓ | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved amber vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved clear vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

## Sample Container Count

CLIENT: Bridgeton LF

COC PAGE 2 of 2

COC ID# _____

Project # 50152744

| Sample Line Item | DG9H / VG9H | Bulk Kit | AG1U | WGFU | AG0U | R | 4 / 6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | | | | Matrix SI/WW/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | | 1 | | 1 | | 1 | 1 | | | | | | | | | WT | ✓ | | |
| 2 | 3 | | | | | | | | | | | | | | | | | | | | | | WT | ✓ | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved amber vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved clear vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

# Sample Container Count

CLIENT: Bridgeton L.F.

COC PAGE 1 of 1

COC ID# 2096073

Project # 50,52744

Bulk Kit

| Sample Line Item | DG9H VG9H | AG1U | WGFU | AG0U | R 4/6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | DG9U | Matrix SI/Wt/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | 1 | | 1 | | 1 | 1 | | | | | | | W | ✓ | | |
| 2 | | | | | | | | | | | | | | | | | | | | 3 ✓ | | |
| 3 | | | | | | | | | | | | | | | | | | | | ✓ | | |
| 4 | | | | | | | | | | | | | | | | | | | | ✓ | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | 3 | | | 6-7 ✓ | | |
| 7 | 3 | | | | | | | | | | | | | | | | | | KP 8-27-16 | ✓ | | |
| 8 | | | | | | | | | | | | | | | | | | | | ✓ | | |
| 9 | | | | | | | | | | | | | | | | | | | | ✓ | | |
| 10 | | | | | | | | | | | | | | | | | | | | ✓ | | |
| 11 | | | | | | | | | | | | | | | | | | | | ✓ | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved **amber** vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved **clear** vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

## Sampl ontainer Count

CLIENT: Bridgeton L.F.

COC PAGE 1 of 1

COC ID# 2095995

Project # 50152744

| Sample Line Item | DG9H | VG9H | Bulk Kit | AG1U | WGFU | AG0U | R | 4 / 6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | Matrix S/W/Wt/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved amber vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved clear vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

# Sample Container Count

CLIENT: Rep. mo

COC PAGE 1 of 2

COC ID# 2095996

Project # 50.52744

| Sample Line Item | DG9H / VG9H | AG1U | WGFU | AG0U | R | 4 / 6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | Matrix SI/Wt/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | 1 | | 1 | | 1 | 1 | | | | | | S | ✓ | | |
| 2 | | | | | | | | | | | | | | | | | | | | 4 | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | 4 | | |
| 12 | | | | | | | | | | | | | | | | | | | | 7 | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved **amber** vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved **clear** vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

# Sample Container Count

CLIENT: Rgr, MC

COC PAGE 2 of 2

COC ID# 2098997

Project # 50152744

| Sample Line Item | VG9H | AG1U | WGFU | AG0U | R 4 / 6 Bulk Kit | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | | | | Matrix SI/Wt/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 3 | | | | | | | | | | | | | | | | | | | | WT | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved amber vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved clear vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |



F-IN-Q-270-rev.06,11May2015

# Sample Container Count

CLIENT: Bridgeton

COC PAGE 1 of 1
COC ID# 2095999

Project # 50152744

| Sample Line Item | DG9H VG9H | Bulk Kit | AG1U | WGFU | AG0U | R | 4/6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | Matrix SI/Wt/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | | 1 | | | | | | | | | | | WT | | | |
| 2 | ↓ | | | | | | | | 1 | | | | | | | | | | | ↓ | | | |
| 3 | | | | | | | | | | | | | Trip Blank | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved **amber** vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved **clear** vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

# Sample Container Count

CLIENT: Bridgeton

COC PAGE 1 of 1

COC ID# 2095998

Project # J0152744

| Sample Line Item | DG9H | VG9H | AG1U | WGFU | AG0U | R | 4 / 6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | Matrix Sl/WW/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH>12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | | 1 | | 1 | | 1 | 1 | | | | | | WT | ✓ | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | |
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| 10 | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved amber vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfate |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved clear vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: D-3
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 467.92

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Date/Time Initiated: 8/31/2016 1115
Initial Water Level (feet): 35.30
Initial Water Level Previous Event (feet): 37.82 Oct 2013
Ground Water Elevation (ft. msl): 432.62
Ground Water Elevation Previous Event (ft. msl): 430.10
Well Total Depth (feet): 107.70
Well Total Depth Previous Event (feet): 107.86 Oct 2013

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 7,550 mL
Purged Dry?: Yes No ✓
Water Level after Purge (feet): N/A
Date/Time Completed: 8/31/2016 1135

LHH 11

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 378 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,000 mL prior to first reading | | | | | | | | |
| 1123 | 3000 | 19.8 | 7.00 | 4350 | >1100 | 0.10 | 130 | Gray w/ black particles |
| 1127 | 4400 | 20.3 | 6.96 | 4340 | 339.6 | 0.18 | NR | Gray w/ black particles |
| 1131 | 5750 | 20.5 | 6.96 | 4250 | 29.23 | 1.51 | -67 | Gray w/ black particles |
| 1135 | 7550 | 20.1 | 6.99 | 4180 | 109.2 | 2.50 | 106 | Clear w/ black particles |
| | | | | | | | | Clear (2) |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-3

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 35.35

Well Collection Sequence #: 34 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other ✓

MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/31/2016 1139 | VOC: 378 Other: 378 | 20.1 | 6.99 | 4180 | 109.2 | 2.50 | 106 | Clear w/ black particles |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/31/2016 0700

End of day: (Date/time) 8/31/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111005I

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200258

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.43 | NTU std 0.02 |
| 9.83 | N/A | NTU std = 10.0 | N/A | 11.45 | NTU std 10.0 |
| 996.9 | N/A | NTU std = 1.000 | N/A | 1001 | NTU std 1.000 |
| 1421 | N/A | µS std = 1.413 | N/A | 1381 | µS std = 1.413 |
| Cell Const 0.482 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.482 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @21.3 °C | N/A | 6.91 | pH std = 7.02 @20.2 °C |
| 4.16 | N/A | pH std = 4.00 @21.4 °C | N/A | 4.23 | pH std = 4.00 @20.8 °C |
| Slope 0.86 @ Temp 20.6°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.69 @ Temp 21.4°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 224 | N/A | ORP std = 222 @21.3 °C | N/A | 222 | ORP std = 223 @20.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 80°F

Sample Characteristics: Clear w/ black particles

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) N Full Suite Collected?: (Y) / N # Bottles Collected: 8 - 1 Eberline 7 Pace

MDNR collected split - MO App I & trip

Date: 8/31/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: D-81
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl): 450.87

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/24/2016 1038
Casing Diameter (inches): 2
Initial Water Level (feet): 18.40
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 20.46 Oct 2013
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft, msl): 432.47
Total Volume Purged (mL): 5,400 mL
Ground Water Elevation Previous Event (ft, msl): 430.41
Purged Dry? Yes No ✓
Well Total Depth (feet): 62.55
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 62.69 Oct 2013
Date/Time Completed: 8/24/2016 1056

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 300 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,000 mL prior to first reading | | | | | | | | |
| 1044 | 2,000 | 17.6 | 6.66 | 1308 | 139.0 | 2.95 | 105 | Clear |
| 1048 | 3150 | 18.2 | 6.59 | 1352 | 96.85 | 2.71 | 169 | Clear |
| 1052 | 4300 | 18.0 | 6.59 | 1366 | 54.62 | 2.30 | 206 | Clear |
| 1056 | 5400 | 17.9 | 6.59 | 1371 | 37.19 | 2.05 | 230 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: D-81

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 18.35

Well Collection Sequence # 20 of 52

Parameters Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/26/2016 1058 | VOC 300 / Other 300 | 17.9 | 6.59 | 1871 | 37.19 | 2.05 | 230 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/26/2016 0700

End of day: (Date/time) 8/26/2016 1515

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #0820025

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.02 | NTU std 0.02 |
| 10.03 | N/A | NTU std = 10.0 | N/A | 11.09 | NTU std 10.0 |
| 996.3 | N/A | NTU std = 1,000 | N/A | 1038 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1397 | µS std = 1,413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.4 °C | N/A | 7.00 | pH std = 7.01 @ 23.3 °C |
| 4.16 | N/A | pH std = 4.01 @ 23.3 °C | N/A | 4.17 | pH std = 4.01 @ 23.4 °C |
| Slope 0.86 @ Temp 22.9°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 1.06 @ Temp 26.1°C | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| 214 | N/A | ORP std = 221 @ 23.2 °C | N/A | 214 | ORP std = 221 @ 23.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION

Weather Conditions @ Sampling: Overcast, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS

Well Closed and Locked?: (Y) N Full Suite Collected?: (Y) N # Bottles Collected: 8 ~ 7 Pace 1 Eberline

MDNR collects split - MO App I & tritium

Date 8/26/2016 By [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill | Sample Point ID: D-83

Location: Bridgeton, Missouri | Sampler(s): Michael Spurgeon

Sample Matrix: Groundwater | Jonathan Wilkinson

Top of Casing (ft, msl): 457.06

PURGE INFORMATION

Method of Well Purge: Waterra Pump | Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 9/6/2016 0850 | Casing Diameter (inches): 2

Initial Water Level (feet): 24.55 | One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 23.09 Jun 2016 | One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 432.51 | Total Volume Purged (mL): 9,600 mL

Ground Water Elevation Previous Event (ft, msl): 433.97 | Purged Dry? Yes No ✓

Well Total Depth (feet): 77.19 | Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 77.20 Jun 2016 | Date/Time Completed: 9/6/2016 0925

PURGE DATA: Discharge: N/A sec | Refill: N/A sec | Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 356 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,500 mL prior to first reading | | | | | | | | |
| 0909 | 2,500 | 19.7 | 6.89 | 2490 | >1100 | 1.75 | -112 | Cloudy, gray, fine sand |
| 0913 | 4,500 | 18.9 | 6.88 | 2700 | 149.9 | 3.07 | -97 | Cloudy, gray, fine sand |
| 0917 | 6,200 | 18.8 | 6.87 | 2410 | 151.1 | 2.60 | -99 | Cloudy w/ fine sand |
| 0921 | 7,850 | 19.2 | 6.87 | 2400 | 257.5 | 2.41 | -97 | Cloudy w/ fine sand |
| 0925 | 9,600 | 18.8 | 6.87 | 2390 | 389.1 | 2.22 | -100 | Cloudy w/ fine sand |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-85

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 24.61

Well Collection Sequence #: 44 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/6/2016 0927 | VOC 356 / Other 356 | 18.8 | 6.87 | 2390 | 389.1 | 2.22 | -100 | Cloudy w/ fine sand |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 9/6/2016 0715

End of day (Date/time): 9/6/2016 1425

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.10 | NTU std 0.02 |
| 9.95 | N/A | NTU std = 10.0 | N/A | 10.15 | NTU std 10.0 |
| 997.5 | N/A | NTU std = 1.000 | N/A | 969.7 | NTU std 1.000 |
| 1413 | N/A | µS std = 1.413 | N/A | 1374 | µS std = 1.413 |
| Cell Const 0.492 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.492 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 24.3 °C | N/A | 6.98 | pH std = 7.00 @ 25.3 °C |
| 4.11 | N/A | pH std = 4.01 @ 24.1 °C | N/A | 4.29 | pH std = 4.01 @ 25.4 °C |
| Slope: 1.03 @ Temp 24.4°C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 1.08 @ Temp 28.8°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 227 | N/A | ORP std = 220 @ 24.5 °C | N/A | 232 | ORP std = 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 80°F

Sample Characteristics: Cloudy w/ fine sand

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) / N Full Suite Collected?: (Y) / N # Bottles Collected: 8 - 7 Pace, 1 Eberline

Collect D-85 DUP @ 0927 (8 bottles); MDNR collects split sample + duplicate split sample - split consists of MO App I & tritium; dup split consist of MO App I

Date: 9/6/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: D-87
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 464.41

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/25/2016 0944
Casing Diameter (inches): 2
Initial Water Level (feet): 31.74
One Borehole Volume (gal): Not Applicable
LHF 11/11
Initial Water Level Previous Event (feet): 34.17 Oct 2013
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 432.67
Total Volume Purged (mL): 8,750 mL
Ground Water Elevation Previous Event (ft. msl): 430.24
Purged Dry? Yes No ✓
Well Total Depth (feet): 114.61
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 112.75 Oct 2013
Date/Time Completed: 8/25/2016 1015

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 282 mL / min Difficult to maintain consistent purge rate

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3500 mL prior to first reading | | | | | | | | |
| 1003 | 3,500 | 18.6 | 7.02 | 3960 | >1,100 | 2.49 | 118 | Dk. gray |
| 1007 | 4,850 | 18.4 | 7.01 | 3880 | 31.66 | 2.38 | -14 | Dk gray |
| 1011 | 6,500 | 18.7 | 7.05 | 3690 | 84.01 | 2.60 | -6 | Dk gray |
| 1015 | 8,750 | 18.5 | 6.99 | 3650 | 60.98 | 2.54 | -161 | Dk gray |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: D-87

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 31.75

Well Collection Sequence #: 13 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/25/2016 1019 | QC 282 / Other 282 | 18.5 | 6.99 | 3650 | 60.78 | 2.59 | -161 | Dark gray |

INSTRUMENT CALIBRATION DATA

Start of day (Date/Time): 8/25/2016 0635

End of day (Date/time): 8/25/2016 1510

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.20 | NTU std 0.02 |
| 10.12 | N/A | NTU std = 10.0 | N/A | 10.26 | NTU std 10.0 |
| 996.7 | N/A | NTU std = 1.000 | N/A | 1003 | NTU std 1.000 |
| 1414 | N/A | µS std = 1.413 | N/A | 1394 | µS std = 1.413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @23.9 °C | N/A | 6.99 | pH std = 7.00 @24.6 °C |
| 4.16 | N/A | pH std = 4.01 @24.6 °C | N/A | 4.16 | pH std = 4.01 @24.5 °C |
| Slope 0.86 | Slope N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope N/A | Slope 1.19 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| @ Temp 23.8 °C | @ Temp N/A | | @ Temp N/A | @ Temp 27.3 °C | |
| 211 | N/A | ORP std = 220 @24.5 °C | N/A | 211 | ORP std = 220 @24.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION

Weather Conditions @ Sampling: Sunny, 85F

Sample Characteristics: Dk. gray

COMMENTS AND OBSERVATIONS

Well Closed and Locked?: (Y) N Full Suite Collected?: (Y) N # Bottles Collected: 5 - 1 Eberline, 7 Pace

* 2 VOAs w/ bubble - not able to form meniscus on bottles.

MDNR collects split - MoApp I & tritium

Date: 9/25/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: I-4
Sampler(s): Michael Spurgeon
Jonathan Wilkinson (JL)

Top of Casing (ft. msl): ~~466.18~~ 465.32
PVC cut to allow steel riser to open

PURGE INFORMATION:

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/31/2016 1023
Casing Diameter (inches): 2
Initial Water Level (feet): 32.67
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 35.71 Oct 2013
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 432.65
Total Volume Purged (mL): 5,950 mL
Ground Water Elevation Previous Event (ft. msl): 430.47
Purged Dry? Yes No ✓
Well Total Depth (feet): 35.95 (Double checked*)
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 78.37 Oct 2013
Date/Time Completed: 8/31/2016 1046

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

* Apparent pinch in the casing
Average Purge Rate: _____ mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,000 mL prior to first reading based on previous TD | | | | | | | | |
| 1030 | 2,000 | 20.0 | 6.98 | 2620 | 57.32 | 1.23 | 128 | Lt. gray |
| 1034 | 3,050 | 19.9 | 6.92 | 2830 | 40.73 | 1.04 | 143 | cloudy |
| 1038 | 4,150 | 20.2 | 6.90 | 3020 | 33.87 | 0.86 | 156 | Clear |
| 1042 | 5,100 | 20.3 | 6.89 | 3010 | 24.17 | 0.79 | 162 | Clear |
| 1046 | ~~5,950~~ | 20.2 | 6.88 | 3140 | 21.40 | 0.71 | 170 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: I-4

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 32.65

Well Collection Sequence #: 33 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/31/2016 1050 | VOC 259 / Other 259 | 20.2 | 6.88 | 3140 | 21.40 | 0.71 | 170 | Clea |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 8/31/2016 0700

End of day (Date/time): 8/31/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.43 | NTU std 0.02 |
| 9.83 | N/A | NTU std = 10.0 | N/A | 11.45 | NTU std 10.0 |
| 996.9 | N/A | NTU std = 1,000 | N/A | 1001 | NTU std 1,000 |
| 1421 | N/A | µS std = 1,413 | N/A | 1381 | µS std = 1,413 |
| Cell Const 0.482 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.482 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 21.3 °C | N/A | 6.91 | pH std = 7.02 @ 20.2 °C |
| 4.16 | N/A | pH std = 4.00 @ 21.4 °C | N/A | 4.23 | pH std = 4.00 @ 20.8 °C |
| Slope 0.86 @ Temp 20.6°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.69 @ Temp 21.4°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 224 | N/A | ORP std = 222 @ 21.3 °C | N/A | 222 | ORP std = 223 @ 20.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 75°F

Sample Characteristics: Clea

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collected split - MO App I & tritium

Date: 8/31/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: I-68
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft. msl): 450.39

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 9/1/2016 1102
Casing Diameter (inches): 2
Initial Water Level (feet): 17.60
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 16.48 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 432.79
Total Volume Purged (mL): 6,000 mL
Ground Water Elevation Previous Event (ft. msl): 433.91
Purged Dry? Yes No ✓
Well Total Depth (feet): 40.45
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 40.47 Jun 2016
Date/Time Completed: 9/1/2016 1121

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

* Average Purge Rate: 316 mL / min * have to keep flow rate up to stabilize temp

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,000 mL prior to first reading | | | | | | | | |
| 1105 | 1000 | 18.9 | 6.85 | 1685 | 29.23 | 1.57 | 86 | Clear |
| 1109 | 2150 | 20.5 | 6.89 | 1646 | 182.5 | 1.49 | 89 | Clear |
| 1113 | 3100 | 19.3 | 6.88 | 1625 | 120.0 | 1.01 | 166 | Clear |
| 1117 | 4650 | 18.8 | 6.88 | 1623 | 95.77 | 0.64 | 248 | Clear |
| 1121 | 6000 | 19.0 | 6.88 | 1621 | 70.90 | 0.44 | 286 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: I-68

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft):

Well Collection Sequence #: 38 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/2016 1123 | VOC 316 / Other 316 | 19.0 | 6.88 | 1621 | 70.90 | 0.44 | 286 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 9/1/2016 0645

End of day (Date/time): 9/1/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201699

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.23 | NTU std 0.02 |
| 9.88 | N/A | NTU std = 10.0 | N/A | 11.20 | NTU std 10.0 |
| 998.3 | N/A | NTU std = 1,000 | N/A | 1023 | NTU std 1,000 |
| 1426 | N/A | µS std = 1,413 | N/A | 1368 | µS std = 1,413 |
| Cell Const 0.483 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.475 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 18.8 °C | N/A | 6.90 | pH std = 7.02 @ 19.8 °C |
| 4.17 | N/A | pH std = 4.00 @ 19.6 °C | N/A | 4.90 | pH std = 4.00 @ 20.5 °C |
| Slope 0.67 @ Temp 18.6°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.61 @ Temp 20.8°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 237 | N/A | ORP std = 224 @ 19.3 °C | N/A | 227 | ORP std = 223 @ 19.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) N Full Suite Collected?: (Y) / N # Bottles Collected: 8 - 7 Pace 1 Eberline

MDNR collected split - Mo App I & trizn

Date: 9/1/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: I-73
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft. msl): 461.96

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/31/2016 1317
Casing Diameter (inches): 2
Initial Water Level (feet): 29.35
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 28.69 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 432.61
Total Volume Purged (mL): 5,350 mL
Ground Water Elevation Previous Event (ft. msl): 433.27
Purged Dry? Yes No ✓
Well Total Depth (feet): 50.75
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 50.75 Jun 2016
Date/Time Completed: 8/31/2016 1332

HH

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 357 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,000 mL prior to first reading | | | | | | | | |
| | Purge via disposable polyethylene bailer on 8/30/2016 @ 1034 | | | | | | | |
| | Original depth to water: 29.55 - after purging some - check depth to water @ 1049 ~ 39 ft. Check again @ 1100 ~ 36 ft. | | | | | | | |
| | Wait to purge + sample until next day (8/31). | | | | | | | |
| | Purging via bailer performed due to historically limited volume | | | | | | | |
| | Begin purging via Waterra @ 1317 on 8/31/2016. | | | | | | | |
| 1320 | 1000 | 20.4 | 7.13 | 3990 | 208.1 | 0.12 | 2 | gray |
| 1324 | 2350 | 20.8 | 7.08 | 4010 | 190.5 | 0.07 | 55 | dk gray |
| 1328 | 3800 | 20.8 | 7.07 | 3930 | 155.0 | 0.05 | 81 | dk gray |
| 1332 | 5350 | 20.3 | 7.08 | 3850 | 305.7 | 0.06 | 109 | dk gray |
| | | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: I-73

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 39.48

Well Collection Sequence #: 35 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/31/2016 1334 | VOC 357 / Other 357 | 20.3 | 7.08 | 3850 | 305.7 | 0.06 | 109 | Dark gray |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 8/31/2016 0700

End of day (Date/time): 8/31/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.43 | NTU std 0.02 |
| 9.83 | N/A | NTU std = 10.0 | N/A | 11.45 | NTU std 10.0 |
| 996.9 | N/A | NTU std = 1,000 | N/A | 1001 | NTU std 1,000 |
| 1421 | N/A | µS std = 1,413 | N/A | 1381 | µS std = 1,413 |
| Cell Const 0.482 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.482 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 21.3 °C | N/A | 6.91 | pH std = 7.02 @ 20.2 °C |
| 4.16 | N/A | pH std = 4.00 @ 21.4 °C | N/A | 4.23 | pH std = 4.00 @ 20.8 °C |
| Slope 0.86 @ Temp 20.6 °C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.69 @ Temp ~~4.23~~ 21.4 °C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 224 | N/A | ORP std = 222 @ 21.3 °C | N/A | 222 | ORP std = 223 @ 20.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Mostly Cloudy, 80°F

Sample Characteristics: Dark gray

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: Y / N Full Suite Collected? Y / N # Bottles Collected: 8 - 7 Pace 2 Eberlin

MDNR collected split - Mo App I + tritium

Date: 8/31/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: LR-100
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 468.14

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Date/Time Initiated: 8/30/2016 1123
Initial Water Level (feet): 15.72
Initial Water Level Previous Event (feet): 15.92 Jun 2016
Ground Water Elevation (ft. msl): 452.42
Ground Water Elevation Previous Event (ft. msl): 452.22
Well Total Depth (feet): 26.99
Well Total Depth Previous Event (feet): 27.01 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 6,400 mL
Purged Dry?: Yes No ✓
Water Level after Purge (feet): N/A
Date/Time Completed: 8/30/2016 1143

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PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 320 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,000 mL prior to first reading | | | | | | | | |
| 1127 | 1,000 | 19.4 | 6.71 | 2310 | 29.43 | 0.57 | -75 | Clear |
| 1131 | 2100 | 20.7 | 6.68 | 2320 | 20.92 | 0.52 | -79 | Clear |
| 1135 | 3400 | 19.4 | 6.69 | 2300 | 9.64 | 0.39 | 79 | Clear |
| 1139 | 5000 | 19.0 | 6.69 | 2320 | 9.71 | 0.36 | 120 | Clear |
| 1143 | 6,400 | 19.0 | 6.69 | 2310 | 9.92 | 0.34 | 153 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: LR-100

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 16.35

Well Collection Sequence #: 31 of 32

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/30/16 1145 | VOC 320 Other 320 | 19.0 | 6.69 | 2,310 | 8.82 | 0.34 | 153 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/30/2016 0700

End of day: (Date/time) 8/30/2016 1505

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.00 | N/A | NTU std = 10.0 | N/A | 10.75 | NTU std 10.0 |
| 1003 | N/A | NTU std = 1,000 | N/A | 1099 | NTU std 1,000 |
| 1415 | N/A | µS std = 1,413 | N/A | 1393 | µS std = 1,413 |
| Cell Const 0.482 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.482 | Cell Const Range: 0.45 - 0.50 |
| 7.03 | N/A | pH std = 7.00 @ 23.8 °C | N/A | 7.01 | pH std = 7.00 @ 25.4 °C |
| 4.19 | N/A | pH std = 4.01 @ 23.6 °C | N/A | 4.17 | pH std = 4.01 @ 25.2 °C |
| Slope 0.86 @ Temp 23.3 °C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.83 @ Temp 27.4 °C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 214 | N/A | ORP std = 221 @ 23.9 °C | N/A | 210 | ORP std = 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 — 7 Pace, 1 Eberline

MDNR collected split - Mo App I & tritium

Date: 8/30/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: LR-103
Sampler(s): Michael Spurgeon
Jonathan Wilkinson

Top of Casing (ft, msl): 470.54

PURGE INFORMATION:

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/25/2016 1116
Casing Diameter (inches): 2
Initial Water Level (feet): 37.85
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 37.10 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft, msl): 432.69
Total Volume Purged (mL): 5,250 mL
Ground Water Elevation Previous Event (ft, msl): 433.44
Purged Dry?: Yes No ✓
1116 Well Total Depth (feet): 49.82
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 49.82 Jun 2016
Date/Time Completed: 8/25/2016 1139

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 228 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 500 mL prior to first reading | | | | | | | | |
| 1119 | 500 | 21.4 | 6.80 | 1891 | 126.2 | 3.63 | ~~8.7~~ (3.7) | Clear |
| 1123 | 1100 | 21.4 | 6.80 | 1932 | 77.91 | 3.34 | 84 | Clear |
| 1127 | 1600 | 22.1 | 6.79 | 1935 | 41.42 | 3.82 | 131 | Clear |
| 1131 | 2300 | 19.0 | 6.80 | 1927 | 28.15 | 3.46 | 138 | Clear |
| 1135 | 3850 | 18.8 | 6.91 | 1913 | 18.54 | 2.74 | 162 | Clear |
| 1139 | 5250 | 18.8 | 6.81 | 1911 | 13.80 | ~~3.7~~ (3.27) 3.27 | 161 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: LR-103

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 37.82

Well Collection Sequence #: 14 of 52

Parameters: Annual ___ Semi-Annual: ___ Quarterly: ___ Monthly ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/25/2016 1141 | VOC 228 Other 228 | 18.8 | 6.81 | 1191 | 13.80 | 3.27 | 161 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/25/2016 0635

End of day: (Date/time) 8/25/2016 1510

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.20 | NTU std 0.02 |
| 10.12 | N/A | NTU std = 10.0 | N/A | 10.26 | NTU std 10.0 |
| 996.7 | N/A | NTU std = 1,000 | N/A | 1003 | NTU std 1,000 |
| 1414 | N/A | µS std = 1,413 | N/A | 1394 | µS std = 1,413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 23.9 °C | N/A | 6.99 | pH std = 7.00 @ 24.6 °C |
| 4.16 | N/A | pH std = 4.01 @ 24.6 °C | N/A | 4.16 | pH std = 4.01 @ 24.5 °C |
| Slope 0.86 @ Temp 23.2°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 1.19 @ Temp 27.3°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 211 | N/A | ORP std = 220 @ 24.5 °C | N/A | 211 | ORP std = 220 @ 24.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Pacs - 1 Aberline

MDNR collects split - MO App I & tritium

Date: 8/25/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: MW-104
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl): 440.91

PURGE INFORMATION:

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/26/2016 0954
Casing Diameter (inches): 2
Initial Water Level (feet): 8.50
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 7.78 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft, msl): 432.41
Total Volume Purged (mL): 4,100 mL
Ground Water Elevation Previous Event (ft, msl): 433.13
Purged Dry? Yes No ✓
Well Total Depth (feet): 19.15
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 19.12 Jun 2016
Date/Time Completed: 8/26/2016 1007

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance. Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 315 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 315 mL prior to first reading | | | | | | | | |
| 0955 | 500 | 19.0 | 6.83 | 1899 | 682.9 | 1.57 | -46 | Gray |
| 0959 | 1600 | 18.9 | 6.79 | 1900 | 488.5 | 1.41 | 31 | Gray |
| 1003 | 3000 | 18.8 | 6.79 | 1895 | 315.1 | 1.03 | 70 | Gray |
| 1007 | 4100 | 19.3 | 6.78 | 1896 | 249.3 | 1.02 | 107 | Gray |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: MW-104

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No:

Water Level After Sampling (ft): 9.02

Well Collection Sequence #: 19 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/26/2016 1009 | VOC 315 | 19.3 | 6.78 | 1096 | 249.3 | 1.02 | 107 | Gray |
| | Other 315 | | | | | | | |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/26/2016 0700

End of day: (Date/time) 8/26/2016 1515

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111100S1

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200258

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.02 | NTU std = 0.02 |
| 10.03 | N/A | NTU std = 10.0 | N/A | 11.09 | NTU std = 10.0 |
| 996.3 | N/A | NTU std = 1,000 | N/A | 1038 | NTU std = 1,000 |
| 1417 | N/A | µS std = 1.413 | N/A | 1397 | µS std = 1.413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.491 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.4 °C | N/A | 7.00 | pH std = 7.01 @ 26.3 °C |
| 4.16 | N/A | pH std = 4.01 @ 23.3 °C | N/A | 4.17 | pH std = 4.01 @ 23.4 °C |
| Slope 0.86 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 1.06 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 22.9 °C | @ Temp N/A | | @ Temp N/A | @ Temp 26.1 °C | |
| 214 | N/A | ORP std = 221 @ 23.2 °C | N/A | 214 | ORP std = 221 @ 23.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Mostly Cloudy, 85°F

Sample Characteristics: Gray

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) N # Bottles Collected 8 - 7 Pace - 1 Eberline

MDNR collects split - MO App I & tritium

Date: 8/26/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: MW-1204
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl): 478.04

PURGE INFORMATION:

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 9/1/16 0811
Casing Diameter (inches): 2
Initial Water Level (feet): 7.55
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 5.59 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft, msl): 470.49
Total Volume Purged (mL): 16,500 mL
Ground Water Elevation Previous Event (ft, msl): 472.45
Purged Dry? Yes No ✓
Well Total Depth (feet): 215.19
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 215.00 Jun 2016
Date/Time Completed: 9/1/2016 0855

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 375 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 8,500 mL prior to first reading | | | | | | | | |
| 0835 | 8,500 | 26.2 | 6.65 | 7360 | >1100 | 0.50 | -157 | dk gray |
| 0839 | 9,350 | 26.1 | 6.61 | 5480 | >1100 | 0.49 | -148 | dk gray |
| 0843 | 10,950 | 26.4 | 6.57 | 3540 | 62.76 | 0.48 | -131 | dk gray |
| 0847 | 12,850 | 26.2 | 6.58 | 3140 | 46.81 | 0.49 | -126 | lt. gray to clear w/ particles |
| 0851 | 14,900 | 26.0 | 6.57 | 3230 | 40.93 | 0.49 | -125 | Clear w/ particles |
| 0855 | 16,500 | 26.1 | 6.57 | 3200 | 61.56 | 0.49 | -128 | Clear w/ particles |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: MW-1204

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 14.70

Well Collection Sequence #: 36 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/2016 0857 | VOC 375 / Other 385 | 26.1 | 6.57 | 3200 | 61.56 | 0.49 | -128 | Clear w/ particles |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 9/1/2016 0645

End of day: (Date/time) 9/1/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.23 | NTU std 0.02 |
| 9.88 | N/A | NTU std = 10.0 | N/A | 11.20 | NTU std 10.0 |
| 998.3 | N/A | NTU std = 1,000 | N/A | 1023 | NTU std 1,000 |
| 1426 | N/A | µS std = 1,413 | N/A | 1368 | µS std = 1,413 |
| Cell Const 0.483 | Cell Const N/A | Cell Const Range 0.45 - 0.50 | Cell Const N/A | Cell Const 0.475 | Cell Const Range 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 18.8 °C | N/A | 6.90 | pH std = 7.02 @ 19.8 °C |
| 4.17 | N/A | pH std = 4.00 @ 19.6 °C | N/A | 4.09 | pH std = 4.00 @ 20.5 °C |
| Slope 0.67 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 0.61 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 18.6°C | @ Temp N/A | | @ Temp N/A | @ Temp 20.8°C | |
| 237 | N/A | ORP std = 224 @ 19.3 °C | N/A | 227 | ORP std = 223 @ 19.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 70°F

Sample Characteristics: Clear with particles

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

collect MW-1204 DUP @ 0857 ; MDNR collects split - MO App I & III

Date: 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-100-SS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 485.75

PURGE INFORMATION:

Method of Well Purge: Bladder Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 9/7/2016 0921
Casing Diameter (inches): 2
Initial Water Level (feet): 30.06
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 29.36 Jun 2016
One Borehole Volume Previous Event (gal): N/A
MM
Ground Water Elevation (ft. msl): 455.69
Total Volume Purged (mL): 5,850 mL
Ground Water Elevation Previous Event (ft. msl): 456.39
Purged Dry? Yes No ✓
Well Total Depth (feet): Top of Pump = 89.13
Water Level after Purge (feet): 42.03
Well Total Depth Previous Event (feet): Top of pump = 89.09 Jun 2016
Date/Time Completed: 9/7/2016 0942

PURGE DATA Discharge: 4.5 sec Refill: 6.0 sec Pressure: 47 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 279 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,500 mL prior to first reading | | | | | | | | |
| 0930 | 2,500 | 18.2 | 7.17 | 673 | 7.45 | 0.88 | 228 | WL: 35.62; clear |
| 0934 | 3,500 | 18.2 | 7.10 | 644 | 5.09 | 1.11 | 253 | WL: 37.78; clear |
| 0938 | 4,600 | 18.2 | 7.08 | 624 | 6.44 | 1.45 | 262 | WL: 39.71; clear |
| 0942 | 5,850 | 18.1 | 7.06 | 618 | 5.04 | 1.87 | 280 | WL: 42.03; clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-100-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 42.03

Well Collection Sequence #: 50 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ✓ Monthly ___ Other: ___

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/7/2016 0944 | VOC 229 Other 229 | 18.1 | 7.06 | 618 | 5.64 | 1.87 | 280 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 9/7/2016 0720

End of day (Date/time): 9/7/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005T

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std = 0.02 |
| 9.96 | N/A | NTU std = 10.0 | N/A | 9.97 | NTU std = 10.0 |
| 991.0 | N/A | NTU std = 1,000 | N/A | 1030 | NTU std = 1,000 |
| 1411 | N/A | µS std = 1.413 | N/A | 1380 | µS std = 1.413 |
| Cell Const 0.485 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.485 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @25.2°C | N/A | 6.90 | pH std = 7.00 @25.6°C |
| 4.12 | N/A | pH std = 4.01 @24.9°C | N/A | 4.22 | pH std = 4.01 @25.8°C |
| Slope 0.98 | Slope N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope N/A | Slope 1.04 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| @ Temp 24.9°C | @ Temp N/A | | @ Temp N/A | @ Temp 31.0°C | |
| 255 | N/A | ORP std = 220 @25.2°C | N/A | 220 | ORP std = 219 @26.1°C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, Breezy, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 1,000 µS: Historical Range from May 2012 - June 2016: 835 - 620 µS.

pH Prediction Limits = 6.6 - 8.0 s.u.: Historical Range from May 2012 - June 2016: 6.83 - 7.27 s.u.

Well Closed and Locked?: (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 7

Date: 9/7/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-100-SD
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 485.72

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Date/Time Initiated: 9/7/2016 0836
Initial Water Level (feet): 32.35
Initial Water Level Previous Event (feet): 31.07 Jun 2016
Ground Water Elevation (ft. msl): 453.37
Ground Water Elevation Previous Event (ft. msl): 454.65
Well Total Depth (feet): Top of pump = 96.19
Well Total Depth Previous Event (feet): Top of pump = 96.19 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 6,100 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): 44.35
Date/Time Completed: 9/7/2016 0852

PURGE DATA Discharge: 4.5 sec Refill: 6.0 sec Pressure: 50 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 505 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,500 mL prior to first reading | | | | | | | | |
| 0844 | 2,500 | 17.9 | 7.30 | 588 | 7.57 | 1.01 | 94 | WL: 37.89; clear |
| 0849 | 3,650 | 18.1 | 7.22 | 581 | 6.38 | 0.74 | 85 | WL: 40.00; clear |
| 0852 | 4,900 | 18.0 | 7.18 | 572 | 4.21 | 0.58 | 83 | WL: 42.06; clear |
| 0856 | 6,100 | 18.1 | 7.15 | 567 | 5.95 | 0.47 | 83 | WL: 44.35; clear |
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# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-100-SD

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 44.35

Well Collection Sequence #: 49 of 52

Parameters: Annual: ___ Semi-Annual ___ Quarterly: ✓ Monthly: ___ Other: ___

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/7/2016 | VOC: 305 | | | | | | | |
| 0858 | Other: 305 | 18.1 | 7.15 | 567 | 5.95 | 0.47 | 83 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 9/7/2016 0720

End of day (Date/time): 9/7/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20110057

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200252

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.96 | N/A | NTU std = 10.0 | N/A | 9.97 | NTU std 10.0 |
| 991.0 | N/A | NTU std = 1.000 | N/A | 1030 | NTU std 1.000 |
| 1411 | N/A | µS std = 1,413 | N/A | 1380 | µS std = 1,413 |
| Cell Const 0.485 | Cell Const N/A | Cell Const Range 0.45 - 0.50 | Cell Const N/A | Cell Const 0.485 | Cell Const Range 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 25.2 °C | N/A | 6.90 | pH std = 7.00 @ 25.6 °C |
| 4.12 | N/A | pH std = 4.01 @ 24.9 °C | N/A | 4.22 | pH std = 4.01 @ 25.8 °C |
| Slope 0.99 | Slope N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope N/A | Slope 1.04 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| @ Temp 24.9°C | @ Temp N/A | | @ Temp N/A | @ Temp 31.0°C | |
| 255 | N/A | ORP std = 220 @ 25.2 °C | N/A | 220 | ORP std = 219 @ 26.1 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, Breezy, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS

Sp. Cond. Prediction Limit = 710 µS; Historical Range from May 2012 - June 2016: 606 - 826 µS.

pH Prediction Limits = 6.6 - 8.2 s.u.; Historical Range from May 2012 - June 2016: 6.95 - 7.48 s.u.

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 7

Date: 9/7/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-101-SS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl): 491.26

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/25/2016 1246
Casing Diameter (inches): 2
Initial Water Level (feet): 37.65
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 37.09 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft, msl): 453.61
Total Volume Purged (mL): 8,300 mL
HHT
Ground Water Elevation Previous Event (ft, msl): 454.17
Purged Dry? Yes No ✓
III
Well Total Depth (feet): 158.49
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 155.10 Jun 2016
Date/Time Completed: 9/25/2016 1316

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 277 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 5,000 mL prior to first reading | | | | | | | | |
| 1304 | 5,000 | 28.7 | 6.52 | 1974 | 8.78 | 4.32 | -45 | Clear |
| 1308 | 5,950 | 29.5 | 6.51 | 1970 | 9.53 | 4.69 | -46 | Clear |
| 1312 | 7,200 | 29.0 | 6.51 | 1974 | 6.23 | 5.05 | -47 | Clear |
| 1316 | 8,300 | 29.0 | 6.51 | 1975 | 9.65 | 5.23 | -40 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-101-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 65.92

Well Collection Sequence #: 15 of 52

Parameters: Annual: ___ Semi-Annual ___ Quarterly ___ Monthly ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/25/2016 1318 | VOC 277 / Other 277 | 29.0 | 6.51 | 1975 | 9.65 | 5.23 | -48 | Clear |

INSTRUMENT CALIBRATION DATA:

| | | Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|---|---|
| Start of day: (Date/Time) | 8/25/2016 0635 | 0.02 | N/A | NTU std = 0.02 | N/A | 0.02 | NTU std 0.02 |
| End of day: (Date/time) | 8/25/2016 1510 | 10.12 | N/A | NTU std = 10.0 | N/A | 10.26 | NTU std 10.0 |
| Turbidity Meter: | HF MicroTPW | 996.7 | N/A | NTU std = 1,000 | N/A | 1003 | NTU std 1,000 |
| Turb Meter S/N: | # 201110051 | 1414 | N/A | µS std = 1,413 | N/A | 1394 | µS std = 1,413 |
| pH / Sp. Cond. Meter: | WTW pH/Cond 3400i | Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| | | 7.00 | N/A | pH std 7.00 @ 23.9 °C | N/A | 6.99 | pH std = 7.00 @ 24.6 °C |
| pH / Sp. Cond. Meter S/N | # 08200256 | 4.16 | N/A | pH std = 4.01 @ 24.6 °C | N/A | 4.16 | pH std = 4.01 @ 24.5 °C |
| ORP / Diss $O_2$ Meter: | WTW pH/Oxi 3400i | Slope: 0.86 @ Temp 23.2 °C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 1.19 @ Temp 27.3 °C | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| ORP / Diss $O_2$ Meter S/N: | # 10201689 | 211 | N/A | ORP std = 220 @ 24.5 °C | N/A | 211 | ORP std = 220 @ 24.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 90°F

Sample Characteristics: Clear; slight LFG odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Pace - 9 Eberlin

MDNR Collects split - MO App I & tritium

Date: 8/25/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-102R-SS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): 465.62

PURGE INFORMATION:

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/25/2016 1352

Casing Diameter (inches): 2

Initial Water Level (feet): 20.64

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 20.70 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 464.98

Total Volume Purged (mL): 10,000 mL

Ground Water Elevation Previous Event (ft. msl): 464.92

Purged Dry?: Yes No ✓

Well Total Depth (feet): 91.10

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 91.14 Jun 2016

Date/Time Completed: 8/25/2016 1425

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 303 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,000 mL prior to first reading | | | | | | | | |
| 1401 | 3,000 | 21.8 | 6.99 | 845 | 116.2 | 2.96 | -110 | Cloudy w/black particle |
| 1405 | 4650 | 21.2 | 6.98 | 847 | 51.72 | 2.78 | -87 | Cloudy w/black particles |
| 1409 | 5750 | 22.5 | 6.97 | 856 | 61.93 | 3.01 | -81 | Cloudy w/black particles |
| 1413 | 6500 | 23.5 | 6.97 | 858 | 39.29 | 3.16 | -88 | Cloudy w/black particle |
| 1417 | 7400 | 21.7 | 6.98 | 851 | 37.97 | 2.90 | -82 | Cloudy w/black particles |
| 1421 | 8750 | 21.4 | 6.99 | 854 | 45.75 | 2.49 | -97 | Cloudy w/black particles |
| 1425 | 10,000 | 21.8 | 6.99 | 856 | 46.20 | 2.54 | -114 | Cloudy w/black particles |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: PZ-102R-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 51.00

Well Collection Sequence #: 16 of 52

Parameters: Annual: ___ Semi-Annual ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/25/2016 1427 | VOC: 303 Other: 303 | 21.8 | 6.99 | 856 | 46.20 | 2.54 | -114 | Clear w/ black particles |

INSTRUMENT CALIBRATION DATA:

| | Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|---|
| | Start of day | End of day | | Start of day | End of day | |
| Start of day: (Date/Time) 8/25/2016 0635 | 0.02 | N/A | NTU std = 0.02 | N/A | 0.20 | NTU std 0.02 |
| End of day: (Date/time) 8/25/2016 1510 | 10.12 | N/A | NTU std = 10.0 | N/A | 10.20 | NTU std 10.0 |
| Turbidity Meter: HF MicroTPW | 996.7 | N/A | NTU std = 1,000 | N/A | 1003 | NTU std 1,000 |
| Turb Meter S/N: #20111005T | 1414 | N/A | µS std = 1,413 | N/A | 1394 | µS std = 1.413 |
| pH / Sp. Cond. Meter: WTW pH/Cond 3400i | Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| pH / Sp. Cond. Meter S/N: #08200256 | 7.00 | N/A | pH std = 7.00 @ 22.9 °C | N/A | 6.99 | pH std = 7.00 @ 24.6 °C |
| ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i | 4.16 | N/A | pH std = 4.01 @ 24.6 °C | N/A | 4.16 | pH std = 4.01 @ 24.5 °C |
| ORP / Diss $O_2$ Meter S/N: #10201689 | Slope 0.86 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 1.19 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| | @ Temp 21.2 °C | @ Temp N/A | | @ Temp N/A | @ Temp 22.3 °C | |
| | 211 | N/A | ORP std = 220 @ 24.5 °C | N/A | 211 | ORP std = 220 @ 24.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 95°F

Sample Characteristics: Clear w/ black particles

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace 1 Eberline

MDNR collects split - Mo App I & tritium

Date: 8/25/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-103-SS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): 483.56

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/29/2016 1417

Casing Diameter (inches): 2

Initial Water Level (feet): 14.13

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 11.93 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 469.43

Total Volume Purged (mL): 12,850 mL

Ground Water Elevation Previous Event (ft. msl): 471.63

Purged Dry?: Yes No ✓

Well Total Depth (feet): 149.66

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 149.65 Jun 2016

Date/Time Completed: 8/29/2016 1446

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

If try to purge w/ lower flow rate - flow stops

Difficult to maintain consistent flow rate.

Average Purge Rate: 443 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 5,500 mL prior to first reading | | | | | | | | |
| 1430 | 5500 | 29.6 | 6.41 | 2420 | 249.8 | 1.49 | -90 | LFG odor; gray |
| 1434 | 7450 | 29.6 | 6.40 | 2360 | 328.4 | 1.39 | -89 | LFG odor; gray |
| 1438 | 9050 | 29.3 | 6.41 | 2080 | 146.9 | 1.44 | 42 | LFG odor; gray |
| 1442 | 10700 | 29.4 | 6.35 | 2030 | 57.18 | 1.22 | -81 | LFG odor; clear |
| 1446 | 12850 | 29.4 | 6.36 | 2050 | 35.74 | 1.13 | 47 | LFG odor; clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-103-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 63.74

Well Collection Sequence #: 27 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓

MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/29/2016 1448 | VOC 443 / Other 443 | 29.4 | 6.36 | 2050 | 35.74 | 1.13 | 47 | LFG odor clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/29/2016 0705

End of day: (Date/time) 8/29/2016 1656

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20140057

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.89 | N/A | NTU std = 10.0 | N/A | 10.02 | NTU std 10.0 |
| 992.2 | N/A | NTU std = 1,000 | N/A | 1020 | NTU std 1,000 |
| 1414 | N/A | µS std = 1,413 | N/A | 1398 | µS std = 1,413 |
| Cell Const 0.486 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.486 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 24.6 °C | N/A | 7.01 | pH std = 7.00 @ 25.6 °C |
| 4.17 | N/A | pH std = 4.01 @ 24.7 °C | N/A | 4.20 | pH std = 4.01 @ 25.0 °C |
| Slope 0.89 @ Temp 24.2°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.86 @ Temp 26.7°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 216 | N/A | ORP std = 220 @ 24.6 °C | N/A | 211 | ORP std = 220 @ 25.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 85°F

Sample Characteristics: Landfill gas odor; clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: Y / N Full Suite Collected?: Y / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collected split - MO App I & tritium

Date: 8/29/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-104-SS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 483.45

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/24/2016 0940
Casing Diameter (inches): 2
Initial Water Level (feet): 19.48
One Borehole Volume (gal): Not Applicable
HTT Initial Water Level Previous Event (feet): 19.15 Jun 2016
One Borehole Volume Previous Event (gal): N/A
111 Ground Water Elevation (ft. msl): 463.97
Total Volume Purged (mL): 7,650 mL
Ground Water Elevation Previous Event (ft. msl): 464.30
Purged Dry? Yes No ✓
Well Total Depth (feet): 140.35 top of pump
Water Level after Purge (feet): 35.31
Well Total Depth Previous Event (feet): Top of pump = 140.30 Jun 2016
Date/Time Completed: 8/24/2016 1010

PURGE DATA Discharge: 4.5 sec Refill: 6.0 sec Pressure: 70 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

~~*30~~ (1)

Average Purge Rate: 255 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) * | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,000 mL prior to first reading | | | | | | | | |
| 0954 | 3000 | 29.5 | 6.84 | 803 | 8.69 | 4.29 | -28 | WL: 25.95 ; clear |
| 0958 | 4,000 | 29.2 | 6.79 | 795 | 11.32 | 5.10 | -281 | WL: 27.96 ; clear |
| 1002 | 5,200 | 28.9 | 6.76 | 792 | 3.87 | 5.49 | -292 | WL: 30.39 ; clear |
| 1006 | 6,450 | 28.7 | 6.74 | 793 | 5.94 | 5.96 | -294 | WL: 32.85 ; clear |
| 1010 | 7,650 | 28.6 | 6.70 | 791 | 4.68 | 6.25 | -101 | WL: 35.31 ; clear |
| | | | | | | | | |
| | * D.O sensor apparently malfunctioning | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: PZ-104-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 35.31

Well Collection Sequence #: 8 of 52

Parameters: Annual: Semi-Annual: Quarterly: ✓ Monthly: Other: ✓ MDNR Split Sampling

SAMPLE DATA: * D.O. Sensor apparently malfunctioning *

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/24/2016 1012 | YSI: 255 Other: 255 | 28.6 | 6.70 | 791 | 4.68 | 6.25 | -101 | Clear |

INSTRUMENT CALIBRATION DATA

Start of day (Date/Time): 8/24/2016 0705

End of day (Date/time): 8/24/2016 1615

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005,

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.04 | NTU std 0.02 |
| 10.01 | N/A | NTU std = 10.0 | N/A | 10.17 | NTU std 10.0 |
| 998.1 | N/A | NTU std = 1,000 | N/A | 1000 | NTU std 1,000 |
| 1417 | N/A | µS std = 1.413 | N/A | 1388 | µS std = 1.413 |
| Cell Const: 0.481 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.3 °C | N/A | 7.03 | pH std = 7.01 @ 25.3 °C |
| 4.01 | N/A | pH std = 4.01 @ 23.5 °C | N/A | 4.05 | pH std = 4.01 @ 25.1 °C |
| Slope: 0.83 | Slope: N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope: N/A | Slope: 0.86 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| @ Temp 23.1 °C | @ Temp N/A | | @ Temp N/A | @ Temp 25.4 | |
| 212 | N/A | ORP std = 221 @ 23.3 °C | N/A | 208 | ORP std = 220 @ 25.4 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION

Weather Conditions @ Sampling: P cloudy, S wind ~10 mph, 80's F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS

Sp. Cond. Prediction Limit = 930 µS: Historical Range from May 2012 - June 2016: 726 - 882 µS.

pH Prediction Limits = 6.2 - 8.5 s.u.; Historical Range from May 2012 - June 2016: 6.48 - 7.1 s.u.

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 + 1 Duplicate

Collect FB @ PZ-104-SS @ 0925; 8 bottles; MDNR collects split - No Application

Date: 8/24/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-104-SD

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft, msl): 483.51

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/24/2016 1032

Casing Diameter (inches): 2

Initial Water Level (feet): 20.80

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 20.56 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 462.71

Total Volume Purged (mL): 5,000mL

Ground Water Elevation Previous Event (ft, msl): 462.95

Purged Dry? Yes No ✓

HHT

Well Total Depth (feet): Top of Pump = 120.66

Water Level after Purge (feet): 24.91

Well Total Depth Previous Event (feet): Top of pump = 120.64 Jun 2016

Date/Time Completed: 8/24/2016 1052

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 65 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 192 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2500 mL prior to first reading | | | | | | | | |
| 1040 | 2,500 | 29.3 | 6.90 | 1956 | 8.68 | 6.42 | -235 | WL: 24.23, clear w/ bubbles |
| 1044 | 3,200 | 29.3 | 6.89 | 1970 | 13.53 | 6.43 | -236 | WL: 24.59, clear w/ bubbles |
| ② 1048 ~~1480~~ | 4,100 | 29.2 | 6.91 | 2010 | 11.01 | 6.46 | -236 | WL: 24.85, clear w/ bubbles |
| 1052 | 5,000 | 29.2 | 6.90 | 2030 | 12.87 | 6.46 | -235 | WL: 24.91, clear w/ bubbles |
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| | * D.O sensor apparently malfunctioning | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ-104-SD

Sampling Method: Bladder Pump Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 24.91 Well Collection Sequence #: 9 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ✓ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA: * D.O. Sensor apparently malfunctioning

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$* (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/24/2016 1054 | VOC: 192 Other: 192 | 29.2 | 6.90 | 2030 | 12.87 | 6.46 | -225 | Clear w/ bubbles |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/24/2016 0705

End of day: (Date/time) 8/24/2016 1615

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111 0051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.04 | NTU std 0.02 |
| 10.01 | N/A | NTU std = 10.0 | N/A | 10.17 | NTU std 10.0 |
| 998.1 | N/A | NTU std = 1,000 | N/A | 1000 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1388 | µS std = 1,413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.3 °C | N/A | 7.03 | pH std = 7.01 @ 25.3 °C |
| 4.01 | N/A | pH std = 4.01 @ 23.5 °C | N/A | 4.05 | pH std = 4.01 @ 25.1 °C |
| Slope 0.83 @ Temp 23.1°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.86 @ Temp 26.4°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 212 | N/A | ORP std = 221 @ 23.3 °C | N/A | 208 | ORP std = 220 @ 25.4 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 85°F

Sample Characteristics: Clear with bubbles

COMMENTS AND OBSERVATIONS:

Sp. cond within recent historical limits

Sp. Cond. Prediction Limit = 1,500 µS; Historical Range from May 2012 - June 2016: 1126 - 2070 µS.

pH Prediction Limits = 6.2 - 8.2 s.u.; Historical Range from May 2012 - June 2016: 6.44 - 7 s.u.

Well Closed and Locked? Y / N Full Suite Collected? Y / N # Bottles Collected: 8 - 7 Pace, 1 Eberline

Collect PZ-104-SD DUP @ 1054; MDNR collected split - MO App I & tritium

Date: 8/24/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-105-SS

Sampler(s): Michael Spurgeon
Jonathan Wilkinson

Top of Casing (ft. msl): 483.51

PURGE INFORMATION

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/23/2016 1417

Casing Diameter (inches): 2

Initial Water Level (feet): 23.84

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 23.92 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 459.67

Total Volume Purged (mL): 7,400 mL

HHT 11

Ground Water Elevation Previous Event (ft. msl): 459.59

Purged Dry? Yes No ✓

Well Total Depth (feet): Top of Pump = 144.93

Water Level after Purge (feet): 38.73

Well Total Depth Previous Event (feet): Top of pump = 144.90 Jun 2016

Date/Time Completed: 8/23/2016 1437

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 77 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 370 mL / min * D.O. probe apperently on malfunction

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge @ ~~390~~ 3,000 mL prior to first reading | | | | | | | | |
| 1425 | 3000 | 19.9 | 7.11 | 1066 | 7.64 | 0.00 | -130 | WL: 30.55; clear |
| 1429 | 4200 | 19.9 | 7.11 | 1073 | 13.51 | 0.00 | -131 | WL: 32.95; clear |
| 1433 | 5800 | 19.7 | 7.12 | 1075 | 9.75 | 0.00 | -132 | WL: 35.82; clear |
| 1437 | 7400 | 19.6 | 7.10 | 1071 | 10.64 | 0.00 | -123 | WL: 38.73; clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-105-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 38.73

Well Collection Sequence #: 5 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ✓ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA: *D.O. Sensor Apperently Malfunctioning

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| ~~8/23/2016~~ 1439 | VOC 370 / Other 370 | 19.6 | 7.10 | 1071 | 10.64 | 0.00 | -123 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/23/2016 1330-DO 0705-others

End of day: (Date/time) 8/23/2016 1600

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201160051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201684

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.01 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.09 | N/A | NTU std = 10.0 | N/A | 11.17 | NTU std 10.0 |
| 992.6 | N/A | NTU std = 1,000 | N/A | 1063 | NTU std 1,000 |
| 1426 | N/A | µS std = 1,413 | N/A | 1399 | µS std = 1,413 |
| Cell Const 0.490 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.490 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 19.5 °C | N/A | 6.97 | pH std = 7.00 @ 25.7 °C |
| 4.00 | N/A | pH std = 4.00 @ 19.5 °C | N/A | 4.04 | pH std = 4.01 @ 25.5 °C |
| Slope 1.17 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 0.97 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 25.6°C | @ Temp N/A | | @ Temp N/A | @ Temp 25.1°C | |
| 222 | N/A | ORP std = 223 @ 19.4 °C | N/A | 208 | ORP std = 219 @ 25.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, Breezy, 70°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 1,100 µS; Historical Range from May 2012 - June 2016: 942 - 1074 µS.

pH Prediction Limits = 6.7 - 8.3 s.u.; Historical Range from May 2012 - June 2016: 7.01 - 7.52 s.u.

Well Closed and Locked?: (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Pace, 1 Eberline

MDNR collected split - App I & tritium

Date: 8/23/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-10[illegible] SS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl): 462.71

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Date/Time Initiated: 8/23/2016 1204
Initial Water Level (feet): 12.95
Initial Water Level Previous Event (feet): 12.30 Jun 2016
Ground Water Elevation (ft, msl): 449.76
Ground Water Elevation Previous Event (ft, msl): 450.41
Well Total Depth (feet): Top of Pump = 161.42
Well Total Depth Previous Event (feet): Top of pump = 161.40 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 7,000 mL
Purged Dry?: Yes No ✓
Water Level after Purge (feet): 26.24
Date/Time Completed: 8/23/2016 1224

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 65 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 350 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved O2 (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,500 mL prior to first reading | | | | | | | | |
| 1212 | 3500 | 22.6 | 7.01 | 944 | 8.92 | 14.00 | -119 | WL: 19.56; clear |
| 1216 | 4200 | 23.5 | 6.99 | 940 | 3.99 | 13.54 | -122 | WL: 21.68; clear |
| 1220 | 5700 | 23.5 | 6.99 | 939 | 6.23 | 12.83 | -126 | WL: 24.01; clear |
| 1224 | 7000 | 23.5 | 7.00 | 939 | 4.79 | 12.06 | -127 | WL: 26.24; clear |
| | | | | | | | | |
| | | * D.O. sensor apparently malfunctioning | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-106-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 26.24

Well Collection Sequence #: 4 of 52

Parameters: Annual ___ Semi-Annual ___ Quarterly: ✓ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA: + D.O. Sensor apparently malfunctioning

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved O2 (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/23/2016 1226 | VOC: 350 Other: 350 | 23.5 | 7.00 | 939 | 4.79 | 12.06 | -127 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/23/2016 0705 1330 - DO.

End of day: (Date/time) 8/23/2016 1600 - others

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.01 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.09 | N/A | NTU std = 10.0 | N/A | 11.17 | NTU std 10.0 |
| 992.6 | N/A | NTU std = 1,000 | N/A | 1063 | NTU std 1,000 |
| 1426 | N/A | µS std = 1,413 | N/A | 1399 | µS std = 1,413 |
| Cell Const 0.490 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.490 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 19.5 °C | N/A | 6.97 | pH std = 7.00 @ 25.7 °C |
| 4.00 | N/A | pH std = 4.00 @ 19.5 °C | N/A | 4.04 | pH std = 4.01 @ 25.5 °C |
| Slope 0.70 @ Temp 18.4 °C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 1.17 @ Temp 25.6 °C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 222 | N/A | ORP std = 223 @ 19.4 °C | N/A | 208 | ORP std = 219 @ 25.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 70°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 950 µS; Historical Range from May 2012 - June 2016: 710 - 913 µS.

pH Prediction Limits = 6.3 - 8.3 s.u.; Historical Range from May 2012 - June 2016: 6.88 - 7.26 s.u.

Well Closed and Locked?: (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Pcs 1 Eberline

MDNR collects MO App I & tritium

Date: 8/23/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-106 SD
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 463.36

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/23/2016 1054
Casing Diameter (inches): 2
Initial Water Level (feet): 13.40
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 12.68 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 449.96
Total Volume Purged (mL): 9,800
Ground Water Elevation Previous Event (ft. msl): 450.68
Purged Dry? Yes No ✓
Well Total Depth (feet): top of pump = 196.29
Water Level after Purge (feet): 19.32
Well Total Depth Previous Event (feet): Top of pump = 196.25 Jun 2016
Date/Time Completed: 8/23/2016 1129

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: ~~60~~ JJ 55 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell

Average Purge Rate: 280 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 4,500 mL prior to first reading | | | | | | | | |
| 1109 | 4,500 | 23.8 | 6.76 | 3,200 | 3.49 | 29.3 | -164 | WL: 18.04; clear |
| 1113 | 5,450 | 23.7 | 6.77 | 3040 | 5.34 | 26.1 | -164 | WL: 18.43; clear |
| 1117 | 6,600 | 23.6 | 6.79 | 2850 | 6.61 | 22.7 | -159 | WL: 18.90; clear |
| 1121 | 7,700 | 23.6 | 6.80 | 2670 | 3.59 | 20.4 | -159 | WL: 19.11; clear |
| 1125 | 8,750 | 23.6 | 6.80 | 2650 | 5.01 | 18.50 | -156 | WL: 19.19; clear |
| 1129 | 9,800 | 23.5 | 6.80 | 2680 | 5.38 | 17.26 | -158 | WL: 19.32; clear |
| | | | | | | | | |
| | | * | Dissolved Oxygen Sensor | | | apparently malfunctioning | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: PZ-106-SD

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 19.32

Well Collection Sequence #: 3 of 52

Parameters: Annual ___ Semi-Annual: ___ Quarterly: ✓ Monthly: ___ Other: ✓

MDNR Split Sampling

SAMPLE DATA: * Dissolved Oxygen Sensor Apparently Malfunctioning

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/23/2016 1131 | VOC 280 / Other 280 | 23.5 | 6.80 | 2680 | 5.38 | 17.26 | -158 | Clear |

INSTRUMENT CALIBRATION DATA

Start of day (Date/Time): 8/23/2016 0705 1330-D.O.

End of day: (Date/time): 8/23/2016 1600-others

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.01 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.09 | N/A | NTU std = 10.0 | N/A | 11.17 | NTU std 10.0 |
| 992.6 | N/A | NTU std = 1,000 | N/A | 1063 | NTU std 1,000 |
| 1426 | N/A | µS std = 1,413 | N/A | 1399 | µS std = 1,413 |
| Cell Const 0.490 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.490 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 19.5 °C | N/A | 6.97 | pH std = 7.00 @ 25.7 °C |
| 4.00 | N/A | pH std = 4.00 @ 19.5 °C | N/A | 4.04 | pH std = 4.01 @ 25.5 °C |
| Slope 0.70 @ Temp 18.4 °C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope ~~0.97~~ 1.17 @ Temp ~~25.1 °C~~ 25.6 °C | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| 222 | N/A | ORP std = 223 @ 19.4 °C | N/A | 208 | ORP std = 219 @ 25.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 70°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS

Sp. cond within recent historical range

Sp. Cond. Prediction Limit = 1,200 µS; Historical Range from May 2012 - June 2016: 827 - 6120 µS.

pH Prediction Limits = 6.5 - 8.0 s.u.; Historical Range from May 2012 - June 2016: 6.54 - 6.99 s.u.

Well Closed and Locked?: (Y) N Full Suite Collected?: (Y) N # Bottles Collected: 8 < 7 Pace 1 @ per 10

MDNR collects split - App I + tritium

Date: 8/23/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-107-SS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): 464.56

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/30/2016 0924

Casing Diameter (inches): 2

Initial Water Level (feet): 31.73

One Borehole Volume (gal): Not Applicable

LLH 1/1

Initial Water Level Previous Event (feet): 31.06 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 432.83

Total Volume Purged (mL): 8,150

Ground Water Elevation Previous Event (ft. msl): 433.50

Purged Dry? Yes No ✓

Well Total Depth (feet): ~~105.09~~ 103.78

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 103.70 Jun 2016

Date/Time Completed: 8/30/2016 0957

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 247 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,000 mL prior to first reading | | | | | | | | |
| 0937 | 3,000 | 23.3 | 6.64 | 2710 | 131.3 | 1.50 | 173 | Cloudy |
| 0941 | 3700 | 22.1 | 6.63 | 3000 | 158.6 | 1.21 | 171 | Cloudy |
| 0945 | 4900 | 21.2 | 6.69 | 3020 | 209.0 | 1.05 | 169 | Cloudy |
| 0949 | 6000 | 22.0 | 6.69 | 2990 | 24.70 | 1.14 | 175 | Cloudy Clear |
| 0953 | 7050 | 21.9 | 6.66 | 2970 | 14.79 | 1.14 | 176 | Clear |
| 0957 | 8150 | 21.6 | 6.70 | 2980 | 9.73 | 0.98 | 186 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: PZ-107-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No ____

Water Level After Sampling (ft): 57.33

Well Collection Sequence #: 30 of 52

Parameters: Annual ___ Semi-Annual ___ Quarterly ___ Monthly ___ Other ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/30/2016 0959 | DC 247 / Other 247 | 21.6 | 6.70 | 2980 | 9.73 | 0.98 | 186 | Clear |

INSTRUMENT CALIBRATION DATA

Start of day: (Date/Time) 8/30/2016 0700

End of day: (Date/time) 8/30/2016 1505

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005I

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200258

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.00 | N/A | NTU std = 10.0 | N/A | 10.75 | NTU std 10.0 |
| 1003 | N/A | NTU std = 1.000 | N/A | 1099 | NTU std 1.000 |
| 1415 | N/A | µS std = 1.413 | N/A | 1393 | µS std = 1.413 |
| Cell Const 0.482 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.482 | Cell Const Range 0.45 - 0.50 |
| 7.03 | N/A | pH std = 7.00 @ 23.8 °C | N/A | 7.01 | pH std = 7.00 @ 25.4 °C |
| 4.19 | N/A | pH std = 4.01 @ 23.6 °C | N/A | 4.17 | pH std 4.01 @ 25.2 °C |
| Slope 0.86 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 0.83 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 23.3 °C | @ Temp N/A | | @ Temp N/A | @ Temp 27.4 °C | |
| 214 | N/A | ORP std = 221 @ 23.9 °C | N/A | 210 | ORP std = 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 80°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Poly 1 Eberline

MDNR collected split - MO App I + tritium

Date: 8/30/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-109-SS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 460.19

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/23/2016 0919
Casing Diameter (inches): 2
Initial Water Level (feet): 25.07
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 22.41 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 435.12
Total Volume Purged (mL): 4,950
Ground Water Elevation Previous Event (ft. msl): 437.78
Purged Dry? Yes No ✓
Well Total Depth (feet): top of pump = 130.99
Water Level after Purge (feet): 34.85
Well Total Depth Previous Event (feet): Top of pump = 131.04 Jun 2016
Date/Time Completed: 8/23/2016

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 70 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 206 mL / min *

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved O2 (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2500 mL prior to first reading | | | | | | | | |
| 0931 | 2,500 | 21.1 | 7.08 | 793 | 3.63 | 30.0 | 10 | WL: 30.33; clear |
| 0935 | 3,250 | 21.1 | 7.09 | 792 | 4.65 | 29.5 | 15 | WL: 31.71; clear |
| 0939 | 4,100 | 21.2 | 7.10 | 793 | 11.06 | 28.2 | 22 | WL: 33.16; clear |
| 0943 | 4,950 | 21.1 | 7.11 | 792 | 10.77 | 26.9 | 37 | WL: 34.85; clear |
| | | | | | | | | |
| | | | | | | | | |
| * | D.O. meter apparently malfunctioning. | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-109-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 34.85

Well Collection Sequence #: 2 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ✓ Monthly: ___ Other: ✓

MDNR Split Sampling

SAMPLE DATA: D.O. Meter apparently malfunctioning

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/23/2016 0945 | VOC 206 Other 206 | 21.1 | 7.11 | 792 | 10.73 | 26.9 | 37 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/23/2016 0705 1330 - D.O

End of day: (Date/time) 8/23/2016 1600 - Others

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.01 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.09 | N/A | NTU std = 10.0 | N/A | 11.17 | NTU std 10.0 |
| 992.6 | N/A | NTU std = 1,000 | N/A | 1063 | NTU std 1,000 |
| 1426 | N/A | µS std = 1,413 | N/A | 1399 | µS std = 1,413 |
| Cell Const 0.490 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.490 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 19.5 °C | N/A | 6.97 | pH std = 7.00 @ 25.7 °C |
| 4.00 | N/A | pH std = 4.00 @ 19.5 °C | N/A | 4.04 | pH std 4.01 @ 25.5 °C |
| Slope 0.70 @ Temp 18.4 °C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope ~~0.97~~ 1.17 @ Temp ~~25.1 °C~~ 25.6 °C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 222 | N/A | ORP std = 223 @ 19.4 °C | N/A | 208 | ORP std = 219 @ 25.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, Breezy, 70°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 990 µS; Historical Range from May 2012 - June 2016: 715 - 834 µS.

pH Prediction Limits = 6.5 - 8.0 s.u.; Historical Range from May 2012 - June 2016: 6.83 - 7.36 s.u.

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collects split - App I + Tritium

Date: ~~8/23~~ 8/23/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-110-SS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 461.15

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Date/Time Initiated: 8/23/2016 0819
Initial Water Level (feet): 28.33
Initial Water Level Previous Event (feet): 27.59 Jun 2016
Ground Water Elevation (ft. msl): 432.82
Ground Water Elevation Previous Event (ft. msl): 433.56
Well Total Depth (feet): top of pump = 107.23
Well Total Depth Previous Event (feet): Top of pump = 107.23 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 5,700 mL
Purged Dry?: Yes No ✓
Water Level after Purge (feet): 31.45
Date/Time Completed: 8/23/2016 0840

11gal

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 50 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: ~271 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge @ ~~1800~~ 2,000 mL prior to first reading | | | | | | | | |
| 0828 | 2,000 | 16.7 | 6.72 | 1984 | 5.18 | 0.35 | -86 | WL: 30.34; clear |
| 0832 | 3,150 | 16.6 | 6.72 | 1933 | 5.46 | 0.33 | -89 | WL: 30.90; clear |
| 0836 | 4,400 | 16.7 | 6.73 | 1911 | 5.95 | 0.38 | -93 | WL: 31.29; clear |
| 0840 | 5,700 | 16.6 | 6.73 | 1915 | 5.23 | 2.06 | -95 | WL: 31.45; clear |
| | | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: PZ-110-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 31.45

Well Collection Sequence #: 1 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ✓ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/23/2016 0842 | VOC 271 / Other 271 | 16.6 | 6.73 | 1915 | 5.23 | 2.06 | -95 | Clear |

INSTRUMENT CALIBRATION DATA

Start of day (Date/Time): 8/23/2016 0705 1330 - 0.0

End of day: (Date/time): 8/23/2016 1602 - other

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005I

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200252

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.01 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.09 | N/A | NTU std = 10.0 | N/A | 11.17 | NTU std 10.0 |
| 992.6 | N/A | NTU std = 1,000 | N/A | 1063 | NTU std 1,000 |
| 1426 | N/A | µS std = 1.413 | N/A | 1399 | µS std = 1.413 |
| Cell Const 0.490 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.490 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @19.5 °C | N/A | 6.97 | pH std = 7.00 @25.7 °C |
| 4.00 | N/A | pH std = 4.00 @19.5 °C | N/A | 4.04 | pH std = 4.01 @25.5 °C |
| Slope 0.70 | Slope N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope N/A | Slope ~~0.97~~ 1.17 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| @ Temp 18.4 °C | @ Temp N/A | | @ Temp N/A | @ Temp ~~25.1~~ 25.6 °C | |
| 222 | N/A | ORP std = 223 @19.4 °C | N/A | 208 | ORP std = 219 @25.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION

Weather Conditions @ Sampling: Overcast, Breezy, 70°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS

Sp. Cond. Prediction Limit = 2,200 µS; Historical Range from May 2012 - June 2016: 1402 - 2140 µS

pH Prediction Limits = 6.0 - 7.7 s.u.; Historical Range from May 2012 - June 2016: 6.47 - 6.94 s.u.

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) N # Bottles Collected: 8 - 1 Peace + 1 Laperline

MDNR collects split - App I + tr. Zinc

Date: 8/23/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-111-SD
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft, msl): 466.46

PURGE INFORMATION:

Method of Well Purge: Bladder Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 9/7/2016 1036
Casing Diameter (inches): 2
Initial Water Level (feet): 33.40
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 32.96 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft, msl): 433.06
Total Volume Purged (mL): 12,150
Ground Water Elevation Previous Event (ft, msl): 433.50
Purged Dry?: Yes No ✓
Well Total Depth (feet): top of pump = 198.83
Water Level after Purge (feet): 53.42
Well Total Depth Previous Event (feet): Top of pump = 199.13 Jun 2016
Date/Time Completed: 9/7/2016 1107

PURGE DATA Discharge: 4.5 sec Refill: 6.0 sec Pressure: 70 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 392 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 6,500 mL prior to first reading | | | | | | | | |
| 1055 | 6,500 | 19.6 | 7.03 | 716 | 7.97 | 0.18 | 51 | WL: 47.43 ; clear |
| 1059 | 8,700 | 19.4 | 7.02 | 707 | 5.48 | 0.52 | 75 | WL: 48.75 ; clear |
| 1103 | 10,900 | 19.3 | 7.02 | 709 | 5.98 | 0.76 | 95 | WL: 50.84 ; clear |
| 1107 | 12,150 | 19.2 | 7.01 | 697 | 7.89 | 0.63 | -30 | WL: 53.42 ; clear |
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FEEZOR ENGINEERING INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-111-SD

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 53.42

Well Collection Sequence #: 51 of 52

Parameters: Annual ___ Semi-Annual ___ Quarterly ✓ Monthly ___ Other ___

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/7/2016 1100 | VOC 352 Other 392 | 19.2 | 7.01 | 697 | 7.83 | 0.63 | -30 | Clear |

INSTRUMENT CALIBRATION DATA:

| | | Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|---|---|
| Start of day (Date/Time) | 9/7/2016 0720 | 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| End of day: (Date/time) | 9/7/2016 1625 | 9.96 | N/A | NTU std = 10.0 | N/A | 9.97 | NTU std 10.0 |
| Turbidity Meter: | HF MicroTPW | 991.0 | N/A | NTU std = 1,000 | N/A | 1030 | NTU std 1,000 |
| Turb Meter S/N: | # 20110051 | 1411 | N/A | µS std = 1,413 | N/A | 1380 | µS std = 1,413 |
| pH / Sp. Cond. Meter: | WTW pH/Cond 3400i | Cell Const 0.485 | Cell Const N/A | Cell Const Range 0.45 - 0.50 | Cell Const N/A | Cell Const 0.485 | Cell Const Range 0.45 - 0.50 |
| | | 7.00 | N/A | pH std = 7.00 @25.2 °C | N/A | 6.90 | pH std = 7.00 @25.6 °C |
| pH / Sp. Cond. Meter S/N: | # 08200256 | 4.12 | N/A | pH std = 4.01 @24.9 °C | N/A | 4.22 | pH std = 4.01 @25.8 °C |
| ORP / Diss $O_2$ Meter: | WTW pH/Oxi 3400i | Slope 0.98 | Slope N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope N/A | Slope 1.04 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| | | @ Temp 24.9°C | @ Temp N/A | | @ Temp N/A | @ Temp 31.0°C | |
| ORP / Diss $O_2$ Meter S/N: | # 10201689 | 255 | N/A | ORP std = 220 @25.2 °C | N/A | 220 | ORP std = 219 @26.1 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 1,000 µS: Historical Range from May 2012 - June 2016: 729 - 851 µS.

pH Prediction Limits = 6.4 - 8.1 s.u.; Historical Range from May 2012 - June 2016: 6.89 - 7.43 s.u.

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 7

Date: 9/7/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-112-AS
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft. msl): 462.50

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Date/Time Initiated: 9/1/2016 0959
Initial Water Level (feet): 29.89
Initial Water Level Previous Event (feet): 28.83 Jun 2016
Ground Water Elevation (ft. msl): 432.61
Ground Water Elevation Previous Event (ft. msl): 433.67
Well Total Depth (feet): 38.41
Well Total Depth Previous Event (feet): 38.38 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 4,700 mL
Purged Dry?: Yes No ✓
Water Level after Purge (feet): N/A
Date/Time Completed: 9/1/2016 1014

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 313 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,000 mL prior to first reading | | | | | | | | |
| 1002 | 1000 | 19.1 | 6.74 | 2240 | 16.21 | 2.11 | -79 | Clear |
| 1006 | 1900 | 18.9 | 6.74 | 2240 | 14.35 | 1.90 | -81 | Clear |
| 1010 | 3550 | 18.4 | 6.71 | 2250 | 10.69 | 0.60 | -89 | Clear |
| 1014 | 4700 | 18.2 | 6.71 | 2250 | 9.63 | 0.57 | -95 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-112-AS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No ____

Water Level After Sampling (ft): 29.74

Well Collection Sequence #: 37 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/2016 0916 | VOC: 313 Other: 313 | 18.8 | 6.71 | 2250 | 9.63 | 0.57 | -95 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 9/1/2016 0645

End of day (Date/time): 9/1/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200252

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201680

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.23 | NTU std 0.02 |
| 9.88 | N/A | NTU std = 10.0 | N/A | 11.20 | NTU std 10.0 |
| 998.3 | N/A | NTU std = 1.000 | N/A | 1023 | NTU std 1.000 |
| 1426 | N/A | µS std = 1.413 | N/A | 1368 | µS std = 1.413 |
| Cell Const: 0.483 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.475 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 18.8 °C | N/A | 6.90 | pH std = 7.02 @ 19.8 °C |
| 4.17 | N/A | pH std = 4.00 @ 19.6 °C | N/A | 4.90 | pH std = 4.00 @ 20.5 °C |
| Slope: 0.67 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 0.61 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 19.6°C | @ Temp N/A | | @ Temp N/A | @ Temp 20.8°C | |
| 237 | N/A | ORP std = 224 @ 19.3 °C | N/A | 227 | ORP std = 223 @ 19.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 3 Filtered

MDNR Collected Split - MO App I & III

Date 9/1/2016 By: Jonathan Wilkinson Title Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-113-AD
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl): 461.54

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Date/Time Initiated: 8/29/2016 1047
Initial Water Level (feet): 28.90
Initial Water Level Previous Event (feet): 27.97 Jun 2016
Ground Water Elevation (ft. msl): 432.64
Ground Water Elevation Previous Event (ft. msl): 433.57
Well Total Depth (feet): 110.11
Well Total Depth Previous Event (feet): 110.13 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 7,000 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): N/A
Date/Time Completed: 8/29/2016 1211

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 206 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,500 mL prior to first reading | | | | | | | | |
| 1105 | 3500 | 21.1 | 6.97 | 4320 | 85.07 | 0.29 | -135 | Clear |
| 1109 | 4550 | 21.0 | 6.97 | 4420 | 34.10 | 0.26 | -134 | Clear |
| 1113 | 5800 | 24.1 | 6.96 | 4530 | 30.28 | 0.24 | -136 | Clear |
| 1117 | 6500 | 24.2 | 6.95 | 4520 | 18.84 | 0.22 | -140 | Clear |
| 1121 | 7000 | 24.0 | 6.96 | 4500 | 16.02 | 0.37 | -140 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-113-AD

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No ____

Water Level After Sampling (ft): 28.91

Well Collection Sequence #: 25 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/29/2016 1123 | VOC: 206 Other: 200 | 24.0 | 6.96 | 4520 | 16.02 | 0.37 | -140 | Clear |

INSTRUMENT CALIBRATION DATA:

| | Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|---|
| | Start of day | End of day | | Start of day | End of day | |
| Start of day: (Date/Time) 8/29/2016 0705 | 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| End of day: (Date/time) 8/29/2016 1650 | 9.89 | N/A | NTU std = 10.0 | N/A | 10.02 | NTU std 10.0 |
| Turbidity Meter: HF MicroTPW | 992.2 | N/A | NTU std = 1,000 | N/A | 1020 | NTU std 1,000 |
| Turb Meter S/N: #20111005L | 1414 | N/A | µS std = 1,413 | N/A | 1398 | µS std = 1,413 |
| pH / Sp. Cond. Meter: WTW pH/Cond 3400i | Cell Const 0.486 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.486 | Cell Const Range: 0.45 - 0.50 |
| | 7.00 | N/A | pH std = 7.00 @24.6°C | N/A | 7.01 | pH std = 7.00 @25.6 °C |
| pH / Sp. Cond. Meter S/N: #08200256 | 4.17 | N/A | pH std = 4.01 @24.7°C | N/A | 4.20 | pH std = 4.01 @25.0 °C |
| ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i | Slope: 0.89 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 0.86 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| | @ Temp 24.2°C | @ Temp N/A | | @ Temp N/A | @ Temp 26.7°C | |
| ORP / Diss $O_2$ Meter S/N: #10201689 | 216 | N/A | ORP std = 220 @24.6°C | N/A | 211 | ORP std = 220 @25.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Pace 1 Eberline

MDNR Collected split - MO App I & thallium

Date: 8/29/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-113-AS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft, msl): 461.40

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/29/2016 1305

Casing Diameter (inches): 2

Initial Water Level (feet): 28.83

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 27.90 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 432.57

Total Volume Purged (mL): 7,650 mL

Ground Water Elevation Previous Event (ft, msl): 433.50

Purged Dry? Yes No ✓

Well Total Depth (feet): 39.17

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 39.25 Jun 2016

Date/Time Completed: 8/29/2016 1330

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 306 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,000 mL prior to first reading | | | | | | | | |
| 1310 | 1000 | 23.7 | 6.86 | 1405 | 69.11 | 0.68 | -87 | Clear w/ black flakes |
| 1314 | 2700 | 21.0 | 6.86 | 1348 | 58.06 | 1.87 | -70 | Clear w/ black flakes |
| 1318 | 4100 | 22.0 | 6.86 | 1397 | 38.54 | 1.63 | +70 | Clear w/ black flakes |
| 1322 | 5350 | 21.5 | 6.86 | 1392 | 29.62 | 1.59 | -60 | Clear w/ black flakes |
| 1326 | 6500 | 21.3 | 6.85 | 1391 | 24.08 | 1.58 | -62 | Clear w/ black flakes |
| 1330 | 7650 | 21.3 | 6.85 | 1394 | 16.44 | 1.32 | -63 | Clear w/ black flakes |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-113-AS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 28.83

Well Collection Sequence #: 26 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓
MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/29/2016 1332 | VOC: 306 Other: 306 | 21.3 | 6.85 | 1394 | 16.44 | 1.32 | -63 | Clear w/ black flecks |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/29/2016 0705

End of day: (Date/time) 8/29/2016 1656

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111005

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.89 | N/A | NTU std = 10.0 | N/A | 10.02 | NTU std 10.0 |
| 992.2 | N/A | NTU std = 1,000 | N/A | 1020 | NTU std 1,000 |
| 1414 | N/A | µS std = 1.413 | N/A | 1398 | µS std = 1.413 |
| Cell Const 0.486 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.486 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @24.6 °C | N/A | 7.01 | pH std = 7.00 @25.6 °C |
| 4.17 | N/A | pH std = 4.01 @24.7 °C | N/A | 4.20 | pH std = 4.01 @25.0 °C |
| Slope: 0.89 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 0.86 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 24.2 °C | @ Temp N/A | | @ Temp N/A | @ Temp 26.7 °C | |
| 216 | N/A | ORP std = 220 @24.6 °C | N/A | 211 | ORP std = 220 @25.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 85°F

Sample Characteristics: Clear w/ black flecks

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) N Full Suite Collected?: (Y) N # Bottles Collected: 8 - 7 Pace 1 Eberline

MDNR collected split - MO App I + trip

Date: 8/29/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-113-SS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): 461.77

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/29/2016 0926

Casing Diameter (inches): 2

Initial Water Level (feet): 29.13

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 28.16 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 432.64

Total Volume Purged (mL): 11,650 mL

Ground Water Elevation Previous Event (ft. msl): 433.61

Purged Dry?: Yes No ✓

Well Total Depth (feet): 160.21

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 160.25 Jun 2016

Date/Time Completed: 8/29/2016 1012

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 253 mL / min Difficult to maintain consistent purge rate

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 5,500 mL prior to first reading | | | | | | | | |
| 0944 | 5500 | 21.5 | 7.48 | 549 | 100.2 | 0.47 | 179 | Lt. gray |
| 0948 | 6450 | 22.2 | 7.47 | 551 | 604.4 | 0.73 | 200 | Lt. gray |
| 0952 | 7200 | 23.7 | 7.46 | 544 | 966.6 | 0.83 | 208 | Lt. gray |
| 0956 | 7700 | 24.3 | 7.45 | 535 | 1014.5 | 1.01 | 211 | Lt. gray |
| 1000 | 9400 | 20.0 | 7.49 | 547 | 593.0 | 0.43 | 219 | Lt. gray |
| 1004 | 10350 | 23.9 | 7.48 | 560 | 448.5 | 1.43 | 247 | Lt. gray |
| 1008 | 10950 | 23.5 | 7.46 | 545 | 378.1 | 1.23 | 240 | Lt. gray |
| 1012 | 11650 | 23.7 | 7.48 | 535 | 353.6 | 0.85 | 236 | Lt. gray |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-113-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No ____

Water Level After Sampling (ft): 58.55

Well Collection Sequence #: 24 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/29/2016 1014 | QC 253 / Other 253 | 23.7 | 7.48 | 535 | 3536 | 0.85 | 236 | Lt. gray |

INSTRUMENT CALIBRATION DATA:

| | Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|---|
| | Start of day | End of day | | Start of day | End of day | |
| Start of day: (Date/Time) 8/29/2016 0705 | 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| End of day (Date/time) 8/29/2016 1650 | 9.89 | N/A | NTU std = 10.0 | N/A | 10.02 | NTU std 10.0 |
| Turbidity Meter: HF MicroTPW | 992.2 | N/A | NTU std = 1,000 | N/A | 1020 | NTU std 1,000 |
| Turb Meter S/N: #20110251 | 1414 | N/A | µS std = 1,413 | N/A | 1398 | µS std = 1,413 |
| pH / Sp. Cond. Meter: WTW pH/Cond 3400i | Cell Const 0.486 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.486 | Cell Const Range: 0.45 - 0.50 |
| pH / Sp. Cond. Meter S/N: #08200256 | 7.00 | N/A | pH std = 7.00 @24.6 °C | N/A | 7.01 | pH std = 7.00 @25.6 °C |
| | 4.17 | N/A | pH std = 4.01 @24.7 °C | N/A | 4.20 | pH std = 4.0 @25.0 °C |
| ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i | Slope 0.89 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 0.86 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| | @ Temp 24.2 °C | @ Temp N/A | | @ Temp N/A | @ Temp 26.7 °C | |
| ORP / Diss $O_2$ Meter S/N: #10201689 | 216 | N/A | ORP std = 220 @24.6 °C | N/A | 211 | ORP std = 220 @25.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 80°F

Sample Characteristics: Light gray

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 1 Eberline, 7 Pace

MDNR collected split - MO App I & tritium

Date: 8/29/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-114-AS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft. msl): 451.26

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 9/6/2016 1508
Casing Diameter (inches): 2
Initial Water Level (feet): 18.33
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 16.80 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 432.93
Total Volume Purged (mL): 5550 mL
Ground Water Elevation Previous Event (ft. msl): 434.46
Purged Dry?: Yes No ✓
Well Total Depth (feet): Top of Pump = 26.32
Water Level after Purge (feet): 18.42
Well Total Depth Previous Event (feet): Top of pump = 26.20 Jun 2016
Date/Time Completed: 9/6/2016 1528

HHT

PURGE DATA Discharge: 28 (D 3.0) sec Refill: 7.0 (D 5.0) sec Pressure: 20 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 278 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1000 mL prior to first reading | | | | | | | | |
| 1512 | 1000 | 19.9 | 6.88 | 353 | 14.89 | 0.34 | 3 | WL: 18.33; clear |
| 1516 | 1800 | 18.2 | 6.78 | 2070 | 11.64 | 0.34 | 23 | WL: 18.33; clear |
| 1520 | 2850 | 17.3 | 6.75 | 2180 | 14.93 | 0.26 | 30 | WL: 18.33; clear |
| 1524 | 4300 | 17.3 | 6.73 | 2150 | 10.56 | 0.24 | 37 | WL: 18.40; clear |
| 1528 | 5550 | 17.6 | 6.72 | 2060 | 9.08 | 0.23 | 48 | WL: 18.42; clear |
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FEEZOR ENGINEERING, INC

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-114-AS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 18.42

Well Collection Sequence #: 47 of 52

Parameters: Annual: ____ Semi-Annual: ____ Quarterly: ✓ Monthly: ____ Other: ____

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/6/2016 1530 | VOC 278 / Other 278 | 17.6 | 6.72 | 2060 | 9.08 | 0.23 | 48 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 9/6/2016 1425

End of day (Date/time): 9/6/2016 1635

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111005

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.10 | N/A | NTU std = 0.02 | N/A | 0.36 | NTU std 0.02 |
| 10.15 | N/A | NTU std = 10.0 | N/A | 10.09 | NTU std 10.0 |
| 969.7 | N/A | NTU std = 1,000 | N/A | 976.6 | NTU std 1,000 |
| 1374 | N/A | µS std = 1.413 | N/A | 1369 | µS std = 1.413 |
| Cell Const: 0.492 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.492 | Cell Const Range: 0.45 - 0.50 |
| 6.98 | N/A | pH std = 7.00 @ 25.3 °C | N/A | 6.81 | pH std = 7.00 @ 25.4 °C |
| 4.29 | N/A | pH std = 4.01 @ 25.4 °C | N/A | 4.23 | pH std = 4.01 @ 24.3 °C |
| Slope: 1.02 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 1.07 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| @ Temp 28.8°C | @ Temp N/A | | @ Temp N/A | @ Temp 29.3°C | |
| 232 | N/A | ORP std = 219 @ 25.2 °C | N/A | 279 | ORP std = 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 3,400 µS; Historical Range from May 2012 - June 2016: 1556 - 2740 µS.

pH Prediction Limits = 6.2 - 7.0 s.u.: Historical Range from May 2012 - June 2016: 6.57 - 6.79 s.u.

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 7

Date: 9/6/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-115-SS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl): 452.27

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 9/6/2016 1546
Casing Diameter (inches): 2
Initial Water Level (feet): 15.30
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 13.18 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft. msl): 436.97
Total Volume Purged (mL): 6,800 mL
LH Ground Water Elevation Previous Event (ft. msl): 439.09
Purged Dry? Yes No ✓
Well Total Depth (feet): top of pump = 81.04
Water Level after Purge (feet): 20.95
Well Total Depth Previous Event (feet): Top of pump = 81.05 Jun 2016
Date/Time Completed: 9/6/2016 1607

PURGE DATA. Discharge: ~~4.6~~ (JV) 5.5 sec Refill: 6.0 sec Pressure: 45 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 524 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,152 mL prior to first reading | | | | | | | | |
| 1555 | 2500 | 17.2 | 6.65 | 2350 | 27.81 | 0.24 | 13 | WL: 18.29 ; clear |
| 1559 | 3600 | 17.1 | 6.68 | 2080 | 7.17 | 0.23 | 56 | WL: 19.31 ; clear |
| 1603 | 5250 | 17.3 | 6.69 | ~~1863~~ 1903 | 7.37 | 0.20 | 102 | WL: 20.34 ; clear |
| 1607 | 6800 | 17.3 | 6.68 | 1920 | 5.22 | 0.22 | 141 | WL: 20.95 ; clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-115-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 20.95

Well Collection Sequence #: 48 of 52

Parameters: Annual: Semi-Annual: Quarterly: ✓ Monthly: Other:

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/6/2016 1609 | VOC 324 | 17.3 | 6.68 | 1920 | 5.22 | 0.22 | 141 | Clear |
| | Other 324 | | | | | | | |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 9/6/2016 1425

End of day: (Date/time) 9/6/2016 1635

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111005I

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.10 | N/A | NTU std = 0.02 | N/A | 0.36 | NTU std 0.02 |
| 10.15 | N/A | NTU std = 10.0 | N/A | 10.09 | NTU std 10.0 |
| 969.7 | N/A | NTU std = 1,000 | N/A | 976.6 | NTU std 1,000 |
| 1374 | N/A | µS std = 1,413 | N/A | 1369 | µS std = 1,413 |
| Cell Const: 0.492 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.492 | Cell Const Range: 0.45 - 0.50 |
| 6.98 | N/A | pH std = 7.00 @25.3°C | N/A | 6.81 | pH std = 7.00 @25.4°C |
| 4.29 | N/A | pH std = 4.01 @25.4°C | N/A | 4.23 | pH std = 4.01 @24.3°C |
| Slope: 1.08 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 1.07 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 28.8°C | @ Temp N/A | | @ Temp N/A | @ Temp 29.3°C | |
| 232 | N/A | ORP std = 219 @25.8°C | N/A | 279 | ORP std = 219 @25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 2,700 µS; Historical Range from May 2012 - June 2016: 1329 - 2740 µS.

pH Prediction Limits = 6.0 - 7.6 s.u.; Historical Range from May 2012 - June 2016: 6.6 - 6.88 s.u.

Well Closed and Locked?: (Y) N Full Suite Collected?: (Y) N # Bottles Collected: 4

Date: 9/6/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-116-SS
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft, msl): 478.21

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Date/Time Initiated: 8/23/2016 1531
Initial Water Level (feet): 10.35
Initial Water Level Previous Event (feet): 6.74 Jun 2016
Ground Water Elevation (ft, msl): 467.86
Ground Water Elevation Previous Event (ft, msl): 471.47
Well Total Depth (feet): top of plug = 142.64
Well Total Depth Previous Event (feet): Top of pump = 142.74 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 8,400 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): 27.15
Date/Time Completed: 8/23/2016 1553

HHT
111

PURGE DATA: Discharge: 5.7 sec Refill: 6.0 sec Pressure: 77 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 382 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3500 mL prior to first reading | | | | | | | | |
| 1541 | 3500 | 25.4 | 7.27 | 546 | 13.63 | 0.35 | -12 | WL: 17.99; clear |
| 1545 | 5100 | 25.2 | 7.25 | 550 | 6.49 | 0.29 | Ø | WL: 20.87; clear |
| 1549 | 6800 | 25.0 | 7.24 | 558 | 5.35 | 0.24 | 8 | WL: 24.06; clear |
| 1553 | 8400 | 24.8 | 7.21 | 551 | 4.54 | 0.22 | 6 | WL: 27.15; clear |
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FEEZOR ENGINEERING INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-116-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 27.15

Well Collection Sequence #: 6 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/23/2016 1555 | VOC 382 Other 382 | 24.8 | 7.21 | 551 | 4.54 | 0.22 | 6 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/23/2016 1330 - D.O. 0705_others

End of day: (Date/time) 8/23/2016 1600

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111600SI

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.01 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.09 | N/A | NTU std = 10.0 | N/A | 11.17 | NTU std 10.0 |
| 992.6 | N/A | NTU std = 1,000 | N/A | 1063 | NTU std 1,000 |
| 1426 | N/A | µS std = 1,413 | N/A | 1399 | µS std = 1,413 |
| Cell Const 0.490 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.490 | Cell Const Range: 0.45 - 0.50 |
| 7.02 | N/A | pH std = 7.02 @ 19.5 °C | N/A | 6.97 | pH std = 7.00 @ 25.7 °C |
| 4.00 | N/A | pH std = 4.00 @ 19.5 °C | N/A | 4.04 | pH std = 4.01 @ 25.5 °C |
| Slope 1.17 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 0.97 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 25.6°C | @ Temp N/A | | @ Temp N/A | @ Temp 25.1°C | |
| 222 | N/A | ORP std = 228 @ 19.4 °C | N/A | 208 | ORP std = 219 @ 25.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 75°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: Y / N Full Suite Collected? Y / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collects split - App 1 & Trip

Date: 8/23/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-200-SS

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft. msl): 485.57

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 8/26/2016 1404

Casing Diameter (inches): 2

Initial Water Level (feet): 20.75

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 20.50 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 464.82

Total Volume Purged (mL): 7,750 mL

Ground Water Elevation Previous Event (ft. msl): 465.07

Purged Dry? Yes ____ No ✓

Well Total Depth (feet): 99.30

Water Level after Purge (feet): NA

Well Total Depth Previous Event (feet): 99.50 Jun 2016

Date/Time Completed: 8/26/2016 1425

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 369 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,500 mL prior to first reading | | | | | | | | |
| 1413 | 3,500 | 19.4 | 6.28 | 2750 | 107.0 | 1.00 | 147 | Gray, cloudy |
| 1417 | 4750 | 19.3 | 6.29 | 2760 | 78.27 | 0.84 | 170 | Clear |
| 1421 | 6100 | 19.2 | 6.29 | 2760 | 54.82 | 0.72 | 191 | Clear |
| 1425 | 7750 | 19.2 | 6.29 | 2770 | 51.64 | 0.64 | 210 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-200-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 21.23

Well Collection Sequence #: 22 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/26/2016 1427 | VOC: 369 Other: 369 | 19.2 | 6.29 | 2770 | 51.64 | 0.64 | 210 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/26/2016 0700

End of day: (Date/time) 8/26/2016 1515

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111 0051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.02 | NTU std 0.02 |
| 10.03 | N/A | NTU std = 10.0 | N/A | 11.09 | NTU std 10.0 |
| 996.3 | N/A | NTU std = 1,000 | N/A | 1038 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1397 | µS std = 1,413 |
| Cell Const: 0.481 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.4 °C | N/A | 7.00 | pH std = 7.01 @ 23.3 °C |
| 4.16 | N/A | pH std = 4.01 @ 23.3 °C | N/A | 4.17 | pH std = 4.01 @ 23.4 °C |
| Slope: 0.86 @ Temp 22.9 °C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 1.06 @ Temp 26.1 °C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 214 | N/A | ORP std = 221 @ 23.2 °C | N/A | 214 | ORP std = 221 @ 23.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collects split - MO App I & tritium

Date: 8/26/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-201A-SS

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft. msl): 48[illegible].20

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 8/24/2016 1357

Casing Diameter (inches): 2

Initial Water Level (feet): 10.51

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 9.64 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 470.05

Total Volume Purged (mL): 5,600 mL

Ground Water Elevation Previous Event (ft. msl 470.56

Purged Dry?: Yes ____ No ✓

Well Total Depth (feet): Top of Pump = 86.34

Water Level after Purge (feet): 22.57

Well Total Depth Previous Event (feet): Top of pump = 86.10 Jun 2016

Date/Time Completed: 8/24/2016 1049

PURGE DATA Discharge: 4.5 sec Refill: 6.0 sec Pressure 50 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell

Average Purge Rate: 311 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,000 mL prior to first reading | | | | | | | | |
| 1357 | 2000 | 18.5 | 7.19 | 779 | 6.45 | 0.00 | 240 | WL: 15.01; clear |
| 1401 | 3000 | 18.7 | 7.19 | 780 | 5.43 | 0.00 | 32 | WL: ~~17.60~~ 17.10; clear |
| 1405 | 4400 | 18.6 | 7.20 | 776 | 3.63 | 0.30 | 39 | WL: 19.72; clear |
| 1409 | 5600 | 18.4 | 7.20 | 766 | 5.28 | 0.55 | 44 | WL: 22.57; clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-201A-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 22.57

Well Collection Sequence #: 11 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ✓ Monthly: ___ Other: ✓

MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/24/2016 1411 | VOC 311 Other 311 | 18.4 | 7.20 | 766 | 5.28 | 0.55 | 44 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/24/2016 0705

End of day: (Date/time) 8/24/2016 1615

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.04 | NTU std 0.02 |
| 10.01 | N/A | NTU std = 10.0 | N/A | 10.17 | NTU std 10.0 |
| 998.1 | N/A | NTU std = 1,000 | N/A | 1000 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1388 | µS std = 1,413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.3 °C | N/A | 7.03 | pH std = 7.01 @ 25.3 °C |
| 4.01 | N/A | pH std = 4.01 @ 23.5 °C | N/A | 4.05 | pH std = 4.01 @ 25.1 °C |
| Slope: 0.83 @ Temp 23.1°C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 0.86 @ Temp 26.4°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 212 | N/A | ORP std = 221 @ 23.3 °C | N/A | 208 | ORP std = 220 @ 25.4 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Mostly Cloudy, Breezy, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 970 µS: Historical Range from May 2012 - June 2016: 772 - 856 µS.

pH Prediction Limits = 6.4 - 8.5 s.u.; Historical Range from May 2012 - June 2016: 6.93 - 7.21 s.u.

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pack - 2 Eberhard

MDNR collected split - MO App I & trizium

Date: 8/24/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-202-SS
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft, msl): 481.02

PURGE INFORMATION:

Method of Well Purge: Bladder Pump
Date/Time Initiated: 8/24/2016 0817
Initial Water Level (feet): 11.42
Initial Water Level Previous Event (feet): 11.23 Jun 2016
Ground Water Elevation (ft, msl): 469.60
Ground Water Elevation Previous Event (ft, msl): 469.79
Well Total Depth (feet): Top of Pump = 85.22
Well Total Depth Previous Event (feet): Top of pump = 85.13 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 4,900 mL
Purged Dry? Yes No ✓ (1)
Water Level after Purge (feet): ~~N/A~~ 11.52 (2)
Date/Time Completed: 8/24/2016 0832

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 45 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 245 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$* (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2000 mL prior to first reading | | | | | | | | |
| 0820 | 2000 | 17.9 | 6.58 | 6200 | 21.16 | 0.95 | -174 | WL: 11.43; clear |
| 0824 | 2750 | 17.7 | 6.59 | 6240 | 31.73 | 9.96 | -162 | WL: 11.46; clear |
| 0828 | 3700 | 17.4 | 6.60 | 6280 | 18.68 | 16.58 | -165 | WL: 11.50; clear |
| 0832 | 4900 | 17.4 | 6.60 | 6270 | 14.67 | 15.69 | -156 | WL: 11.52; clear |
| | | | | | | | | |
| | * | D.O. Sensor Apparently Malfunctioning | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-202-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 11.52

Well Collection Sequence #: 7 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓

MDNR Split Sampling

SAMPLE DATA: * D.O. Sensor apparently malfunctioning

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) * | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/24/2016 0834 | VOC: 245 Other: 245 | 17.4 | 6.60 | 6270 | 14.67 | 15.69 | -156 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/24/2016 0705

End of day: (Date/time) 8/24/2016 1615

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.04 | NTU std 0.02 |
| 10.01 | N/A | NTU std = 10.0 | N/A | 10.17 | NTU std 10.0 |
| 998.1 | N/A | NTU std = 1,000 | N/A | 1000 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1388 | µS std = 1,413 |
| Cell Const: 0.481 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.3 °C | N/A | 7.03 | pH std = 7.01 @ 25.3 °C |
| 4.01 | N/A | pH std = 4.01 @ 23.5 °C | N/A | 4.05 | pH std = 4.01 @ 25.1 °C |
| Slope: 0.83 @ Temp 23.1°C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 0.86 @ Temp 26.4 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 212 | N/A | ORP std = 221 @ 23.3 °C | N/A | 208 | ORP std = 220 @ 25.4 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Mostly Cloudy, 75°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collects split - MO App I & tritium

Date: 8/24/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-203-SS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): 486.44

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/29/2016 1526

Casing Diameter (inches): 2

Initial Water Level (feet): 25.10

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 24.59 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 461.34

Total Volume Purged (mL): 9,300 mL

Ground Water Elevation Previous Event (ft. msl): 461.85

Purged Dry? Yes No ✓

Well Total Depth (feet): 111.10

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 111.34 Jun 2016

Date/Time Completed: 8/29/2016 1605

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 291 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 4,000 mL prior to first reading | | | | | | | | |
| 1544 | 4,000 | 21.1 | 7.19 | 768 | 22.83 | 0.62 | -93 | Clear |
| 1548 | 5,170 | 19.7 | 7.20 | 765 | 16.42 | 0.53 | -91 | Clear |
| 1552 | 6450 | 18.8 | 7.21 | 752 | 16.67 | 0.45 | -90 | Clear |
| 1556 | 7900 | 18.7 | 7.22 | 745 | 11.09 | 0.37 | -90 | Clear |
| 1600 | 9300 | 19.1 | 7.21 | 742 | 11.20 | 0.32 | -90 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: PZ-203-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 25.79

Well Collection Sequence #: 28 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/29/2016 1602 | Cell 291 / Other 291 | 19.1 | 7.21 | 742 | 11.26 | 0.32 | -90 | Clear |

INSTRUMENT CALIBRATION DATA

Start of day (Date/Time): 8/29/2016 0705

End of day (Date/time): 8/29/2016 1656

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.89 | N/A | NTU std = 10.0 | N/A | 10.02 | NTU std 10.0 |
| 992.2 | N/A | NTU std = 1,000 | N/A | 1020 | NTU std 1,000 |
| 1414 | N/A | µS std = 1,413 | N/A | 1398 | µS std = 1,413 |
| Cell Const 0.486 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.486 | Cell Const Range 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 24.6 °C | N/A | 7.01 | pH std = 7.00 @ 25.6 °C |
| 4.17 | N/A | pH std = 4.01 @ 24.7 °C | N/A | 4.20 | pH std = 4.01 @ 25.0 °C |
| Slope 0.89 @ Temp 24.2°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.86 @ Temp 26.7°C | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| 216 | N/A | ORP std = 220 @ 24.6 °C | N/A | 211 | ORP std = 220 @ 25.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: ~~PSE~~ P. Cloudy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS

Well Closed and Locked?: (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace, 1 Eberline

MDNR collected split-MO App I & tritium

Date: 8/29/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-204A-SS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

*pH/cond meter malfunction - reboot meter @ 1301

Top of Casing (ft. msl): 462.60

PURGE INFORMATION 3400 mL then resume @ 1301 to 5,000 mL

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 9/1/2016 1231

Casing Diameter (inches): 2

Initial Water Level (feet): 4.45

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 4.24 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 458.15

Total Volume Purged (mL): 14,000 mL

Ground Water Elevation Previous Event (ft. msl): 458.36

Purged Dry?: Yes No ✓

LHT Well Total Depth (feet): 84.33

Water Level after Purge (feet): N/A

LHT Well Total Depth Previous Event (feet): 84.23 Jun 2016

Date/Time Completed: 9/1/2016 1329

111

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 379 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 5000 mL prior to first reading | | | | | | | | |
| 1305 | 5200 | 20.9 | 6.36 | 6290 | 266.4 | 1.59 | 54 | Tan |
| 1309 | 6300 | 20.2 | 6.33 | 6040 | 136.4 | 0.84 | -23 | Tan to Clear |
| 1313 | 7650 | 19.8 | 6.34 | 5590 | 63.24 | 0.56 | -80 | Clear |
| 1317 | 9300 | 19.6 | 6.35 | 5220 | 32.52 | 0.55 | 101 | Clear |
| 1321 | 10900 | 19.4 | 6.30 | 5000 | 21.67 | 0.54 | 99 | Clear |
| 1325 | 12500 | 19.3 | 6.33 | 4890 | 15.52 | 0.53 | 73 | Clear |
| 1329 | 14000 | 19.2 | 6.37 | 4840 | 14.69 | 0.56 | 170 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-204A-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 5.12

Well Collection Sequence #: 39 of 52

Parameters: Annual: Semi-Annual: Quarterly: Monthly: Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/2016 1331 | VOC 379 / Other 379 | 19.2 | 6.37 | 4840 | 14.69 | 0.56 | 170 | Clear |

INSTRUMENT CALIBRATION DATA:

| | Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|---|
| | Start of day | End of day | | Start of day | End of day | |
| Start of day: (Date/Time) 9/1/2016 0645 | 0.02 | N/A | NTU std = 0.02 | N/A | 0.23 | NTU std 0.02 |
| End of day: (Date/time) 9/1/2016 1625 | 9.88 | N/A | NTU std = 10.0 | N/A | 11.20 | NTU std 10.0 |
| Turbidity Meter: HF MicroTPW | 988 | N/A | NTU std = 1,000 | N/A | 1023 | NTU std 1,000 |
| Turb Meter S/N: #20111005I | 1426 | N/A | µS std = 1,413 | N/A | 1368 | µS std = 1,413 |
| pH / Sp. Cond. Meter: WTW pH/Cond 3400i | Cell Const: 0.488 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.475 | Cell Const Range: 0.45 - 0.50 |
| | 7.02 | N/A | pH std = 7.02 @18.8 °C | N/A | 6.90 | pH std = 7.02 @19.8 °C |
| pH / Sp. Cond. Meter S/N: #09200256 | 4.17 | N/A | pH std = 4.00 @19.6 °C | N/A | 4.90 | pH std = 4.00 @20.5 °C |
| ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i | Slope: 0.67 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 0.61 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| | @ Temp 18.6 °C | @ Temp N/A | | @ Temp N/A | @ Temp 20.8 °C | |
| ORP / Diss $O_2$ Meter S/N: #10201689 | 237 | N/A | ORP std = 224 @19.3 °C | N/A | 227 | ORP std = 223 @19.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Breezy, 75°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) / N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Pace 1 Eberline

MDNR collected split - No App I & trip

Date 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-205-AS

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft, msl): 464.77

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/30/2016 0827

Casing Diameter (inches): 2

Initial Water Level (feet): 30.89

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 30.33 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 433.88

Total Volume Purged (mL): 5,500 mL

Ground Water Elevation Previous Event (ft, msl): 434.44

Purged Dry? Yes No ✓

Well Total Depth (feet): 53.88

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 54.03 Jun 2016

Date/Time Completed: 8/30/2016 0843

1 of 4

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 347 mL / min * Unable to lower purge rate and still obtain water

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1000 mL prior to first reading | | | | | | | | |
| 0831 | 1000 | 22.5 | 6.67 | 5160 | 328.5 | 0.22 | 23 | LFG odor, cloudy gray |
| 0835 | 2400 | 21.8 | 6.67 | 4690 | 200.8 | 0.25 | 65 | LFG odor, cloudy gray |
| 0839 | 4000 | 21.6 | 6.68 | 4560 | 201.3 | 0.15 | 88 | LFG odor; clear to cloudy |
| 0843 | 5500 | 21.7 | 6.68 | 4500 | 278.7 | 0.12 | 106 | LFG odor; clear to cloudy |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-205-AS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 47.50

Well Collection Sequence #: 29 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/30/2016 0845 | VOC: 347 Other: 347 | 21.7 | 6.68 | 4500 | 278.7 | 0.12 | 106 | LFG odor; clear to cloudy |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/30/2016 0700

End of day: (Date/time) 8/30/2016 1505

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111005L

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 10.00 | N/A | NTU std = 10.0 | N/A | 10.75 | NTU std 10.0 |
| 1003 | N/A | NTU std = 1,000 | N/A | 1099 | NTU std 1,000 |
| 1415 | N/A | µS std = 1,413 | N/A | 1393 | µS std = 1.413 |
| Cell Const: 0.482 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.482 | Cell Const Range: 0.45 - 0.50 |
| 7.03 | N/A | pH std = 7.00 @ 23.8 °C | N/A | 7.01 | pH std = 7.00 @ 25.4 °C |
| 4.19 | N/A | pH std = 4.01 @ 23.6 °C | N/A | 4.17 | pH std = 4.01 @ 25.2 °C |
| Slope: 0.86 | Slope: N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope: N/A | Slope: 0.83 | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| @ Temp 23.3°C | @ Temp N/A | | @ Temp N/A | @ Temp 27.4°C | |
| 214 | N/A | ORP std = 221 @ 23.9 °C | N/A | 210 | ORP std = 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 80°F

Sample Characteristics: LFG odor; clear to cloudy

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace 1 Eberline

MDNR collected split - Re App I & trip

Date: 8/30/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-205-SS
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft. msl): 465.83

PURGE INFORMATION:

Method of Well Purge: Bladder Pump
Date/Time Initiated: 9/7/2016 1227
Initial Water Level (feet): 30.04
Initial Water Level Previous Event (feet): 29.05 Jun 2016
Ground Water Elevation (ft. msl): 435.79
Ground Water Elevation Previous Event (ft. msl): 436.78
Well Total Depth (feet): Top of pump = 93.00
Well Total Depth Previous Event (feet): Top of pump = 93.02 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 6,100 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): 42.34
Date/Time Completed: 9/7/2016 1248

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 50 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: ~~2500~~ 291 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 2,500 mL prior to first reading | | | | | | | | |
| 1236 | 2,500 | 22.2 | 7.02 | 783 | 11.62 | 1.27 | 172 | WL: 35.40; clear |
| 1240 | 3550 | 21.8 | 7.00 | 779 | 9.26 | 1.17 | 134 | WL: 37.10; clear |
| 1244 | 4,750 | 21.5 | 6.98 | 778 | 7.58 | 1.12 | 127 | WL: 39.44; clear |
| 1248 | 6,100 | 21.6 | 6.96 | 772 | 6.62 | 1.09 | 114 | WL: 42.34; clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-205-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 42.34

Well Collection Sequence #: 52 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ✓ Monthly: ___ Other: ___

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/7/2016 1250 | VOC: 291 Other: 291 | 21.6 | 6.96 | 972 | 6.69 | 1.09 | 114 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 9/7/2016 0720

End of day: (Date/time) 9/7/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.96 | N/A | NTU std = 10.0 | N/A | 9.97 | NTU std 10.0 |
| 991.0 | N/A | NTU std = 1,000 | N/A | 1030 | NTU std 1,000 |
| 1411 | N/A | µS std = 1,413 | N/A | 1380 | µS std = 1,413 |
| Cell Const: 0.485 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.485 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @25.2 °C | N/A | 6.90 | pH std = 7.00 @25.6 °C |
| 4.12 | N/A | pH std = 4.01 @24.9 °C | N/A | 4.22 | pH std = 4.01 @25.8 °C |
| Slope: 0.98 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 1.04 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 24.9°C | @ Temp N/A | | @ Temp N/A | @ Temp 51.0°C | |
| 255 | N/A | ORP std = 220 @25.2 °C | N/A | 220 | ORP std = 219 @26.1 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, Breezy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 1,300 µS; Historical Range from May 2012 - June 2016: 762 - 936 µS.

pH Prediction Limits = 6.5 - 7.9 s.u.; Historical Range from May 2012 - June 2016: 6.89 - 7.27 s.u.

Well Closed and Locked? (Y) N Full Suite Collected? (Y) / N # Bottles Collected: 7

Date: 9/7/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-206-SS
Sampler(s): Michael Spurgeon
Jonathan Williamson
Top of Casing (ft. msl): 463.42

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Date/Time Initiated: 8/29/2016 0815
Initial Water Level (feet): 28.19
Initial Water Level Previous Event (feet): 27.20 Jun 2016
Ground Water Elevation (ft. msl): 435.23
Ground Water Elevation Previous Event (ft. msl): 436.22
Well Total Depth (feet): 129.74
Well Total Depth Previous Event (feet): 129.82 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 8250 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): N/A
Date/Time Completed: 8/29/2016 0849

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 243 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 4,520 mL prior to first reading | | | | | | | | |
| 0837 | 4,520 | 22.0 | 6.90 | 1403 | 627.8 | 1.07 | 159 | Gray |
| 0841 | 5,650 | 21.4 | 6.92 | 1389 | 464.5 | 0.94 | 169 | Gray |
| 0845 | 6850 | 21.0 | 6.92 | 1389 | 243.5 | 0.76 | 192 | Gray |
| 0849 | 8250 | 21.2 | 6.93 | 1397 | 73.43 | 0.68 | 191 | Gray to Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-206-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 40.25

Well Collection Sequence #: 23 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/29/2016 0851 | VOC 243 / Other 243 | 21.2 | 6.93 | 1397 | 73.43 | 0.68 | 191 | Gray to clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/29/2016 0705

End of day: (Date/time) 8/29/2016 1650

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.89 | N/A | NTU std = 10.0 | N/A | 10.02 | NTU std 10.0 |
| 992.2 | N/A | NTU std = 1,000 | N/A | 1020 | NTU std 1,000 |
| 1414 | N/A | µS std = 1,413 | N/A | 1398 | µS std = 1,413 |
| Cell Const: 0.486 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.486 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 24.6 °C | N/A | 7.01 | pH std = 7.00 @ 25.6 °C |
| 4.17 | N/A | pH std = 4.01 @ 24.7 °C | N/A | 4.20 | pH std = 4.01 @ 25.0 °C |
| Slope: 0.89 @ Temp 24.2 °C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 0.86 @ Temp 26.7 °C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 216 | N/A | ORP std = 220 @ 24.6 °C | N/A | 211 | ORP std = 220 @ 25.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 80°F

Sample Characteristics: Gray to clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected?: (Y) N # Bottles Collected: 8 - 7 Pace, 1 Eberline

MDNR collected split - MO App I & tritium

Date: 8/29/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater
Sample Point ID: PZ-207-AS
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft, msl): 462.49

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Dedicated Equipment: Yes ✓ No
Date/Time Initiated: 8/25/2016 0852
Casing Diameter (inches): 2
Initial Water Level (feet): 29.23
One Borehole Volume (gal): Not Applicable
Initial Water Level Previous Event (feet): 28.57 Jun 2016
One Borehole Volume Previous Event (gal): N/A
Ground Water Elevation (ft, msl): 433.26
Total Volume Purged (mL): 5150 mL
Ground Water Elevation Previous Event (ft, msl): 433.92
Purged Dry? Yes No ✓
Well Total Depth (feet): 38.92
Water Level after Purge (feet): N/A
Well Total Depth Previous Event (feet): 38.95 Jun 2016
Date/Time Completed: 8/25/2016 0915

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 224 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 500 mL prior to first reading | | | | | | | | |
| 0855 | 500 | 21.5 | 6.59 | 2410 | 13.88 | 2.08 | 26 | Clear |
| 0859 | 1700 | 20.2 | 6.58 | 2350 | 17.90 | 2.60 | -84 | Clear |
| 0903 | 2800 | 20.0 | 6.59 | 2420 | 13.66 | 1.13 | -88 | Clear |
| 0907 | 3850 | 20.8 | 6.57 | 2450 | 9.28 | 1.43 | +86 | Clear |
| 0911 | 4550 | 21.2 | 6.59 | 2430 | 9.06 | 1.72 | +125 | Clear |
| 0915 | 5150 | 21.1 | 6.60 | 2440 | 6.95 | 2.22 | +155 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-207-AS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 29.15

Well Collection Sequence # 12 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/25/2016 0917 | VOC 224 / Other 224 | 21.1 | 6.60 | 2440 | 0.95 | 2.22 | 155 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/25/2016 0635

End of day: (Date/time) 8/25/2016 1510

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 1020 1089

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.20 | NTU std 0.02 |
| 10.12 | N/A | NTU std = 10.0 | N/A | 10.26 | NTU std 10.0 |
| 996.7 | N/A | NTU std = 1.000 | N/A | 1003 | NTU std 1.000 |
| 1414 | N/A | µS std = 1.413 | N/A | 1394 | µS std = 1.413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 23.9 °C | N/A | 6.99 | pH std = 7.00 @ 24.6 °C |
| 4.16 | N/A | pH std = 4.01 @ 24.6 °C | N/A | 4.16 | pH std = 4.01 @ 24.5 °C |
| Slope 0.86 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 1.19 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 23.8 °C | @ Temp N/A | | @ Temp N/A | @ Temp 27.3 °C | |
| 211 | N/A | ORP std = 220 @ 24.5 °C | N/A | 211 | ORP std = 220 @ 24.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? Y / N Full Suite Collected? Y N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR Collected split - No App I & tritium

Date: 8/25/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-208-SS
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft. msl): 474.19

PURGE INFORMATION:

Method of Well Purge: Waterra Pump
Date/Time Initiated: 9/6/2016 1019
Initial Water Level (feet): 19.80
Initial Water Level Previous Event (feet): 19.40 Jun 2016
Ground Water Elevation (ft. msl): 454.39
Ground Water Elevation Previous Event (ft. msl): 454.79
Well Total Depth (feet): 100.38
Well Total Depth Previous Event (feet): 100.35 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 9,550 mL
Purged Dry?: Yes No ✓
Water Level after Purge (feet): NA
Date/Time Completed: 9/6/2016 1047

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 341 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 3,500 mL prior to first reading | | | | | | | | |
| 1027 | 3500 | 19.7 | 6.84 | 1388 | 49.17 | 1.06 | 33 | Clear |
| 1031 | 5000 | 19.8 | 6.76 | 1395 | 30.89 | 1.39 | 144 | Clear |
| 1035 | 6250 | 19.9 | 6.79 | 1304 | 20.59 | 1.39 | 11 | Clear |
| 1039 | 7450 | 20.5 | 6.84 | 1198 | 13.96 | 1.25 | -16 | Clear |
| 1043 | 8550 | 20.4 | 6.89 | 1134 | 9.51 | 0.99 | -23 | Clear |
| 1047 | 9550 | 20.6 | 6.93 | 1106 | 6.87 | 0.87 | -33 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-208-SS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ (2) No ✓

Water Level After Sampling (ft): 44.03

Well Collection Sequence #: 45. of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/6/2016 1049 | VOC: 341 Other: 341 | 20.6 | 6.93 | 1106 | 6.87 | 0.87 | -33 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 9/6/2016 0715

End of day (Date/time) 9/6/2016 1425

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111005

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200258

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event | | | | Sampling Event | | | |
|---|---|---|---|---|---|---|---|
| Start of day | End of day | | | Start of day | End of day | | |
| 0.02 | N/A | NTU std = | 0.02 | N/A | 0.10 | NTU std | 0.02 |
| 9.95 | N/A | NTU std = | 10.0 | N/A | 10.15 | NTU std | 10.0 |
| 997.5 | N/A | NTU std = | 1.000 | N/A | 969.7 | NTU std | 1.000 |
| 1413 | N/A | µS std = | 1.413 | N/A | 1374 | µS std = | 1.413 |
| Cell Const 0.490 | Cell Const N/A | Cell Const Range: | 0.45 - 0.50 | Cell Const N/A | Cell Const 0.492 | Cell Const Range: | 0.45 - 0.50 |
| 7.00 | N/A | pH std = | 7.00 @ 24.3 °C | N/A | 6.98 | pH std = | 7.00 @ 25.3 °C |
| 4.4 | N/A | pH std = | 4.01 @ 24.1 °C | N/A | 4.25 | pH std = | 4.01 @ 25.4 °C |
| Slope 1.03 | Slope N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | | Slope N/A | Slope 1.08 | Dissolved $O_2$ Slope Range 0.6 to 1.25 | |
| @ Temp 24.4°C | @ Temp N/A | | | @ Temp N/A | @ Temp 28.8°C | | |
| 227 | N/A | ORP std = | 220 @ 24.5 °C | N/A | 232 | ORP std = | 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, Breezy, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 4 Pace - 1 Eberline

MDNR collected split - MO App I & III

Date: 9/6/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-212 SD
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft. msl): 482.72

PURGE INFORMATION

Method of Well Purge: Bladder Pump
Date/Time Initiated: 8/24/2016 1258
Initial Water Level (feet): 13.97
Initial Water Level Previous Event (feet): 13.82 Jun 2016
Ground Water Elevation (ft. msl): 468.75
Ground Water Elevation Previous Event (ft. msl): 468.90
Well Total Depth (feet): top of pump = 92.80
Well Total Depth Previous Event (feet): Top of pump = 92.89 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 9,400 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): 31.11
Date/Time Completed: 8/24/2016 1324

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 50 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 336 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = umhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 5,500 mL prior to first reading | | | | | | | | |
| 1312 | 5,500 | 16.6 | 7.43 | 1066 | 0.21 | 0.35 | -132 | WL: 29.74 |
| 1316 | 6,600 | 16.6 | 7.43 | 1060 | 4.71 | 0.25 | -78 | WL: 26.51 |
| 1320 | 8,000 | 16.7 | 7.42 | 1064 | 60.92 | 0.09 | 49 | WL: 28.94 |
| 1324 | 9,400 | 16.7 | 7.43 | 1072 | 5.67 | 0.00 | 87 | WL: 31.11 |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-212-SD

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): 31.11

Well Collection Sequence #: 10 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/24/16 1326 | VOC 330 Other 330 | 16.7 | 7.43 | 1072 | 5.67 | 0.00 | 87 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/24/2016 0705

End of day: (Date/time) 8/24/2016 1415

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111005I

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201684

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.04 | NTU std = 0.02 |
| 10.01 | N/A | NTU std = 10.0 | N/A | 10.17 | NTU std = 10.0 |
| 998.1 | N/A | NTU std = 1.000 | N/A | 1000 | NTU std = 1.000 |
| 1412 | N/A | µS std = 1.413 | N/A | 1388 | µS std = 1.413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @23.3 °C | N/A | 7.03 | pH std = 7.01 @25.3 °C |
| 4.01 | N/A | pH std = 4.01 @23.5 °C | N/A | 4.05 | pH std = 4.01 @25.1 °C |
| Slope 0.83 | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope N/A | Slope 0.86 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 23.1 °C | @ Temp N/A | | @ Temp N/A | @ Temp 26.4 °C | |
| 212 | N/A | ORP std = 221 @23.3 °C | N/A | 208 | ORP std = 220 @25.4 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Mostly Cloudy, Breezy (S), 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 / 2 Pace / 1 Eberline

MDNR collects split - MO App I + tritium

Date: 8/24/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-302-Al

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft, msl): 451.02

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/26/2016 1158

Casing Diameter (inches): 2

Initial Water Level (feet): 18.59

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 17.83 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 432.43

Total Volume Purged (mL): 6,000 mL

Ground Water Elevation Previous Event (ft, msl): 433.19

Purged Dry? Yes No ✓

Well Total Depth (feet): 44.09

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 44.10 Jun 2016

Date/Time Completed: 8/26/2016 1224

LHT

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 250 mL / min

Difficulty maintaining consistent flow rate

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,500 mL prior to first reading | | | | | | | | |
| 1206 | 1500 | 19.0 | 6.71 | 1445 | 130.5 | 1.06 | 229 | Cloudy |
| 1210 | 2200 | 19.4 | 6.65 | 1464 | 37.92 | 1.17 | 246 | Clear |
| 1214 | 3250 | 18.7 | 6.65 | 1463 | 22.83 | 0.92 | 260 | Clear |
| 1218 | 4650 | 18.5 | 6.64 | 1470 | 19.27 | 0.81 | 273 | Clear |
| 1222 | 6000 | 18.5 | 6.65 | 1479 | 20.11 | 0.71 | 288 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-302-AI

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 18.52

Well Collection Sequence #: 21 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/26/2016 1224 | VOC: 250 Other: 250 | 18.5 | 6.65 | 1479 | 20.11 | 6.71 | 288 | Clee |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/26/2016 0700

End of day: (Date/time) 8/26/2016 1515

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200856

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.02 | NTU std 0.02 |
| 10.03 | N/A | NTU std = 10.0 | N/A | 11.09 | NTU std 10.0 |
| 996.3 | N/A | NTU std = 1,000 | N/A | 1038 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1397 | µS std = 1,413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.4 °C | N/A | 7.00 | pH std = 7.01 @ 23.3 °C |
| 4.16 | N/A | pH std = 4.01 @ 23.3 °C | N/A | 4.17 | pH std = 4.01 @ 23.4 °C |
| Slope: 0.86 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 1.06 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 22.9°C | @ Temp N/A | | @ Temp N/A | @ Temp 26.1°C | |
| 214 | N/A | ORP std = 221 @ 23.2 °C | N/A | 214 | ORP std = 221 @ 23.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collected split - MO App I & tritium

Date: 8/26/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-302-AS

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft, msl): 451.33

PURGE INFORMATION

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 8/31/2016 1503

Casing Diameter (inches): 2

Initial Water Level (feet): 18.76

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 17.58 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 432.57

Total Volume Purged (mL): 4,450 mL

Ground Water Elevation Previous Event (ft, msl): 433.75

Purged Dry?: Yes ✓ No ____

Well Total Depth (feet): 24.51

Water Level after Purge (feet): Dry @ Bottom of Well

Well Total Depth Previous Event (feet): 24.50 Jun 2016

Date/Time Completed: 8/31/2016 1517

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 318 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1000 mL prior to first reading | | | | | | | | |
| 1506 | 1000 | 19.0 | 6.83 | 1664 | 177.9 | 0.76 | 87 | Cloudy |
| 1510 | 2000 | 18.8 | 6.68 | 1680 | 150.3 | 0.62 | 121 | Cloudy |
| 1514 | 3400 | 18.5 | 6.64 | 1690 | 125.6 | 0.49 | 157 | Cloudy |
| 1517 | Well purged dry @ 4,450 mL - allow to recharge | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Peristaltic

Sample Point ID: PZ-302-AS

Sampling Method: ~~Waterra~~ Pump

Dedicated: Yes ✓ (D) No ✓

Water Level ~~After Sampling~~ (ft): 18.81 (S)

Well Collection Sequence #: 40 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/2016 1355 | VOC: NA | 24.4 | 6.58 | 1652 | 580.1 | 2.72 | -79 | Gray |
| | Other NA | | | | | | | |

INSTRUMENT CALIBRATION DATA:

| | Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|---|
| Start of day: (Date/Time) | 8/31/2016 0700 | 9/1/2016 0645 | | | | |
| End of day: (Date/time) | 8/31/2016 1025 | 9/1/2016 1625 | | | | |
| | 0.02 | 0.43 | NTU std = 0.02 | 0.02 | 0.23 | NTU std 0.02 |
| | 9.83 | 11.45 | NTU std = 10.0 | 9.88 | 11.20 | NTU std 10.0 |
| | 996.9 | 1001 | NTU std = 1,000 | 988.3 | 1023 | NTU std 1,000 |
| | 1421 | 1381 | µS std = 1,413 | 1426 | 1368 | µS std = 1,413 |
| | Cell Const: 0.482 | Cell Const: 0.482 | Cell Const Range: 0.45 - 0.50 | Cell Const: 0.483 | Cell Const: 0.475 | Cell Const Range: 0.45 - 0.50 |
| | 7.01 | 6.91 | pH std = AM 7.01 @21.3 PM 7.02 @21.4 °C | 7.02 | 6.90 | pH std AM 7.02 @ 18.8 PM 7.00 @ 19.8 °C |
| | 4.16 | 4.23 | pH std AM 4.00 @21.4 PM 4.00 @20.8 °C | 4.17 | 4.90 | pH std AM 4.00 @18.6 PM 4.00 @ 20.5 °C |
| | Slope: 0.86 | Slope: 0.69 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: 0.67 | Slope: 0.61 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| | @ Temp 20.6°C | @ Temp 21.4°C | | @ Temp 18.6°C | @ Temp 20.8°C | |
| | 224 | 222 | ORP std = AM 222 @21.3 PM 223 @20.6 °C | 237 | 227 | ORP std = AM 224 @ 19.3 PM 223 @ 19.7 °C |

Start of day: 8/31/2016 0700 | 9/1/2016 0645

End of day: 8/31/2016 1025 | 9/1/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005I

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200S2

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Breezy, 75°F

Sample Characteristics: Gray

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 1 Field Dup

MDNR collected split - MW Appx I ; rmb

Date: 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-303-AS

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): 453.08

PURGE INFORMATION:

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 9/6/2016 1158

Casing Diameter (inches): 2

Initial Water Level (feet): 21.90

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 21.01 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 431.18

Total Volume Purged (mL): 3,900 mL

Ground Water Elevation Previous Event (ft. msl): 432.07

Purged Dry? Yes No ✓

Well Total Depth (feet): 23.80

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 28.30 Jun 2016

Date/Time Completed: 6/9/2016 1215

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 205 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 500 mL prior to first reading | | | | | | | | |
| 1159 | 500 | 21.3 | 6.79 | 2080 | 83.16 | 0.54 | -102 | Gray w/ petroleum odor |
| 1203 | 1300 | 20.4 | 6.77 | 2141 | 58.93 | 0.44 | -108 | Gray w/ petroleum odor |
| 1207 | 2100 | 21.1 | 6.73 | 2040 | 71.31 | 0.31 | -113 | Gray w/ petroleum odor |
| 1211 | 3000 | 20.8 | 6.70 | 2100 | 37.54 | 0.23 | -115 | Gray w/ petroleum odor |
| 1215 | 3900 | 20.8 | 6.70 | 2110 | 37.73 | 0.25 | -116 | Gray w/ petroleum odor |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-303-AS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 22.59

Well Collection Sequence #: 46 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/6/2016 1217 | VOC 205 Other 205 | 20.8 | 6.70 | 2110 | 37.73 | 0.25 | -116 | Gray w/ petroleum odor |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 9/6/2016 0715

End of day: (Date/time) 9/6/2016 1425

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.10 | NTU std 0.02 |
| 9.95 | N/A | NTU std = 10.0 | N/A | 10.15 | NTU std 10.0 |
| 997.5 | N/A | NTU std = 1,000 | N/A | 969.7 | NTU std 1,000 |
| 1413 | N/A | µS std = 1,413 | N/A | 1374 | µS std = 1,413 |
| Cell Const: 0.492 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.492 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 24.3°C | N/A | 6.98 | pH std = 7.00 @ 25.3 °C |
| 4.11 | N/A | pH std = 4.01 @ 24.1°C | N/A | 4.29 | pH std = 4.01 @ 25.4 °C |
| Slope: 1.03 @ Temp 24.4°C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 1.08 @ Temp 28.8°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 227 | N/A | ORP std = 220 @ 24.5°C | N/A | 232 | ORP std = 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 85°F

Sample Characteristics: Gray with petroleum odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: Y / N Full Suite Collected?: Y / N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collected MO APP I & tritium split

Date: 9/6/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-304-AI

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft, msl): 453.86

PURGE INFORMATION:

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/26/2016 0905

Casing Diameter (inches): 2

Initial Water Level (feet): 21.50

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 20.76 Jun 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 432.36

Total Volume Purged (mL): 5,400 mL

Ground Water Elevation Previous Event (ft, msl): 433.10

Purged Dry? Yes No ✓

Well Total Depth (feet): 51.99

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 51.99 Jun 2016

Date/Time Completed: 8/26/2016 0922

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 318 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved O2 (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1500 mL prior to first reading | | | | | | | | |
| 0910 | 1500 | 18.6 | 6.84 | 2960 | 66.83 | 0.47 | -95 | Gray w/ black particles |
| 0914 | 2600 | 18.5 | 6.83 | 2980 | 62.74 | 0.44 | -109 | Gray w/ black particles |
| 0918 | 3950 | 18.4 | 6.83 | 2970 | 23.09 | 0.39 | -103 | Clear |
| 0922 | 5400 | 18.4 | 6.83 | 2940 | 15.94 | 0.41 | -106 | Clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-304-AI

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 21.55

Well Collection Sequence #: 19 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/26/2016 0924 | VOC 318 / Other 318 | 18.4 | 6.83 | 2940 | 15.94 | 0.41 | -106 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/26/2016 0700

End of day: (Date/time) 8/26/2016 1515

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #20111 0051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.02 | NTU std 0.02 |
| 10.03 | N/A | NTU std = 10.0 | N/A | 11.09 | NTU std 10.0 |
| 996.3 | N/A | NTU std = 1,000 | N/A | 1038 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1397 | µS std = 1,413 |
| Cell Const 0.481 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 23.4°C | N/A | 7.00 | pH std = 7.01 @ 23.3°C |
| 4.16 | N/A | pH std = 4.01 @ 23.3°C | N/A | 4.17 | pH std = 4.01 @ 23.4°C |
| Slope: 0.86 @ Temp 22.9°C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 1.06 @ Temp 26.1°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 214 | N/A | ORP std = 221 @ 23.2°C | N/A | 214 | ORP std = 221 @ 23.3°C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Mostly Cloudy, 75°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 8 - 7 Pace - 1 Eberline

MDNR collected split - Mo App I & tritium

Date: 8/26/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-304-AS
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft, msl): 453.61

PURGE INFORMATION

Method of Well Purge: Waterra Pump
Date/Time Initiated: 8/26/2016 0815
Initial Water Level (feet): 21.25
Initial Water Level Previous Event (feet): 20.46 Jun 2016
Ground Water Elevation (ft, msl): 432.36
Ground Water Elevation Previous Event (ft, msl): 433.15
Well Total Depth (feet): 29.20
Well Total Depth Previous Event (feet): 29.20 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 3,850 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): N/A
Date/Time Completed: 8/26/2016 0831

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 241 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 500 mL prior to first reading | | | | | | | | |
| 0814 | 500 | 19.6 | 6.74 | 3920 | 146.3 | 1.83 | -102 | Cloudy |
| 0823 | 1750 | 18.3 | 6.75 | 4000 | 136.3 | 0.96 | -111 | Cloudy |
| 0827 | 2800 | 18.4 | 6.75 | 4020 | 76.91 | 0.82 | -113 | Cloudy |
| 0831 | 3850 | 18.5 | 6.76 | 4030 | 57.70 | 0.70 | -114 | Cloudy |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-304-AS

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 21.23

Well Collection Sequence #: 17 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/26/2016 0833 | VOC 241 / Other 241 | 18.5 | 6.76 | 4030 | 7.58 | 0.70 | -114 | Cloudy |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 8/26/2016 0700

End of day: (Date/time) 8/26/2016 1515

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.02 | NTU std 0.02 |
| 10.03 | N/A | NTU std = 10.0 | N/A | 11.09 | NTU std 10.0 |
| 996.3 | N/A | NTU std = 1,000 | N/A | 1038 | NTU std 1,000 |
| 1417 | N/A | µS std = 1,413 | N/A | 1397 | µS std = 1,413 |
| Cell Const: 0.481 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.481 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @23.4°C | N/A | 7.00 | pH std = 7.01 @23.3 °C |
| 4.16 | N/A | pH std = 4.01 @23.3°C | N/A | 4.17 | pH std = 4.01 @23.4 °C |
| Slope: 0.86 @ Temp 22.9°C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 1.06 @ Temp 26.1°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 214 | N/A | ORP std = 221 @23.2°C | N/A | 214 | ORP std = 221 @23.3 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Mostly Cloudy, 75°F

Sample Characteristics: Cloudy

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected?: (Y) N # Bottles Collected: 8 - 7 [illegible] - 1 Eberline

* VOCs effervesced - sent up unpreserved - 7 day hold *

2 of 3 VOC vials had bubble

MDNR collected split - Mo App I & tritium

Date: 8/26/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: S-5

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): ~~466.45~~ 465.75 (DW) PVC cut to allow steel esg to ope

PURGE INFORMATION:

Method of Well Purge: Waterra Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 8/31/2016 0924

Casing Diameter (inches): 2

Initial Water Level (feet): 32.44

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 36.07 Oct 2013

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): 433.31

Total Volume Purged (mL): 5,2130 mL

Ground Water Elevation Previous Event (ft. msl): 430.38

Purged Dry? Yes No ✓

LMF Well Total Depth (feet): 43.54 *

Water Level after Purge (feet): N/A

Well Total Depth Previous Event (feet): 44.34 Oct 2013

Date/Time Completed: 8/31/2016 0939

PURGE DATA Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 352 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,000 mL prior to first reading | | | | | | | | |
| 0927 | 1000 | 19.6 | 6.98 | 5120 | >1100 | 0.08 | -161 | Black |
| 0931 | 2350 | 19.3 | 6.96 | 4920 | >1100 | 0.07 | -177 | Dark gray |
| 0935 | 3800 | 19.4 | 6.95 | 4820 | 88.07 | 0.08 | -179 | Dk gray to clear |
| 0939 | 5280 | 19.4 | 6.96 | 4780 | 86.58 | 0.08 | -183 | Dk. gray to clear |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: S-5

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 33.56

Well Collection Sequence #: 32 of 52

Parameters: Annual ___ Semi-Annual ___ Quarterly ___ Monthly ___ Other ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 8/31/2016 0943 | VOC 352 / Other 352 | 19.4 | 6.96 | 4780 | 86.56 | 0.08 | -183 | Dk gray to Clear |

INSTRUMENT CALIBRATION DATA:

Start of day (Date/Time): 8/31/2016 0700

End of day (Date/time): 8/31/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: #201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.43 | NTU std 0.02 |
| 9.83 | N/A | NTU std = 10.0 | N/A | 11.45 | NTU std 10.0 |
| 996.9 | N/A | NTU std = 1,000 | N/A | 1001 | NTU std 1,000 |
| 1421 | N/A | µS std = 1,413 | N/A | 1381 | µS std = 1,413 |
| Cell Const 0.482 | Cell Const N/A | Cell Const Range 0.45 - 0.50 | Cell Const N/A | Cell Const 0.482 | Cell Const Range 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.01 @ 21.3 °C | N/A | 6.91 | pH std = 7.02 @ 20.2 °C |
| 4.16 | N/A | pH std = 4.00 @ 21.4 °C | N/A | 4.23 | pH std = 4.00 @ 20.8 °C |
| Slope 0.86 @ Temp 20.6°C | Slope N/A @ Temp N/A | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope N/A @ Temp N/A | Slope 0.69 @ Temp 21.4°C | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| 224 | N/A | ORP std = 222 @ 21.3 °C | N/A | 222 | ORP std = 223 @ 20.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 75°F

Sample Characteristics: Dk gray to Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? Y / N Full Suite Collected? Y / N # Bottles Collected 8 - 7 Pace, 1 Eberline

MDNR collected split - Mo App I & trizin

Date: 8/31/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: S-53

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft, msl): 444.18

PURGE INFORMATION

Method of Well Purge: Peristaltic Pump

Dedicated Equipment: Yes ____ No ✓

Date/Time Initiated: 8/31/2016 1422

Casing Diameter (inches): 2

Initial Water Level (feet): 11.85

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 13.70 Sep 2013

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 432.33

Total Volume Purged (mL): 4,000 mL

Ground Water Elevation Previous Event (ft, msl): 430.48

Purged Dry? Yes ✓ No ____

Well Total Depth (feet): 18.00

Water Level after Purge (feet): Dry @ bottom of well

Well Total Depth Previous Event (feet): 17.00 Sep 2013

Date/Time Completed: 8/31/2016 1434

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 333 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (uS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 500 mL prior to first reading | | | | | | | | |
| 1424 | 500 | 19.4 | 8.42 | 793 | 42.81 | 4.95 | 169 | Clear |
| 1428 | 1850 | 19.8 | 8.17 | 780 | 12.89 | 5.34 | 72 | Clear |
| 1432 | 3250 | 20.3 | 8.07 | 735 | 13.22 | 5.27 | 82 | Clear |
| 1434 | purged dry @ ~4000 mL - allow to recharge. | | | | | | | |
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# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: S-53

Sampling Method: Peristaltic Pump

Dedicated: Yes ____ No ✓

Water Level After Sampling (ft): 11.90

Well Collection Sequence #: 41 of 52

Parameters: Annual: ___ Semi-Annual ___ Quarterly ___ Monthly ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/2016 1425 | VOC N/A Other N/A | 25.5 | 7.24 | 965 | 51.76 | 2.92 | 39 | Clear |

INSTRUMENT CALIBRATION DATA:

| | | Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|---|---|
| Start of day (Date/Time) | 8/31/2016 0700 9/1/2016 0645 | 0.02 | 0.43 | NTU std = 0.02 | 0.02 | 0.23 | NTU std 0.02 |
| End of day (Date/time) | 8/31/2016 1625 9/1/2016 1625 | 9.83 | 11.45 | NTU std = 10.0 | 9.88 | 11.20 | NTU std 10.0 |
| Turbidity Meter | HF MicroTPW | 996.9 | 1001 | NTU std = 1.000 | 988.3 | 1023 | NTU std 1.000 |
| Turb Meter S/N: | # 20110051 | 1421 | 1381 | µS std = 1.413 | 1426 | 1368 | µS std = 1.413 |
| pH / Sp. Cond. Meter: | WTW pH/Cond 3400i | Cell Const 0.482 | Cell Const 0.482 | Cell Const Range 0.45 - 0.50 | Cell Const 0.483 | Cell Const 0.475 | Cell Const Range: 0.45 - 0.50 |
| pH / Sp. Cond. Meter S/N: | # 08200256 | 7.01 | 6.91 | pH std Am 7.01@21.3 pm 7.02@20.2 °C | 7.02 | 6.90 | pH std Am 7.02@18.8 pm 7.02@19.8 °C |
| | | 4.16 | 4.23 | pH std Am 4.00@21.4 pm 4.00@20.8 °C | 4.17 | 4.90 | pH std Am 4.00@19.6 pm 4.00@20.5 °C |
| ORP / Diss $O_2$ Meter | WTW pH/Oxi 3400i | Slope 0.86 @ Temp 20.6°C | Slope 0.69 @ Temp 21.4°C | Dissolved $O_2$ Slope Range 0.6 to 1.25 | Slope 0.67 @ Temp 18.6°C | Slope 0.61 @ Temp 20.8°C | Dissolved $O_2$ Slope Range 0.6 to 1.25 |
| ORP / Diss $O_2$ Meter S/N: | # 10201689 | 224 | 222 | ORP std = Am 222@21.3 pm 223@20.8 °C | 237 | 227 | ORP std = Am 224@19.3 pm 223@19.7 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, 80°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Pace, 2 Eberline

MDNR collected split - Mo App I & trim

Date 9/1/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: S-84
Sampler(s): Michael Spurgeon, Jonathan Wilkinson
Top of Casing (ft. msl): 456.78

PURGE INFORMATION:

Method of Well Purge: Waterra Pump
Date/Time Initiated: 9/6/2016 0813
Initial Water Level (feet): 24.29
Initial Water Level Previous Event (feet): 23.09 Jun 2016
Ground Water Elevation (ft. msl): 432.49
Ground Water Elevation Previous Event (ft. msl): 433.69
Well Total Depth (feet): 32.90
Well Total Depth Previous Event (feet): 32.89 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 5,500 mL
Purged Dry? Yes No ✓
Water Level after Purge (feet): N/A
Date/Time Completed: 9/6/2016 0834

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 262 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 1,000 mL prior to first reading | | | | | | | | |
| 0818 | 1000 | 19.3 | 6.63 | 1308 | 67.52 | 0.69 | 98 | Clear |
| 0822 | 2100 | 20.1 | 6.69 | 1300 | 158.4 | 0.51 | 127 | Cloudy |
| 0826 | 2950 | 19.4 | 6.72 | 1295 | 172.5 | 0.58 | 134 | Cloudy |
| 0830 | 4250 | 19.4 | 6.74 | 1293 | 238.3 | 0.55 | 146 | Cloudy |
| 0834 | 5500 | 19.1 | 6.75 | 1288 | 280.9 | 0.29 | 146 | Cloudy |
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# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: S-84

Sampling Method: Waterra Pump

Dedicated: Yes ✓ No

Water Level After Sampling (ft): 23.25

Well Collection Sequence #: 43 of 52

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/6/2016 0836 | VOC 262 / Other 262 | 19.1 | 6.75 | 1288 | 290.9 | 0.29 | 146 | Cloudy |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 9/6/2016 0715

End of day: (Date/time) 9/6/2016 1425

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 201110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: #10201689

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.10 | NTU std 0.02 |
| 9.95 | N/A | NTU std = 10.0 | N/A | 10.15 | NTU std 10.0 |
| 997.5 | N/A | NTU std = 1,000 | N/A | 969.7 | NTU std 1,000 |
| 1413 | N/A | µS std = 1,413 | N/A | 1374 | µS std = 1,413 |
| Cell Const: 0.492 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.492 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @ 24.3 °C | N/A | 6.98 | pH std = 7.00 @ 25.3 °C |
| 4.11 | N/A | pH std = 4.01 @ 24.1 °C | N/A | 4.29 | pH std = 4.01 @ 25.4 °C |
| Slope: 1.03 @ Temp 24.4°C | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A @ Temp N/A | Slope: 1.08 @ Temp 28.8°C | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| 227 | N/A | ORP std = 220 @ 24.5 °C | N/A | 232 | ORP std = 219 @ 25.8 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: Cloudy

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) N Full Suite Collected?: (Y) N # Bottles Collected: 8 - 7 Pace 1 Eberline

MDNR collected split - MO App I & tritium

Date: 9/6/2016 By: [signature] Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Leachate

Sample Point ID: LCS-1D

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft. msl): Not Applicable

PURGE INFORMATION:

Method of Well Purge: Not Applicable

Dedicated Equipment: Yes N/A No N/A

Date/Time Initiated: Not Applicable

Casing Diameter (inches): Not Applicable

Initial Water Level (feet): Not Applicable

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): Not Applicable

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): Not Applicable

Total Volume Purged (mL): Not Applicable

Ground Water Elevation Previous Event (ft. msl): N/A

Purged Dry? Yes N/A No N/A

Well Total Depth (feet): Not Applicable

Water Level after Purge (feet): Not Applicable

Well Total Depth Previous Event (feet): Not Applicable

Date/Time Completed: Not Applicable

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: N/A mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| Leachate Grab Sample - No Purchase Necessary | | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: LCS-1D

Sampling Method: Leachate Grab

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): Not Applicable

Well Collection Sequence #: N/A of N/A

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓

**MDNR Split Sampling**

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/16 1543 | VOC: N/A<br>Other: N/A | Dry Point – No Sample Collected | | | | | | |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) N/A

End of day: (Date/time) N/A

Turbidity Meter: HF MicroTPW

Turb Meter S/N: N/A

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: N/A

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: N/A

| Purging Event | | | | Sampling Event | | | |
|---|---|---|---|---|---|---|---|
| Start of day | End of day | | | Start of day | End of day | | |
| N/A | N/A | NTU std = 0.02 | | N/A | N/A | NTU std 0.02 | |
| N/A | N/A | NTU std = 10.0 | | | | NTU std 10.0 | |
| N/A | N/A | NTU std = 1,000 | | | | NTU std 1,000 | |
| N/A | N/A | µS std = 1,413 | | | | µS std = 1,413 | |
| Cell Const: N/A | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | | Cell Const: | Cell Const: | Cell Const Range: 0.45 - 0.50 | |
| N/A | N/A | pH std = @ °C | | | | pH std = @ °C | |
| N/A | N/A | pH std = @ °C | | | | pH std = @ °C | |
| Slope: N/A | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | | Slope: | Slope: | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | |
| @ Temp N/A | @ Temp N/A | | | @ Temp | @ Temp | | |
| N/A | N/A | ORP std = @ °C | | | | ORP std = @ °C | |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Breezy, 80°F

Sample Characteristics: N/A

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: Y / N (NA) Full Suite Collected?: Y / (N) # Bottles Collected: 0

Dry Point – No Sample collected – checked @ 1543 on 9/1/2016

Date: 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Leachate

Sample Point ID: LCS-2D

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft. msl): Not Applicable

PURGE INFORMATION:

Method of Well Purge: Not Applicable

Dedicated Equipment: Yes N/A No N/A

Date/Time Initiated: Not Applicable

Casing Diameter (inches): Not Applicable

Initial Water Level (feet): Not Applicable

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): Not Applicable

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): Not Applicable

Total Volume Purged (mL): Not Applicable

Ground Water Elevation Previous Event (ft. msl N/A

Purged Dry? Yes N/A No N/A

Well Total Depth (feet): Not Applicable

Water Level after Purge (feet): Not Applicable

Well Total Depth Previous Event (feet): Not Applicable

Date/Time Completed: Not Applicable

PURGE DATA: Discharge N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: N/A mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| Leachate Grab Sample - No Purchase Necessary | | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: LCS-2D

Sampling Method: Leachate Grab

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): Not Applicable

Well Collection Sequence #: N/A of N/A

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓

MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/16 1550 | VOC N/A | | Dry Point - No Sample Collected | | | | | |
| | Other N/A | | | | | | | |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) N/A

End of day: (Date/time) N/A

Turbidity Meter: HF MicroTPW

Turb Meter S/N: N/A

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: N/A

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: N/A

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| N/A | N/A | NTU std = 0.02 | N/A | N/A | NTU std 0.02 |
| N/A | N/A | NTU std = 10.0 | | | NTU std 10.0 |
| N/A | N/A | NTU std = 1,000 | | | NTU std 1,000 |
| N/A | N/A | µS std = 1,413 | | | µS std = 1,413 |
| Cell Const N/A | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: | Cell Const: | Cell Const Range: 0.45 - 0.50 |
| N/A | N/A | pH std = @ °C | | | pH std = @ °C |
| N/A | N/A | pH std = @ °C | | | pH std = @ °C |
| Slope: N/A | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: | Slope: | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp N/A | @ Temp N/A | | @ Temp | @ Temp | |
| N/A | N/A | ORP std = @ °C | | | ORP std = @ °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Breezy, 80°F

Sample Characteristics: N/A

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: (N/A) Y / N Full Suite Collected?: Y / N # Bottles Collected: 0

Dry Point - No Sample Collected - checked @ 1550 on 9/1/2016

Date: 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Leachate

Sample Point ID: LCS-3D

Sampler(s): Michael Spurgeon, Jonathan Wilkinson

Top of Casing (ft. msl): Not Applicable

PURGE INFORMATION

Method of Well Purge: Not Applicable

Dedicated Equipment: Yes N/A No N/A

Date/Time Initiated: Not Applicable

Casing Diameter (inches): Not Applicable

Initial Water Level (feet): Not Applicable

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): Not Applicable

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): Not Applicable

Total Volume Purged (mL): Not Applicable

Ground Water Elevation Previous Event (ft. msl): N/A

Purged Dry? Yes N/A No N/A

Well Total Depth (feet): Not Applicable

Water Level after Purge (feet): Not Applicable

Well Total Depth Previous Event (feet): Not Applicable

Date/Time Completed: Not Applicable

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: N/A mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| **Leachate Grab Sample - No Purchase Necessary** | | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: LCS-3D

Sampling Method: Leachate Grab

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): Not Applicable

Well Collection Sequence #: N/A of N/A

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/16 1552 | VOC: N/A<br>Other: N/A | | Dry Point - No Sample Collected | | | | | |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) N/A

End of day: (Date/time) N/A

Turbidity Meter: HF MicroTPW

Turb Meter S/N: N/A

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: N/A

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: N/A

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| N/A | N/A | NTU std = 0.02 | N/A | N/A | NTU std 0.02 |
| N/A | N/A | NTU std = 10.0 | | | NTU std 10.0 |
| N/A | N/A | NTU std = 1,000 | | | NTU std 1,000 |
| N/A | N/A | µS std = 1,413 | | | µS std = 1,413 |
| Cell Const: N/A | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: | Cell Const: | Cell Const Range: 0.45 - 0.50 |
| N/A | N/A | pH std = @ °C | | | pH std = @ °C |
| N/A | N/A | pH std = @ °C | | | pH std = @ °C |
| Slope: N/A @ Temp N/A | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: @ Temp | Slope: @ Temp | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| N/A | N/A | ORP std = @ °C | | | ORP std = @ °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Breezy, 80°F

Sample Characteristics: N/A

COMMENTS AND OBSERVATIONS: N/A

Well Closed and Locked?: Y / N Full Suite Collected?: Y / N # Bottles Collected: 0

Dry Point - No Sample Collected - cracked @ 1552 on 9/1/2016

Date: 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Leachate

Sample Point ID: LCS-4B

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft. msl): Not Applicable

PURGE INFORMATION:

Method of Well Purge: Not Applicable

Dedicated Equipment: Yes N/A No N/A

Date/Time Initiated: Not Applicable

Casing Diameter (inches): Not Applicable

Initial Water Level (feet): Not Applicable

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): Not Applicable

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft. msl): Not Applicable

Total Volume Purged (mL): Not Applicable

Ground Water Elevation Previous Event (ft. msl): N/A

Purged Dry? Yes N/A No N/A

Well Total Depth (feet): Not Applicable

Water Level after Purge (feet): Not Applicable

Well Total Depth Previous Event (feet): Not Applicable

Date/Time Completed: Not Applicable

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: N/A mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| **Leachate Grab Sample - No Purchase Necessary** | | | | | | | | |
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FEEZOR ENGINEERING INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: LCS-4B

Sampling Method: Leachate Grab

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): Not Applicable

Well Collection Sequence #: N/A of N/A

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/16 1547 | VOC N/A<br>Other N/A | | Dry Point - No Sample Collected | | | | | |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) N/A

End of day: (Date/time) N/A

Turbidity Meter: HF MicroTPW

Turb Meter S/N: N/A

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: N/A

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: N/A

| Purging Event | | | Sampling Event | | |
|---|---|---|---|---|---|
| Start of day | End of day | | Start of day | End of day | |
| N/A | N/A | NTU std = 0.02 | N/A | N/A | NTU std 0.02 |
| N/A | N/A | NTU std = 10.0 | | | NTU std 10.0 |
| N/A | N/A | NTU std = 1,000 | | | NTU std 1,000 |
| N/A | N/A | µS std = 1,413 | | | µS std = 1,413 |
| Cell Const: N/A | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: | Cell Const: | Cell Const Range: 0.45 - 0.50 |
| N/A | N/A | pH std = @ °C | | | pH std = @ °C |
| N/A | N/A | pH std = @ °C | | | pH std = @ °C |
| Slope: N/A @ Temp N/A | Slope: N/A @ Temp N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: @ Temp | Slope: @ Temp | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| N/A | N/A | ORP std = @ °C | | | ORP std = @ °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Breezy, 80°F

Sample Characteristics: N/A

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: Y / N (N/A) Full Suite Collected?: Y (N) # Bottles Collected: 0

Dry Point - No Sample Collected - checked @ 1547 on 9/1/2016

Date: 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Leachate

Sample Point ID: LCS-6B

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft. msl): Not Apolicable

PURGE INFORMATION

Method of Well Purge: Not Applicable

Date/Time Initiated: Not Applicable

Initial Water Level (feet): Not Applicable

Initial Water Level Previous Event (feet): Not Applicable

Ground Water Elevation (ft. msl): Not Applicable

Ground Water Elevation Previous Event (ft. msl): N/A

Well Total Depth (feet): Not Applicable

Well Total Depth Previous Event (feet): Not Applicable

Dedicated Equipment: Yes N/A No N/A

Casing Diameter (inches): Not Applicable

One Borehole Volume (gal): Not Applicable

One Borehole Volume Previous Event (gal): N/A

Total Volume Purged (mL): Not Applicable

Purged Dry? Yes N/A No N/A

Water Level after Purge (feet): Not Applicable

Date/Time Completed: Not Applicable

PURGE DATA: Discharge: N/A sec Refill: N/A sec Pressure: N/A psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: N/A mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| **Leachate Grab Sample - No Purchase Necessary** | | | | | | | | |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION

Sample Point ID: LCS-6B

Sampling Method: Leachate Grab

Dedicated: Yes ✓ No

Water Level @ Sampling (ft): Not Applicable

Well Collection Sequence #: 42 of 52

Parameters: Annual ___ Semi-Annual ___ Quarterly ___ Monthly ___ Other: ✓ MDNR Split Sampling

SAMPLE DATA

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/1/2016 1515 | VOC: N/A | 39.7 | 7.25 | 15,700 | 25.0 / 0.34 | | -21 | Green / Gray, LFG off 2001 |
| | Other: N/A | | | | | | | |

INSTRUMENT CALIBRATION DATA

| | | Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|---|---|
| Start of day: (Date/Time) | 9/1/2016 0645 | N/A | N/A | NTU std = 0.02 | 0.02 | 0.23 | NTU std 0.02 |
| End of day: (Date/time) | 9/1/2016 1625 | N/A | N/A | NTU std = 10.0 | 9.88 | 11.20 | NTU std 10.0 |
| Turbidity Meter: | HF MicroTPW | N/A | N/A | NTU std = 1,000 | 988.3 | 1023 | NTU std 1,000 |
| Turb Meter S/N: | #20111005I | N/A | N/A | µS std = 1,413 | 1426 | 1368 | µS std = 1,413 |
| pH / Sp. Cond. Meter: | WTW pH/Cond 3400i | Cell Const N/A | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const 0.483 | Cell Const 0.475 | Cell Const Range: 0.45 - 0.50 |
| pH / Sp. Cond. Meter S/N: | #08200256 | N/A | N/A | pH std = 7.02 @ 18.8 °C | 7.02 | 6.90 | pH std = 7.00 @ 19.8 °C |
| ORP / Diss $O_2$ Meter: | WTW pH/Oxi 3400i | N/A | N/A | pH std = 4.00 @ 18.6 °C | 4.17 | 4.90 | pH std = 4.00 @ 20.5 °C |
| ORP / Diss $O_2$ Meter S/N: | #10201685 | Slope N/A | Slope N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope 0.67 | Slope 0.61 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| | | @ Temp N/A | @ Temp N/A | | @ Temp 18.6°C | @ Temp 20.8°C | |
| | | N/A | N/A | ORP std = 224 @ 19.3 °C | 239 | 227 | ORP std = 223 @ 19.9 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION

Weather Conditions @ Sampling: P. Cloudy, Breezy, 80°F

Sample Characteristics:

COMMENTS AND OBSERVATIONS:

Well Closed and Locked?: Y / N (N/A) Full Suite Collected? (Y) / N # Bottles Collected: 8 - 7 Poly, 1 Energy

MDNR collected split - MO App T & total

Date: 9/1/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill
Location: Bridgeton, Missouri
Sample Matrix: Groundwater

Sample Point ID: PZ-104-KS
Sampler(s): Michael Spurgeon
Jonathan Wilkinson
Top of Casing (ft, msl) 483.95

PURGE INFORMATION:

Method of Well Purge: Bladder Pump
Date/Time Initiated: 9/7/2016 1416
Initial Water Level (feet): 16.73
Initial Water Level Previous Event (feet): 16.34 Jun 2016
Ground Water Elevation (ft, msl): 467.22
Ground Water Elevation Previous Event (ft, msl 467.61
Well Total Depth (feet): top of pump = 93.09
Well Total Depth Previous Event (feet): Top of pump = 93.05 Jun 2016

Dedicated Equipment: Yes ✓ No
Casing Diameter (inches): 2
One Borehole Volume (gal): Not Applicable
One Borehole Volume Previous Event (gal): N/A
Total Volume Purged (mL): 13,750 mL
Purged Dry?: Yes No ✓
Water Level after Purge (feet): 24.42
Date/Time Completed: 9/7/2016 1508

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 50 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 352 mL / min Well depth: 409.26 ft

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 9,500 mL prior to first reading | | | | | | | | |
| | * 1431 | - compressor | ran out of gas | | @ 4,600 mL | | | |
| | * 1442 | - resume | purging | | | | | |
| 1456 | 9,500 | 26.9 | 7.09 | 729 | 4.23 | 0.23 | -129 | WL: 24.45; clear |
| 1500 | 10,850 | 26.8 | 7.10 | 714 | 3.28 | 0.22 | -137 | WL: 25.16; clear |
| 1504 | 12350 | 26.9 | 7.10 | 713 | 4.77 | 0.22 | -141 | WL: 25.92; clear |
| 1508 | 13750 | 26.8 | 7.10 | 712 | 3.81 | 0.23 | -141 | WL: 26.42; clear |

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-104-KS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 26.42

Well Collection Sequence #: 1 of 1

Parameters: Annual: ___ Semi-Annual: ___ Quarterly: ___ Monthly: ___ Other: ✓

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 9/7/2016 1510 | VOC: 352 Other 357 | 26.2 | 7.10 | 712 | 3.81 | 0.23 | -141 | Clear |

INSTRUMENT CALIBRATION DATA:

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.02 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.96 | N/A | NTU std = 10.0 | N/A | 9.97 | NTU std 10.0 |
| 991.0 | N/A | NTU std = 1,000 | N/A | 1030 | NTU std 1,000 |
| 1411 | N/A | µS std = 1,413 | N/A | 1380 | µS std = 1,413 |
| Cell Const: 0.485 | Cell Const: N/A | Cell Const Range: 0.45 - 0.50 | Cell Const: N/A | Cell Const: 0.485 | Cell Const Range: 0.45 - 0.50 |
| 7.00 | N/A | pH std = 7.00 @25.2 °C | N/A | 6.90 | pH std = 7.00 @25.6 °C |
| 4.12 | N/A | pH std = 4.01 @24.9 °C | N/A | 4.22 | pH std = 4.01 @25.8 °C |
| Slope: 0.98 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: 1.04 | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 24.9 °C | @ Temp N/A | | @ Temp N/A | @ Temp 31.0 °C | |
| 255 | N/A | ORP std = 220 @25.2 °C | N/A | 220 | ORP std = 219 @26.1 °C |

Start of day: (Date/Time) 9/7/2016 0720

End of day: (Date/time) 9/7/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20110051

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200256

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 10201689

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Breezy, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Well Closed and Locked? (Y) / N Full Suite Collected? (Y) / N # Bottles Collected: 4

Collect FB @ PZ-104-KS @ 1405 - 4 bottles

Date: 9/7/2016 By: _____ Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.

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October 27, 2016

Environmental Manager
Bridgeton Landfill LLC
13570 Saint Charles Rock Road
Bridgeton, MO 63044

RE: Project: Bridgeton Volatiles
Pace Project No.: 50157063

Dear Environmental Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Chris Sarkan
chris.sarkan@pacelabs.com
Project Manager

Enclosures

cc: Mr. Steve Jett, Jett Environmental Consulting
Ms Dana Sincox, Republic Services, Inc
Mr. Jon Wilkinson, Feezor Engineering, Inc.



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# CERTIFICATIONS

Project: Bridgeton Volatiles
Pace Project No.: 50157063

**Indiana Certification IDs**
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 0042
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL-0065
Oklahoma Certification #: 2014-148
Texas Certification #: T104704355-15-9
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-10-00128

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Bridgeton Volatiles
Pace Project No.: 50157063

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 50157063001 | PZ-110-SS | Water | 10/19/16 15:57 | 10/20/16 08:35 |
| 50157063002 | Trip Blank | Water | 10/19/16 08:00 | 10/20/16 08:35 |

REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Bridgeton Volatiles
Pace Project No.: 50157063

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| 50157063001 | PZ-110-SS | EPA 8260 | CAP | 4 |
| 50157063002 | Trip Blank | EPA 8260 | CAP | 4 |



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## SUMMARY OF DETECTION

Project: Bridgeton Volatiles
Pace Project No.: 50157063

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50157063001** | **PZ-110-SS** | | | | | |
| | Field pH | 6.64 | Std. Units | | 10/19/16 00:00 | |
| | Field Temperature | 16.0 | deg C | | 10/19/16 00:00 | |
| | Field Specific Conductance | 1910 | umhos/cm | | 10/19/16 00:00 | |
| | Field Turbidity | 4.46 | NTU | | 10/19/16 00:00 | |
| | Total Well Depth | NA | feet | | 10/19/16 00:00 | |
| | Elevation Water Level | 432.20 | ft/msl | | 10/19/16 00:00 | |
| | Collar Elevation | 461.15 | ft/msl | | 10/19/16 00:00 | |
| | Depth to Water | 28.95 | feet | | 10/19/16 00:00 | |



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# ANALYTICAL RESULTS

Project: Bridgeton Volatiles
Pace Project No.: 50157063

**Sample: PZ-110-SS** **Lab ID: 50157063001** Collected: 10/19/16 15:57 Received: 10/20/16 08:35 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **Field Data** | Analytical Method: | | | | | | | |
| Field pH | **6.64** | Std. Units | | 1 | | 10/19/16 00:00 | | |
| Field Temperature | **16.0** | deg C | | 1 | | 10/19/16 00:00 | | |
| Field Specific Conductance | **1910** | umhos/cm | | 1 | | 10/19/16 00:00 | | |
| Field Turbidity | **4.46** | NTU | | 1 | | 10/19/16 00:00 | | |
| Total Well Depth | **NA** | feet | | 1 | | 10/19/16 00:00 | | |
| Elevation Water Level | **432.20** | ft/msl | | 1 | | 10/19/16 00:00 | | |
| Collar Elevation | **461.15** | ft/msl | | 1 | | 10/19/16 00:00 | | |
| Depth to Water | **28.95** | feet | | 1 | | 10/19/16 00:00 | | |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/26/16 22:38 | 71-43-2 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 84-118 | 1 | | 10/26/16 22:38 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 79-116 | 1 | | 10/26/16 22:38 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 86-110 | 1 | | 10/26/16 22:38 | 2037-26-5 | |

**Sample: Trip Blank** **Lab ID: 50157063002** Collected: 10/19/16 08:00 Received: 10/20/16 08:35 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/26/16 23:12 | 71-43-2 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 95 | %. | 84-118 | 1 | | 10/26/16 23:12 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 79-116 | 1 | | 10/26/16 23:12 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 86-110 | 1 | | 10/26/16 23:12 | 2037-26-5 | |

## REPORT OF LABORATORY ANALYSIS

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# QUALITY CONTROL DATA

Project: Bridgeton Volatiles
Pace Project No.: 50157063

QC Batch: 358315
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50157063001, 50157063002

METHOD BLANK: 1656368 Matrix: Water
Associated Lab Samples: 50157063001, 50157063002

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Benzene | ug/L | ND | 5.0 | 10/26/16 22:04 | |
| 4-Bromofluorobenzene (S) | %. | 98 | 79-116 | 10/26/16 22:04 | |
| Dibromofluoromethane (S) | %. | 98 | 84-118 | 10/26/16 22:04 | |
| Toluene-d8 (S) | %. | 99 | 86-110 | 10/26/16 22:04 | |

LABORATORY CONTROL SAMPLE: 1656369

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Benzene | ug/L | 50 | 49.3 | 99 | 76-122 | |
| 4-Bromofluorobenzene (S) | %. | | | 101 | 79-116 | |
| Dibromofluoromethane (S) | %. | | | 101 | 84-118 | |
| Toluene-d8 (S) | %. | | | 100 | 86-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1656370 1656371

| Parameter | Units | 50157148004 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ug/L | ND | 50 | 50 | 43.1 | 45.3 | 86 | 91 | 51-140 | 5 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 101 | 103 | 79-116 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 102 | 100 | 84-118 | | | |
| Toluene-d8 (S) | %. | | | | | | 96 | 98 | 86-110 | | | |

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

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# QUALIFIERS

Project: Bridgeton Volatiles
Pace Project No.: 50157063

## DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bridgeton Volatiles
Pace Project No.: 50157063

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 50157063001 | PZ-110-SS | | 357489 | | |
| 50157063001 | PZ-110-SS | EPA 8260 | 358315 | | |
| 50157063002 | Trip Blank | EPA 8260 | 358315 | | |



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# CHAIN-OF-CUSTODY / Analytical Request Document

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

GWB

Page : 1 Of 1

| Section A Required Client Information: | | Section B Required Project Information: | | Section C Invoice Information: | |
|---|---|---|---|---|---|
| Company: | Republic Services - Missouri Landfills | Report To: | Jon Wilkinson | Attention: | |
| Address: | 3377 Hollenberg Drive | Copy To: | | Company Name: | |
| | Bridgeton, MO 63044 | | | Address: | |
| Email To: | jwilkinson@feezorengineering.com | Purchase Order #: | | Pace Quote: | |
| Phone: | (636) 578-8635 Fax: | Project Name: | Bridgeton Volatiles | Pace Project Manager: | chris.boyle@pacelabs.com |
| Requested Due Date: | Standard | Project #: | | Pace Profile #: | 4762 / 1 |

| Regulatory Agency | State / Location |
|---|---|
| | MO |

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

| ITEM # | SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique) | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED START DATE | COLLECTED START TIME | COLLECTED END DATE | COLLECTED END TIME | SAMPLE TEMP AT COLLECTION (deg C) | # OF CONTAINERS | Preservatives: Unpreserved | H2SO4 | HNO3 | HCl | NaOH | Na2S2O3 | Methanol | Other | Analyses Test Y/N | Benzene by VOC 8620 | Residual Chlorine (Y/N) | 5015063 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PZ-110-SS | WT | G | | | 10/19/16 | 1557 | N/A | 3 | | | | 3 | | | | | | X | | 001 |
| 2 | Trip Blank | WT | G | | | 10/19/2016 | | N/A | 3 | | | | 3 | | | | | | X | | 002 |
| 3 | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Jon Wilkinson / Feezor Engineering, Inc. | 10/19/2016 | 1700 | FedEx #690751227555 | 10/19/2016 | 1700 | | | | |
| | Fedex | | | | 10-20-16 | 0835 | 0.4 | Y | Y | Y |
| | | | | | | | | | | |
| | | | | | | | | | | |

| SAMPLER NAME AND SIGNATURE | | | TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N) |
|---|---|---|---|---|---|---|
| PRINT Name of SAMPLER: | Jonathan Wilkinson | | | | | |
| SIGNATURE of SAMPLER: | | DATE Signed: 10/19/2016 | | | | |

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Republic-MO  Project # 50157063

**Courier:** ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

**Tracking #:** 6907 5122 7555

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

**Date/Time 5035A kits placed in freezer** _____

**Packing Material:** ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

**Thermometer** 1 2 3 4 5 6 A B C D E F  **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

**Cooler Temperature (Initial/Corrected)** 0.4/0.4  **Ice Visible in Sample Containers:** ☐ yes ☒ no

Temp should be above freezing to 6°C

**Comments:**

**Date and Initials of person examining contents:** JLK 10-20-16

| | | | | | |
|---|---|---|---|---|---|
| **Are samples from West Virginia?** Document any containers out of temp. | | ☐Yes | ☑No | | 1. |
| Chain of Custody Present: | | ☑Yes | ☐No | ☐N/A | 2. |
| Chain of Custody Filled Out: | | ☑Yes | ☐No | ☐N/A | 3. |
| Chain of Custody Relinquished: | | ☑Yes | ☐No | ☐N/A | 4. |
| Sampler Name & Signature on COC: | | ☑Yes | ☐No | ☐N/A | 5. |
| **Short Hold Time Analysis (<72hr):** | | ☐Yes | ☑No | ☐N/A | 6. |
| **Rush Turn Around Time Requested:** | | ☐Yes | ☑No | ☐N/A | 7. |
| Containers Intact: | | ☑Yes | ☐No | ☐N/A | 8. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | | ☑Yes | ☐No | ☐N/A | 9. |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G | | ☐Yes | ☐No | ☑N/A | 10 (Circle) HNO3 H2SO4 NaOH NaOH/ZnAc |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | | | | |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | | | | 11. Present Absent |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | | | | 12. Present Absent |
| Headspace in VOA Vials ( >6mm): | | ☐Yes | ☑No | ☐N/A | 13 |
| Headspace Wisconsin Sulfide | | ☐Yes | ☐No | | 14 |
| Trip Blank Present: | | ☑Yes | ☐No | ☐N/A | 15 |
| Trip Blank Custody Seals Present | | ☑Yes | ☐No | ☐N/A | |
| **Project Manager Review** | | | | | |
| Samples Arrived within Hold Time: | | ☑Yes | ☐No | ☐N/A | 15. |
| Sufficient Volume: | | ☑Yes | ☐No | ☐N/A | 16. |
| Correct Containers Used: | | ☑Yes | ☐No | ☐N/A | 17. |

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

Person Contacted: _____  Date/Time: _____

Comments/ Resolution: _____

**Project Manager Review:** CMB  **Date:** 10-20-16

# Sample Container Count

CLIENT: Republic-MD

COC PAGE 1 of 1

COC ID#

Project # 50157063

| Sample Line Item | DG9H | VG9H | AG1U | WGFU | AG0U | R | 4 / 6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3C | BP1U | SP5T | AG2U | | | | Matrix SI/WI/Ot (Soil/Water/Other) | pH <2 | pH >9 | pH> |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | | | | | | | | | | | | | | | | WT | | | |
| 2 | 3 | | | | | | | | | | | | | | | | | | | | | | ↓ | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved amber via |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T | 120mL Coliform Na Thiosulfat |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved clear vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 1

Facility: Bridgeton Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-110-SS

Sampler(s): Michael Spurgeon

Jonathan Wilkinson

Top of Casing (ft, msl) 461.15

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 10/19/2016 1522

Casing Diameter (inches): 2

Initial Water Level (feet): 28.95

One Borehole Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 28.33 Aug 2016

One Borehole Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 432.20

Total Volume Purged (mL): 8,750 ml

Ground Water Elevation Previous Event (ft, msl 432.82

Purged Dry?: Yes No ✓

Well Total Depth (feet): Top of Pump = N/A

Water Level after Purge (feet): 32.35

Well Total Depth Previous Event (feet): Top of pump = 107.23 Aug 2016

Date/Time Completed: 10/19/2016 1555

PURGE DATA: Discharge: 4.5 sec Refill: 6.0 sec Pressure: 50 psi

Measure field pH, Temp, Specific Conductance, Diss $O_2$, and Oxidation-Reduction Potential using flow-through cell.

Average Purge Rate: 265 mL / min

| Time | Cumulative Volume (mL) | Temp (°C) | pH (std units) | Spec. Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| Purge 5,000 mL prior to first reading | | | | | | | | |
| 1543 | 5,000 | 16.2 | 6.65 | 1912 | 5.10 | 0.60 | -46 | Clear; WL: 31.41 |
| 1547 | 6,100 | 16.1 | 6.65 | 1907 | 4.79 | 0.71 | -51 | Clear; WL: 31.63 |
| 1551 | 7,400 | 16.0 | 6.64 | 1906 | 5.65 | 0.34 | -54 | Clear; WL: 32.15 |
| 1555 | 8,750 | 16.0 | 6.64 | 1910 | 4.46 | 0.34 | -53 | Clear; WL: 32.35 |
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FEEZOR ENGINEERING, INC.

# FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-110-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 32.35

Well Collection Sequence #: 1 of 1

Parameters: Annual: ____ Semi-Annual: ____ Quarterly: ____ Monthly: ____ Other: ✓ Verification

SAMPLE DATA:

| Time & Date | Sample Rate mL/min | Temp (°C) | pH (std units) | Specific Conductance (µS = µmhos/cm) | Turbidity (NTU) | Dissolved $O_2$ (mg/L) | ORP (mV) | Notes |
|---|---|---|---|---|---|---|---|---|
| 10/19/2016 1557 | VOC 265 Other: N/A | 16.0 | 6.64 | 1910 | 4.46 | 0.34 | -53 | Clear |

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/19/2016 1330

End of day: (Date/time) 10/19/2016 1625

Turbidity Meter: HF MicroTPW

Turb Meter S/N: # 20111005

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 08200255

ORP / Diss $O_2$ Meter: WTW pH/Oxi 3400i

ORP / Diss $O_2$ Meter S/N: # 09480084

| Purging Event Start of day | Purging Event End of day | | Sampling Event Start of day | Sampling Event End of day | |
|---|---|---|---|---|---|
| 0.07 | N/A | NTU std = 0.02 | N/A | 0.00 | NTU std 0.02 |
| 9.93 | N/A | NTU std = 10.0 | N/A | 10.01 | NTU std 10.0 |
| 997.1 | N/A | NTU std = 1,000 | N/A | 982.7 | NTU std 1,000 |
| 1427 | N/A | µS std = 1,413 | N/A | 1420 | µS std = 1,413 |
| Cell Const 0.482 | Cell Const N/A | Cell Const Range: 0.45 - 0.50 | Cell Const N/A | Cell Const 0.482 | Cell Const Range: 0.45 - 0.50 |
| 7.01 | N/A | pH std = 7.02 @20.3 °C | N/A | 7.09 | pH std = 7.02 @19.4 °C |
| 4.11 | N/A | pH std = 4.00 @20.5 °C | N/A | 4.19 | pH std = 4.00 @19.4 °C |
| Slope: 1.07 | Slope: N/A | Dissolved $O_2$ Slope Range: 0.6 to 1.25 | Slope: N/A | Slope: +1.19 LW | Dissolved $O_2$ Slope Range: 0.6 to 1.25 |
| @ Temp 18.4°C | @ Temp N/A | | @ Temp N/A | @ Temp 18.5°C | |
| 241 | N/A | ORP std = 224 @19.3 °C | N/A | 233 | ORP std = 223 @19.6 °C |

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 65°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Sp. Cond. Prediction Limit = 2,200 µS; Historical Range from May 2012 - June 2016: 1402 - 2140 µS.

pH Prediction Limits = 6.0 - 7.7 s.u.; Historical Range from May 2012 - June 2016: 6.47 - 6.94 s.u.

Well Closed and Locked? (Y) N Full Suite Collected? (Y) N # Bottles Collected: 3

Date: 10/19/2016 By: Jonathan Wilkinson Title: Residuals Management Team Member

Company: Feezor Engineering, Inc.



Feezor Engineering, Inc. • 3377 Hollenberg Drive • Bridgeton, Missouri 63044