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DETECTION MONITORING PROGRAM
GROUNDWATER STATISTICAL ANALYSIS
SEMI-ANNUAL REPORT

OCTOBER 2013 SAMPLING EVENT

BRIDGETON LANDFILL, LLC.
BRIDGETON LANDFILL
Bridgeton, Missouri

MO DNR PERMIT #MO - 118912

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

January 2, 2014

Dear Ms. Fitch:

Detection Monitoring Program Groundwater Statistical Analysis Report
Bridgeton Landfill, LLC. Bridgeton Landfill
Bridgeton, Missouri
Missouri DNR Permit #MO - 118912

On behalf of the Bridgeton Landfill, LLC. Bridgeton Landfill, Herst & Associates, Inc. is submitting the Detection Monitoring Program Groundwater Statistical Analysis Semi-Annual Report for the October 2013 groundwater monitoring event.

Should you have any questions or concerns, please contact us at your earliest convenience

Sincerely,

HERST & ASSOCIATES, INC.

Ward E. Herst
Managing Partner

Andrew Wyatt
Senior Environmental Scientist

POSTED 1/3/1480

cc: *Brian Power – Republic Services*

Attachments: *Detection Monitoring Program Groundwater Statistical Analysis Report*

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BRIDGETON LANDFILL, LLC.
BRIDGETON LANDFILL
Bridgeton, Missouri

MO DNR PERMIT #MO - 118912

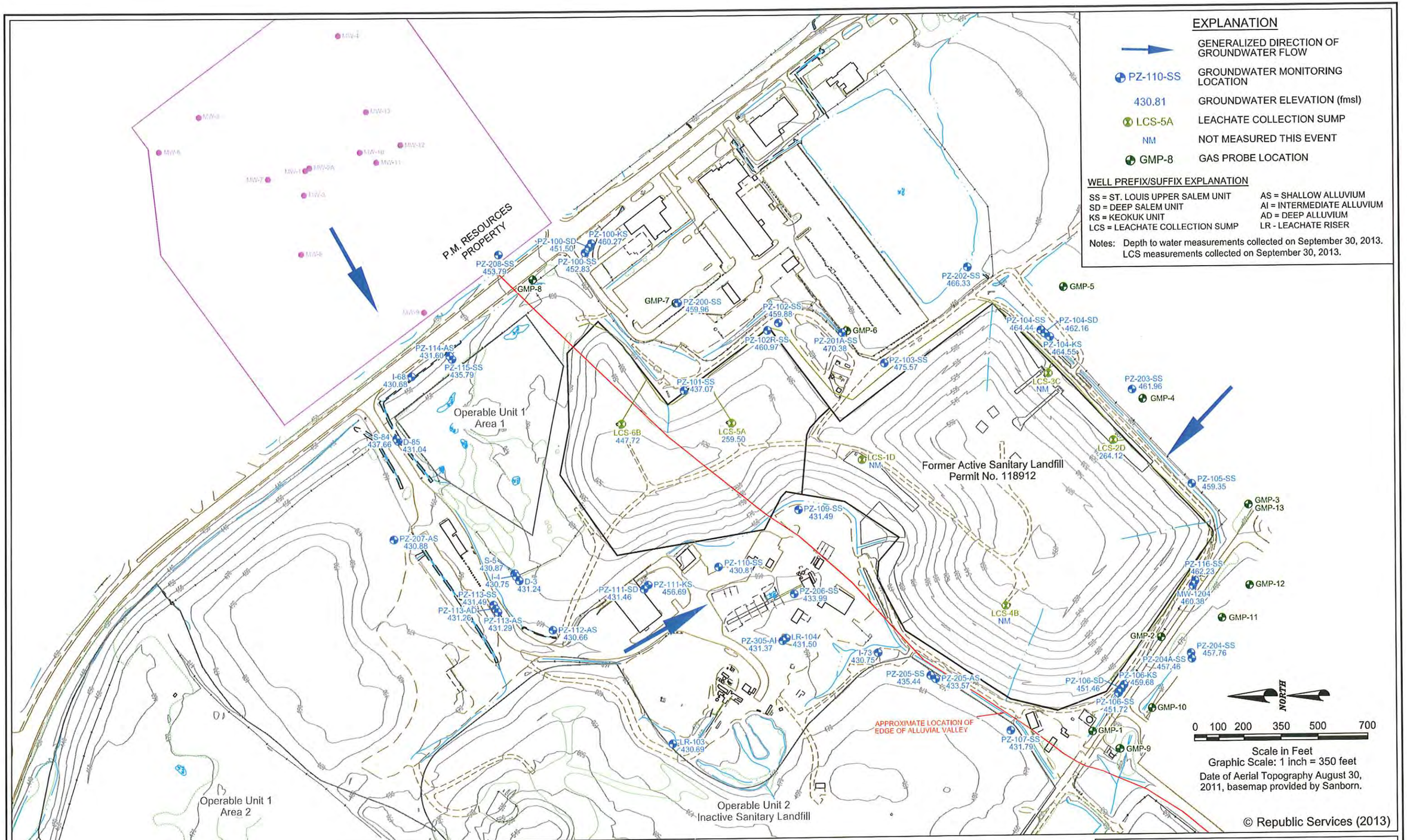
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Bridgeton Landfill, LLC
Bridgeton, Missouri

September 2013 Potentiometric Surface Map

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1.0 INTRODUCTION

On behalf of the Bridgeton Landfill, LLC - Bridgeton Landfill, Herst & Associates, Inc. has prepared this Detection Monitoring Program (DMP) Groundwater Statistical Analysis Semi-Annual Report for the October 2013 groundwater monitoring event. The October 2013 sampling was conducted by Herst & Associates, Inc. Laboratory analytical testing was performed by Pace Analytical Services, Inc. (Pace). The 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 (USEPA's) *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (March 2009).

2.0 SITE BACKGROUND AND MONITORING NETWORK

Herst & Associates, Inc. statistically evaluated constituents from the October 2013 monitoring 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.

There are three hydrostratigraphic zones that are statistically evaluated at the site. These zones are described in **Section 3** of this report. **Table 1** lists the wells analyzed in this report as well as the monitoring zone of each well. Each well is located hydraulically upgradient of the landfill, which is designed to maintain an inward hydraulic gradient. The background data utilized for this report includes samples collected from January 1997 through the previous monitoring event (April 2013).

Pursuant to Missouri Department of Natural Resources (MDNR) correspondence dated April 3, 2007, the facility has prepared statistical power curve graphs to allow MDNR to perform comparisons between the current DMP and USEPA-recommended standards. Under USEPA's *Unified Guidance*, intra-well prediction limits are constructed to have a site-wise false positive rate (SWFPR) of 10% annually, or 5% per event for a semi-annually sampled facility. Based on the smallest pre-screening background size of $n = 31$ for a parametric intra-well prediction limit in the Alluvial Zone, the power of the monitoring program is approximately 90% at 3 standard deviations and 99% at 4 standard deviations. Based on the smallest pre-screening background size of $n = 34$ for a non-parametric intra-well prediction limit in the Alluvial Zone, the power of the program is approximately 65% at 3 standard deviations and 90% at 4 standard deviations. Based on the smallest pre-screening background size of $n = 30$ for a parametric intra-well prediction limit in the St. Louis Zone, the power of the program is approximately 70% at 3 standard deviations and 95% at 4 standard deviations. Based on the smallest pre-screening background size of $n = 33$ for a non-parametric intra-well prediction limit in the St. Louis Zone, the power of the program is approximately 65% at 3 standard deviations and 90% at 4 standard deviations. Based on the smallest pre-screening background size of $n = 30$ for a parametric intra-well prediction limit in the Salem Zone, the power of the program is approximately 80% at 3 standard deviations and 95% at 4 standard deviations. Based on the smallest pre-screening background size of $n = 32$ for a non-parametric intra-well prediction limit in the Deep Salem Zone, the power of the program is approximately 65% at 3 standard deviations and 90% at 4 standard deviations. **Appendix A** presents the power curve graph for the facility's monitoring program. As the size of the background period increases, the statistical power will likewise increase.

A full suite of sample bottles was collected from each well during the October 2013 event. A field duplicate was collected at well PZ-104-SS. A field blank sample was also collected at well PZ-100-SD. One trip blank was shipped to the laboratory with the samples.

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

3.0 SITE HYDROGEOLOGY

The hydrogeologic setting for the facility was defined in a *Hydrogeologic Characterization Report* (1995), a *Groundwater Monitoring Plan* (1995), a *Physical Characterization Technical Memorandum* (1996), and a *Site Characterization Summary Report* (1997), all by Golder Associates, Inc. According to the above-mentioned reports, three general hydrostratigraphic zones are identifiable at the Bridgeton Landfill.

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.

The 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 potentiometric surface map utilizing groundwater level data from the October 2013 monitoring event.

4.0 STATISTICAL PROCEDURES

The *Sanitas*™ program was utilized to compile and statistically evaluate the data for the October 2013 monitoring event. Intra-well prediction interval analysis summary tables are presented in **Appendix C** for Alluvial Zone well 114-AS, **Appendix D** for the St. Louis Formation wells, and **Appendix E** for the Salem Formation wells.

4.1 Background 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 confidence of 98% (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 constituents-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 in 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 during the October 2013 event. Intra-well prediction limit summary tables and graphs are presented in **Appendices C**, **D**, and **E**.

During the October 2013 event, there were two results that exceeded their intra-well prediction limits in the Alluvial Zone: total arsenic and total phosphorus at 114-AS. Nine results exceeded their intra-well prediction limits in the St. Louis Formation: total calcium, chloride, total magnesium, sulfate, and total dissolved solids (TDS) at 105-SS; chloride and total sodium at 106-SS; total manganese at 115-SS; and nitrate/nitrite at 201A-SS. Twelve results exceeded their intra-well prediction limits in the Salem Formation: total barium, chloride, total chromium, total hardness, total iron, total magnesium, total manganese, total sodium, TDS, and TOC at 104-SD; and total barium and fluoride at 106-SD.

Twenty-one of the twenty-three intra-well prediction limit exceedances observed during the October 2013 event had been observed during the previous event (April 2013): total arsenic and total phosphorus at 114-AS; total calcium, chloride, total magnesium, sulfate, and TDS at 105-SS; chloride at 106-SS; total manganese at 115-SS; nitrate/nitrite at 201A-SS; total barium, chloride, total chromium, total hardness, total iron, total magnesium, total manganese, total sodium, TDS, and TOC at 104-SD; and total barium at 106-SD. The new exceedances observed during the October 2013 event were: total sodium at 106-SS and fluoride at 106-SD. The next monitoring event (May 2014) will be used to confirm the new exceedances, pursuant to MDNR correspondence to the Bridgeton Landfill, LLC dated October 23, 2003.

The October 2013 event served as a confirmatory event for the intra-well prediction limit exceedances that were observed during the April 2013 event. As noted above, twenty-one of the exceedances that were been observed during the April 2013 event were confirmed during the October 2013 event. The April 2013 exceedances that were not confirmed were: total boron, COD, chloride, nitrate/nitrite, and TOC at 104-SS; total chromium at 106-SS; total calcium, total chromium, and total hardness at 201A-SS; total hardness at 205-SS; total calcium, total cobalt, total nickel, and total vanadium at 104-SD; total cadmium, total chromium, total iron, total lead, and total phosphorus at 106-SD.

During the October 2013 event, 1,4-dichlorobenzene (6.3 ug/L) and chlorobenzene (69 ug/L) were detected at well 114-AS. **Table 3** summarizes the historical VOC detections at 114-AS. As

described in the MDNR's October 23, 2003 letter, VOC detections at upgradient well 114-AS appear to be related to the upgradient PM Resources, Inc. property.

During the October 2013 event, the following VOCs were detected at well 104-SD: 1,4-dichlorobenzene (5.4 ug/L), 2-hexanone (19 ug/L), 4-methyl-2-pentanone (47 ug/L), acetone (3,000 ug/L), benzene (920 ug/L), ethylbenzene (18 ug/L), methyl ethyl ketone (1,900 ug/L), toluene (250 ug/L), and total xylenes (42 ug/L). Detections of benzene and toluene were first observed at well 104-SD during the May 2012 event. Detections of ethylbenzene and total xylenes were first observed at 104-SD during the November 2012 event. Detections of acetone and methyl ethyl ketone were first observed at 104-SD during the April 2013 event. VOC detections at 104-SD are summarized on **Table 4**. The confirmed VOC detections at 104-SD will be addressed in upcoming assessment monitoring events, as detailed in the December 17, 2013 *Assessment Monitoring Plan*.

Three VOCs exhibited initial detections at 104-SD in October 2013: 1,4-dichlorobenzene (5.4 ug/L), 2-hexanone (19 ug/L), and 4-methyl-2-pentanone (47 ug/L). The May 2014 event will be utilized to confirm these detections.

During the October 2013 event, the following VOCs were detected at well 104-SS: 1,2-dichloroethane (43 ug/L), 1,4-dichlorobenzene (7.5 ug/L), 2-hexanone (52 ug/L), 4-methyl-2-pentanone (210 ug/L), benzene (2,200 ug/L), ethylbenzene (35 ug/L), toluene (150 ug/L), and total xylenes (78 ug/L). Detections of 1,2-dichloroethane, 1,4-dichlorobenzene, 4-methyl-2-pentanone, benzene, ethylbenzene, toluene, and total xylenes were first observed at well 104-SS during the November 2012 event. 2-Hexanone detections were first observed at 104-SS during the April 2013 event. VOC detections at 104-SS are summarized on **Table 4**. The confirmed VOC detections at 104-SS will be addressed in upcoming assessment monitoring events, as detailed in the December 17, 2013 *Assessment Monitoring Plan*.

During the April 2013 event, 104-SS exhibited initial detections of chloroethane and methyl ethyl ketone. These were the first historical detections of these VOCs at 104-SS. The October 2013 event was utilized to confirm these new VOC detections. During the October 2013 event, chloroethane and methyl ethyl ketone were not detected at 104-SS. The April 2013 detections were therefore not confirmed.

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 at a confidence of 98% (Type I error rate of $\alpha = 0.01$ per tail).

Trend evaluation indicated that of the twenty-three constituents that exceeded intra-well prediction limits during the October 2013 monitoring event, nineteen exhibited an upward statistical trend: total arsenic and total phosphorus at 114-AS; total calcium, chloride, total magnesium, sulfate, and TDS at 105-SS; chloride and total sodium at 106-SS; total manganese at 115-SS; nitrate/nitrite at 201A-SS; total barium, chloride, total magnesium, total sodium, TDS, and TOC at 104-SD; and total barium and fluoride at 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 analyzed in this report.

5.0 STATISTICAL RESULTS SUMMARY

During the October 2013 monitoring event, there were two results that exceeded their respective intra-well prediction limits in the Alluvial Zone. Nine results exceeded their respective intra-well prediction limits in the St. Louis Formation. Twelve results exceeded their respective intra-well prediction limits in the Salem Formation.

Two new exceedances were observed during the October 2013 event. The next sampling event (May 2014) will be used to confirm these new exceedances, pursuant to MDNR correspondence to the Bridgeton Landfill, LLC dated October 23, 2003.

The October 2013 event serves as a confirmatory event for the intra-well prediction limit exceedances that were observed during the April 2013 event. Twenty-one of the exceedances that were observed during the April 2013 event were confirmed during the October 2013 event.

During the October 2013 event, 1,4-dichlorobenzene and chlorobenzene were detected at well 114-AS. As described in the MDNR's October 23, 2003 letter, VOC detections at upgradient well 114-AS appear to be related to the upgradient PM Resources, Inc. property.

Pursuant to an October 23, 2003 letter from the MDNR, a groundwater demonstration report or assessment monitoring plan (AMP) may not be required for a well that exhibits a confirmed exceedance and upward trend for an inorganic constituent, unless the well also exhibits a confirmed organic constituent detection above the laboratory RL.

During the October 2013 event, well 104-SD exhibited confirmed exceedances and upward trends for inorganic constituents and also exhibited confirmed organic constituent detections. Total barium, chloride, total magnesium, total sodium, TDS, and TOC exhibited confirmed exceedances and upward trends at 104-SD during the October 2013 event. Acetone, benzene, ethylbenzene, methyl ethyl ketone, toluene, and total xylenes exhibited confirmed detections at 104-SD during the October 2013 event.

During the October 2013 event, well 104-SS exhibited confirmed organic constituent detections, but did not exhibit confirmed exceedances or upward trends for inorganic constituents. 1,2-dichloroethane, 1,4-dichlorobenzene, 2-hexanone, 4-methyl-2-pentanone, benzene, ethylbenzene, toluene, and total xylenes exhibited confirmed detections at 104-SS during the October 2013 event.

Pursuant to Title 10 of the Missouri Code of State Regulations (CSR) 80-3.010 (11)(C)6.C the facility submitted an Assessment Monitoring Plan (AMP) on December 17, 2013 in response to the confirmed exceedances, upwards trends, and confirmed organic detections that were first observed at well 104-SD in November 2012 and at 104-SS in April 2013. The first assessment monitoring event will be completed within 90 days of the MDNR's approval of the AMP.

Appendix F presents a copy of the laboratory analytical report for the October 2013 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 Detection Monitoring Wells – October 2013 BRIDGETON LANDFILL, LLC. – Bridgeton Landfill	
Zone	**Groundwater Wells**
Alluvial	114-AS
St. Louis Formation	100-SS, 104-SS, 105-SS, 106-SS, 109-SS 110-SS, 115-SS, 201A-SS, 205-SS
Salem Formation	100-SD, 104-SD, 106-SD, 111-SD

TABLE 2
Prediction Limit Exceedances – October 2013
BRIDGETON LANDFILL, LLC. – Bridgeton Landfill

Zone	Well	Parameter	Units	Result	Prediction Limit	Repeat from April 2013?	Trending?
Alluvial	114-AS	Arsenic, Total	mg/L	0.2	0.1745	Yes	+
		Phosphorus, Total	mg/L	2.2	1.56	Yes	+
St. Louis Formation	105-SS	Calcium, Total	mg/L	92	82.685	Yes	+
		Chloride	mg/L	81	22.32	Yes	+
		Magnesium, Total	mg/L	48	45.551	Yes	+
		Sulfate	mg/L	85	51.67	Yes	+
		Total Dissolved Solids	mg/L	590	540	Yes	+
	106-SS	Chloride	mg/L	24	17	Yes	+
		Sodium, Total	mg/L	18	17.049	No	+
	115-SS	Manganese, Total	mg/L	0.046	0.01827	Yes	+
	201A-SS	Nitrate/Nitrite	mg/L	0.34	0.33	Yes	+
Salem Formation	104-SD	Barium, Total	mg/L	0.61	0.2188	Yes	+
		Chloride	mg/L	170	110	Yes	+
		Chromium, Total	mg/L	0.012	0.0078	Yes	0
		Hardness, Total	mg/L	570	553.5	Yes	0
		Iron, Total	mg/L	8.2	6.519	Yes	0
		Magnesium, Total	mg/L	64	57.305	Yes	+
		Manganese, Total	mg/L	0.17	0.163	Yes	0
		Sodium, Total	mg/L	130	31.151	Yes	+
		Total Dissolved Solids	mg/L	970	747.7	Yes	+
		Total Organic Carbon	mg/L	81	32	Yes	+
	106-SD	Barium, Total	mg/L	0.12	0.113	Yes	+
		Fluoride	mg/L	1.4	1.379	No	+

Notes:
"0" indicates no statistical trend observed (i.e. stable)
"+" indicates positive statistical trend observed (i.e. upward trend)

TABLE 3
Summary of VOC Detections at 114-AS
BRIDGETON LANDFILL, LLC. – Bridgeton Landfill

Sampling Date	Benzene (ug/L)	Chlorobenzene (ug/L)	1,4-Dichlorobenzene (ug/L)
8/25/1997	<5	7	<5
11/10/1997	<5	5.1	<5
2/16/1998	<5	<5	<5
5/27/1998	<5	<5	<5
11/12/1998	<5	7.2	<5
5/19/1999	<5	<5	<5
11/19/1999	<5	<5	<5
5/23/2000	<5	<5	<5
11/13/2000	<5	<5	<5
5/15/2001	<5	7.7	<5
11/7/2001	<5	5	<5
5/21/2002	<5	130	<5
7/24/2002*	NA	150	NA
11/19/2002	<5	120	5.5
5/28/2003	<5	110	6.2
11/20/2003	6.1	120	14
5/11/2004	5.4	130	18
11/17/2004	<5	96	11
5/25/2005	<5	102	12.2
11/30/2005	<5	120	16
5/23/2006	<5	95	17
11/8/2006	<5	87	12
5/17/2007	<5	76	8.7
11/7/2007	<5	95	11
5/7/2008	<5	64	9
11/5/2008	<5	72	9.4
5/8/2009	<5	43	<5
11/4/2009	<5	19	<5
5/20/2010	<5	24	<5
11/11/2010	<5	64	7
5/11/2011	<5	17	<5
11/18/2011	<5	14	<5
5/10/2012	<5	9.6	<5
11/27/2012	<5	42	<5
4/8/2013	8.9	86	5.4
10/8/2013	<5	69	6.3

Notes

* Denotes a confirmation sampling event.

NA: Not analyzed. 1,4-Dichlorobenzene and benzene were not detected during the previous event, and confirmation was not required.

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

TABLE 4
Summary of VOC Detections at 104-SS and 104-SD
BRIDGETON LANDFILL, LLC. – Bridgeton Landfill

PZ-104-SS

Constituent	5/11/12		11/27/12		4/11/13		10/9/2013	
	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit
1,2-Dichloroethane	ND	5.0	20	5.0	43 / 41	5.0	43 / 42	5.0
1,4-Dichlorobenzene	ND	5.0	8.2	5.0	6.3 / 6.8	5.0	7.5 / 7.1	5.0
2-Hexanone	ND	10	ND	10	72 / 68	10	52 / 54	10
4-Methyl-2-Pentanone	ND	10	63	10	220 / 210	10	210 / 210	10
Benzene	ND	5.0	1,100	50	2,400 / 2,500	100	2,200 / 2,100	50
Chloroethane	ND	10	ND	10	11 / ND	10	ND / ND	10
Ethylbenzene	ND	5.0	18	5.0	26 / 27	5.0	35 / 34	5.0
Methyl Ethyl Ketone	ND	10	ND	10	110 / 98	10	ND	10
Toluene	ND	5.0	78	5.0	140 / 140	100	150 / 160	50
Xylenes, Total	ND	5.0	48	5.0	66 / 69	5.0	78 / 76	5.0

PZ-104-SD

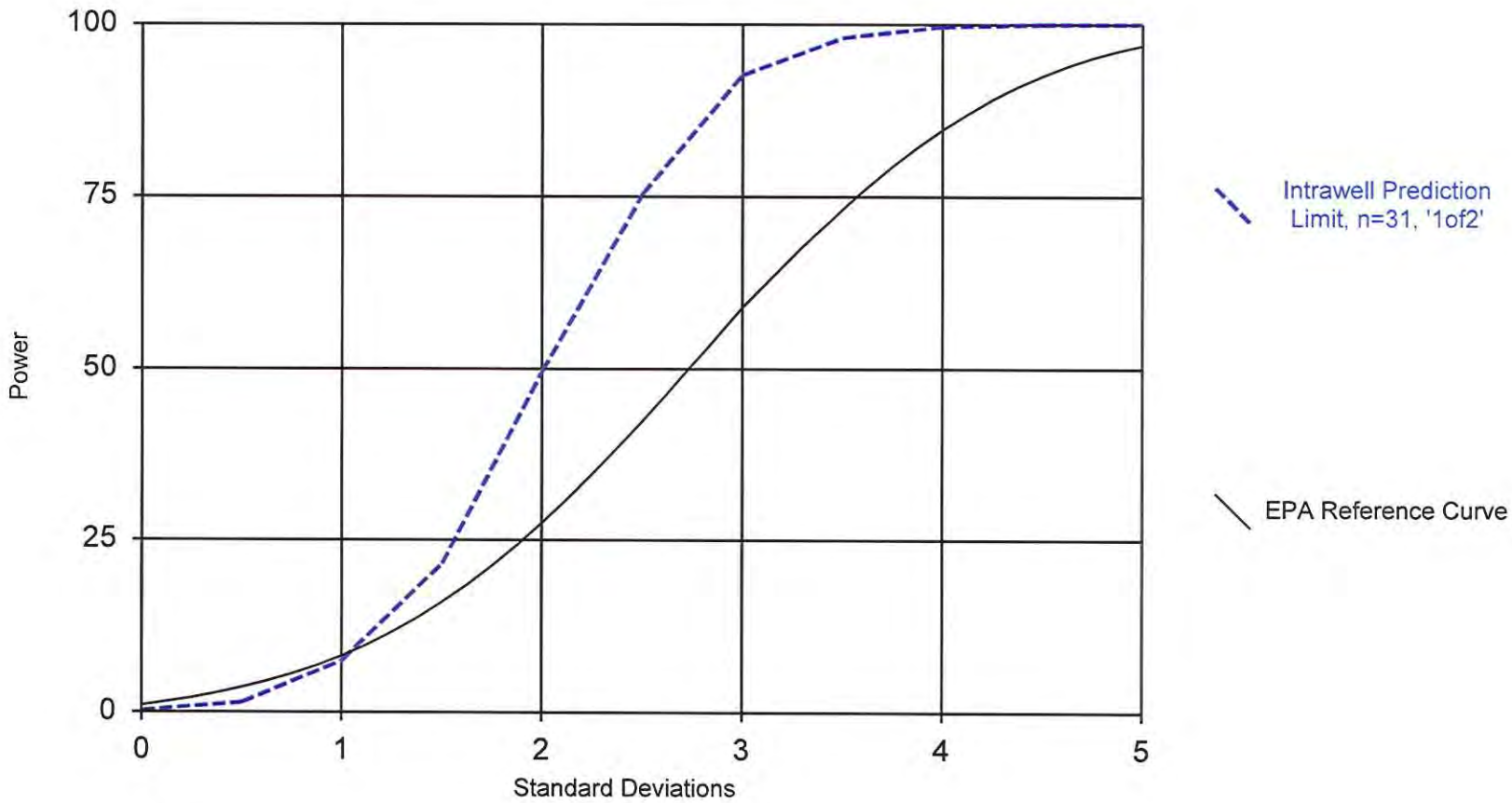
Constituent	5/11/12		11/27/12		4/11/13		10/7/2013	
	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit
1,2-Dichloroethane	ND	5.0	6.7 / 6.4	5.0	24	5.0	ND	5.0
1,4-Dichlorobenzene	ND	5.0	6.0 / 6.2	5.0	ND	5.0	5.4	5.0
2-Hexanone	ND	10	ND / ND	10	ND	10	19	10
4-Methyl-2-Pentanone	ND	10	ND / ND	10	ND	10	47	10
Acetone	ND	10	ND / ND	10	59	10	3,000	100
Benzene	57	5.0	350 / 330	10	1,000	100	920	10
Ethylbenzene	ND	5.0	11 / 11	5.0	24	5.0	18	5.0
Methyl Ethyl Ketone	ND	10	ND / ND	10	37	10	1,900	100
Toluene	4.4	5.0	140 / 130	10	1,800	100	250	10
Xylenes, Total	ND	5.0	31 / 32	5.0	58	5.0	42	5.0

Notes
All concentrations presented in units of ug/L.
Duplicate sample results are presented alongside original sample (e.g., <5 / <5).
ND: Constituent not detected above the labroatory method detection limit (MDL)
Constituent detected at or above the RL.

APPENDICES

APPENDIX A
STATISTICAL POWER CURVES

Power Curve



Kappa = 1.935, based on 1 compliance well and 34 constituents, evaluated semi-annually (this report reflects annual total).

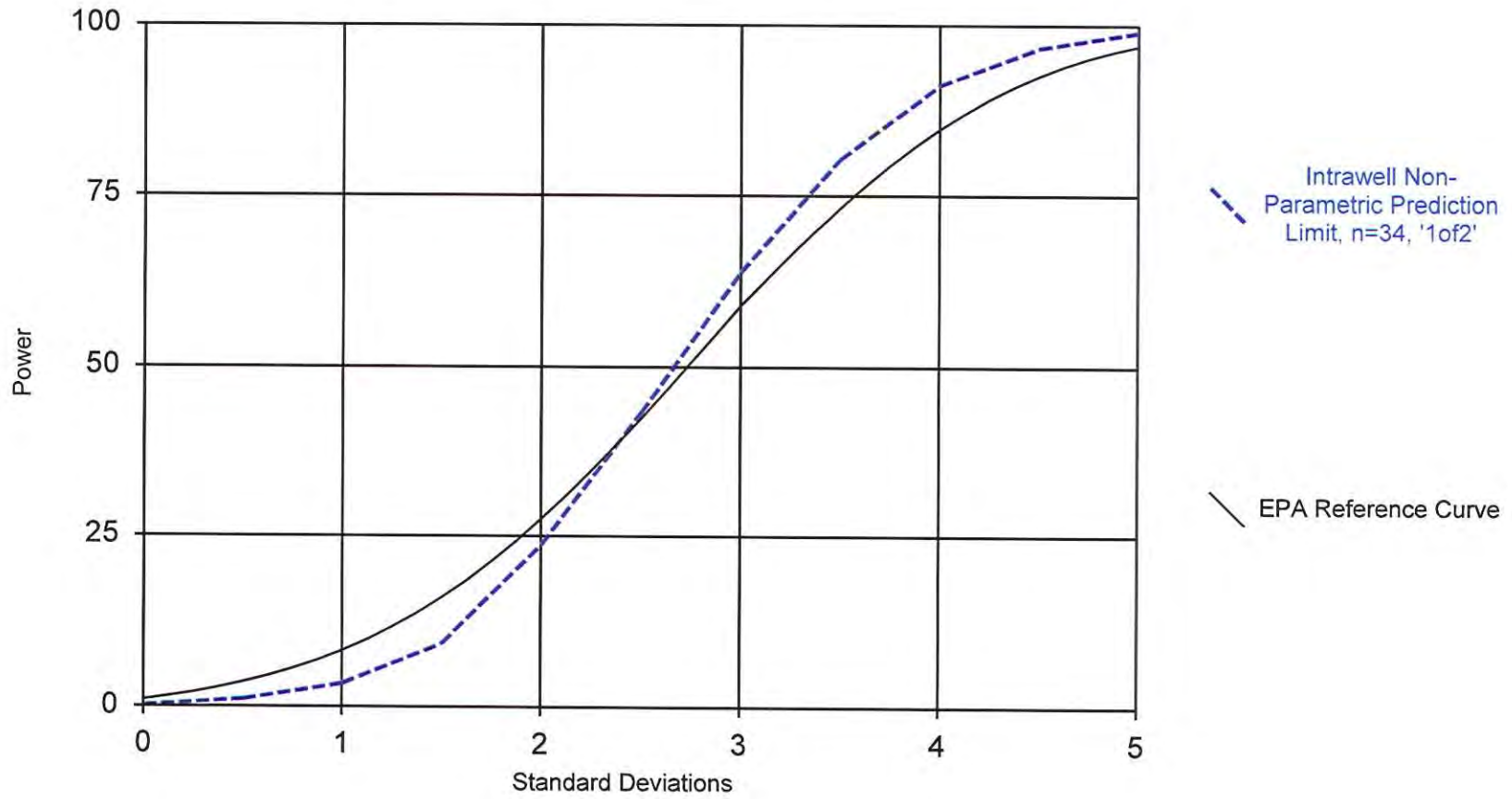
Analysis Run 12/17/2013 11:42 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

HERST & ASSOCIATES, INC.

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Power Curve

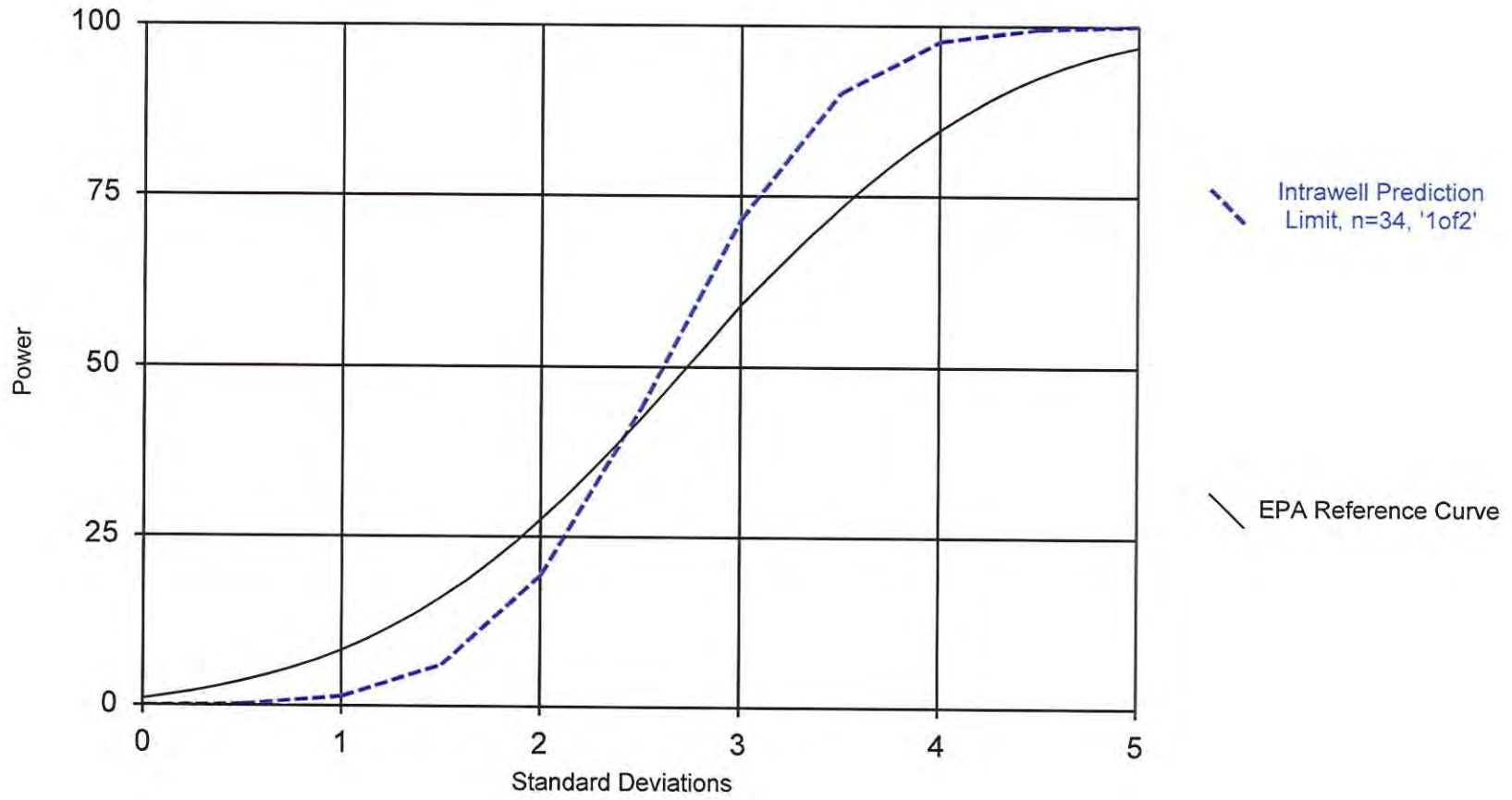


Analysis Run 12/17/2013 11:42 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

HERST & ASSOCIATES, INC.®

Power Curve



Kappa = 2.501, based on 9 compliance wells and 34 constituents, evaluated semi-annually (this report reflects annual total).

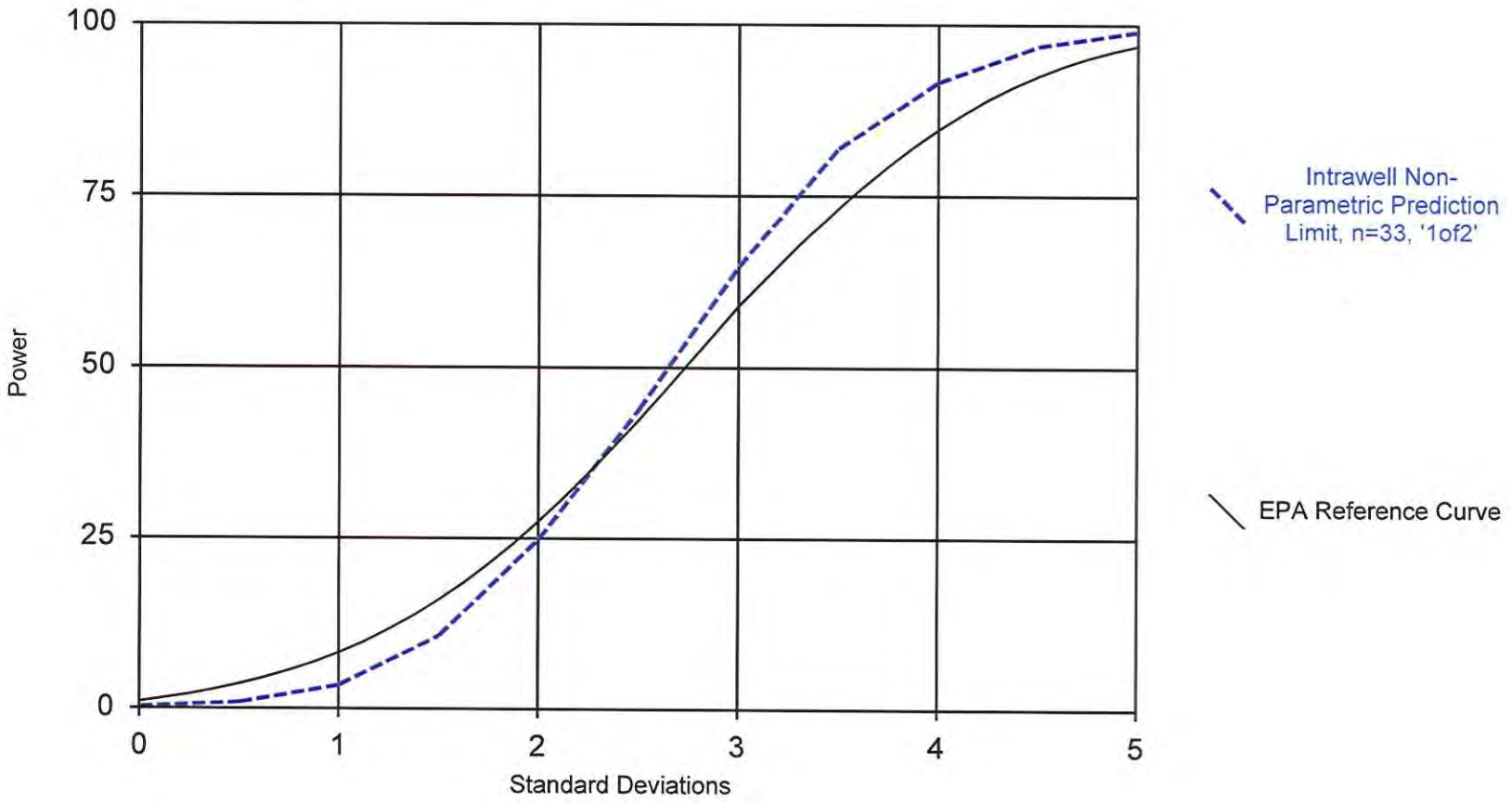
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Power Curve

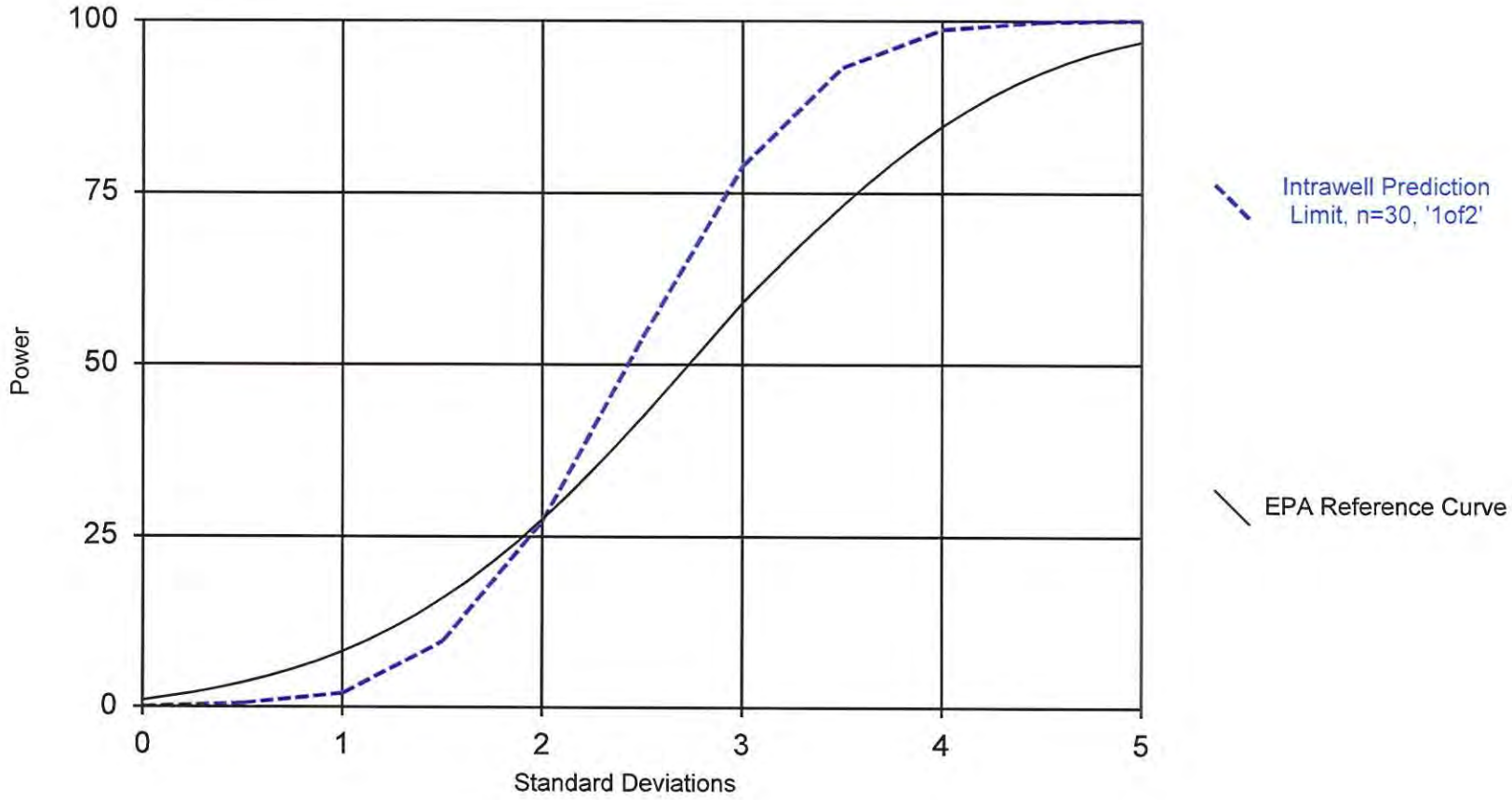


Analysis Run 12/17/2013 11:45 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

HERST & ASSOCIATES, INC.®

Power Curve



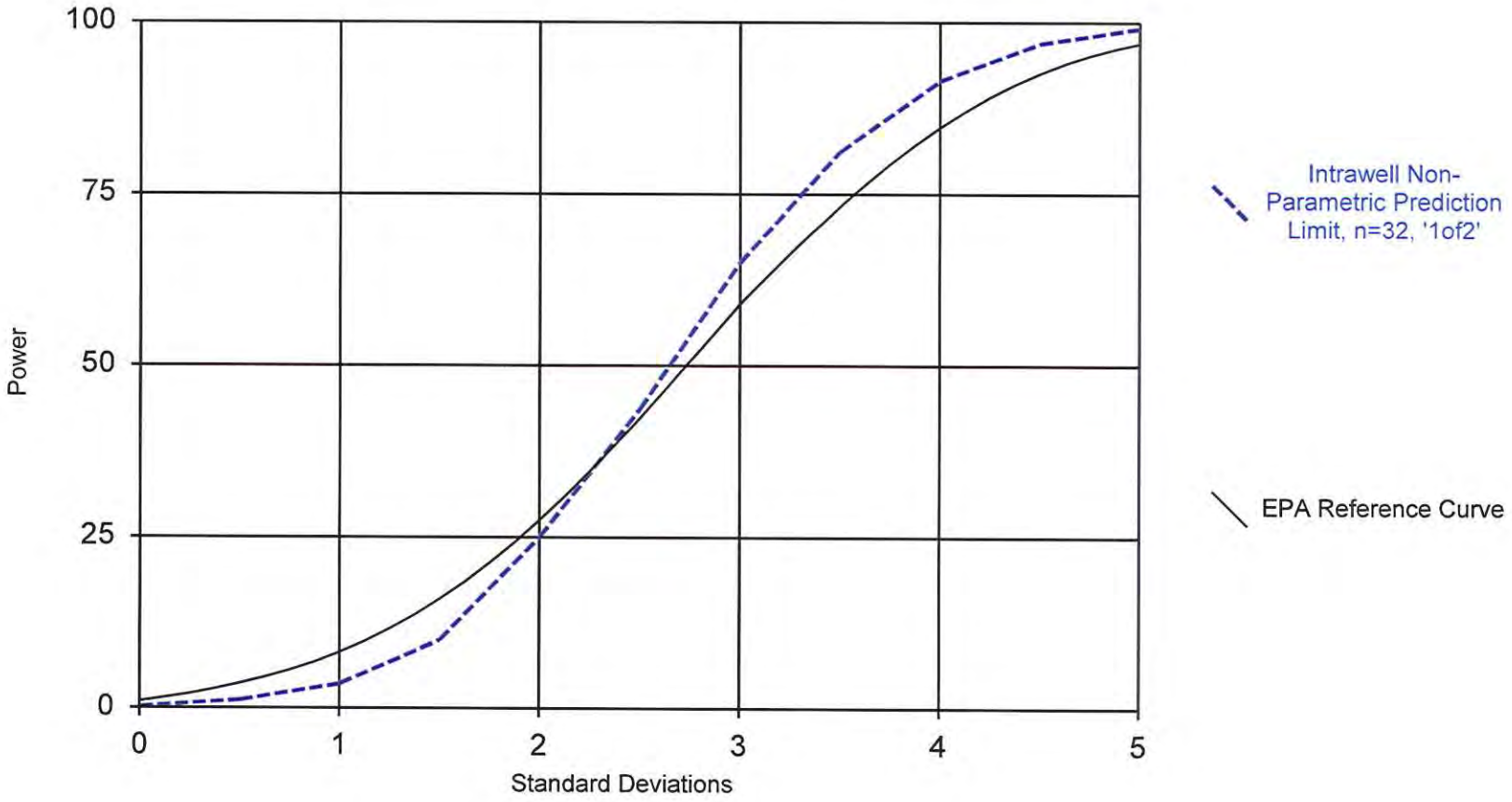
Kappa = 2.326, based on 4 compliance wells and 34 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 12/17/2013 11:46 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Power Curve



Analysis Run 12/17/2013 11:46 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

HERST & ASSOCIATES, INC.®

APPENDIX B
POTENTIOMETRIC SURFACE MAP

Groundwater Elevation Summary Table
Bridgeton Landfill, LLC

Well	Top of PVC Casing Elevation (fmsl)	Depth to Water (ft)	Groundwater Elevation (fmsl)
D-3	468.74	37.50	431.24
D-85	457.67	26.63	431.04
I-4	466.14	35.39	430.75
I-68	450.60	19.92	430.68
I-73	461.48	30.73	430.75
LR-103	470.64	39.95	430.69
LR-104	460.05	28.55	431.50
MW-1204	485.76	25.38	460.38
PZ-100-KS	486.36	26.09	460.27
PZ-100-SD	486.49	34.99	451.50
PZ-100-SS	486.55	33.72	452.83
PZ-101-SS	491.56	54.49	437.07
PZ-102R-SS	486.45	25.48	460.97
PZ-102-SS	484.65	24.77	459.88
PZ-103-SS	484.21	8.64	475.57
PZ-104-KS	484.60	20.05	464.55
PZ-104-SD	484.15	21.99	462.16
PZ-104-SS	484.00	19.56	464.44
PZ-105-SS	484.04	24.69	459.35
PZ-106-KS	464.73	5.05	459.68
PZ-106-SD	463.84	12.38	451.46
PZ-106-SS	463.11	11.39	451.72
PZ-107-SS	465.41	33.62	431.79
PZ-108-SS	Destroyed	Destroyed	Destroyed
PZ-109-SS	459.30	27.81	431.49
PZ-110-SS	461.46	30.65	430.81
PZ-111-KS	465.80	9.11	456.69
PZ-111-SD	466.57	35.11	431.46
PZ-112-AS	462.53	31.87	430.66
PZ-113-AD	462.24	30.98	431.26
PZ-113-AS	462.19	30.90	431.29
PZ-113-SS	462.66	31.17	431.49
PZ-114-AS	452.14	20.54	431.60
PZ-115-SS	452.90	17.11	435.79
PZ-116-SS	486.44	24.21	462.23
PZ-200-SS	486.23	26.27	459.96
PZ-201A-SS	482.33	11.95	470.38
PZ-202-SS	481.82	15.49	466.33
PZ-203-SS	487.19	25.23	461.96
PZ-204A-SS	463.09	5.63	457.46
PZ-204-SS	465.28	7.52	457.76
PZ-205-AS	460.88	27.31	433.57
PZ-205-SS	462.27	26.83	435.44
PZ-206-SS	460.79	26.80	433.99
PZ-207-AS	462.65	31.77	430.88
PZ-208-SS	475.19	21.40	453.79
PZ-305-AI	460.38	29.01	431.37
S-5	466.63	35.76	430.87
S-84	457.45	19.79	437.66

Leachate Elevation Summary Table
Bridgeton Landfill, LLC

Sump Designation	Measured Height Above Transducer / Below Top of Casing (ft)	Sump Depth (ft)	Transducer / Bubbler Set Point From Bottom (ft)	Base of Sump Elevation (fmsl)	Depth to Liquid (ft)	Height of Leachate (ft)	Elevation of Leachate (fmsl)
LCS #1D	NA	NA	12.00	252.22	NA	NA	NA
LCS #2D	13.80	14.40	14.40	235.92	NA	28.20	264.12
LCS #3C	NA	NA	12.00	251.64	NA	NA	NA
LCS #4B	NA	NA	12.00	256.60	NA	NA	NA
LCS #5A	14.10	NA	15.00	235.40	NA	24.10	259.50
LCS #6B	9.80	NA	9.40	428.52	NA	19.20	447.72

Notes:
Well top of casing elevations are from site survery performed 8/13, 8/21-22, 8/29, and 8/31/12.
Note: Herst & Associates, Inc. performed depth to groundwater measurements on 9/30/13.
Herst & Associates, Inc. performed depth to leachate measurements on 9/30/13.
NA: Not applicable. Leachate height measurements at LCS #1D, LCS #2D, LCS #3C, LCS #4B, LCS #5A, LCS #6B measured from the set point of a dedicated pump / transducer via controller box.
LCS #1D, #3C, and #4B were not operational during the September 2013 leachate level event.

APPENDIX C
STATISTICAL EVALUATIONS
ALLUVIAL ZONE

TREND EVALUATION OF BACKGROUND DATA
ALLUVIAL ZONE

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, 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

- Arsenic at 114-AS (8/97 through 11/07)
- Chemical oxygen demand at 114-AS (8/97 through 5/06)
- Iron at 114-AS (8/97 through 5/06)
- Phosphorus at 114-AS (8/97 through 11/05)

Trend Test

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:11 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Ammonia as N (mg/L)	114-AS (bg)	0.1458	146	158	No	34	2.941	n/a	n/a	0.02	NP
Antimony Total (ug/L)	114-AS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	**114-AS (bg)**	**7.464**	**290**	**158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Barium Total (ug/L)	114-AS (bg)	-6.728	-88	-158	No	34	0	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	114-AS (bg)	0	30	158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	114-AS (bg)	4.317	111	158	No	34	0	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	114-AS (bg)	0	-35	-158	No	34	91.18	n/a	n/a	0.02	NP
Calcium Total (ug/L)	**114-AS (bg)**	**-5330**	**-214**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	**114-AS (bg)**	**6.667**	**217**	**158**	**Yes**	**34**	**5.882**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	114-AS (bg)	3.378	66	158	No	34	0	n/a	n/a	0.02	NP
Chromium Total (ug/L)	114-AS (bg)	0	-26	-158	No	34	97.06	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	114-AS (bg)	-0.3657	-113	-158	No	34	26.47	n/a	n/a	0.02	NP
Copper Total (ug/L)	114-AS (bg)	0	-27	-158	No	34	85.29	n/a	n/a	0.02	NP
Fluoride (mg/L)	114-AS (bg)	0	-15	-145	No	32	18.75	n/a	n/a	0.02	NP
Hardness Total (mg/L)	**114-AS (bg)**	**-18.16**	**-204**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**114-AS (bg)**	**3813**	**190**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Lead Total (ug/L)	114-AS (bg)	0	-28	-158	No	34	97.06	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	**114-AS (bg)**	**-1496**	**-202**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	114-AS (bg)	-158.4	-156	-158	No	34	0	n/a	n/a	0.02	NP
Mercury Total (ug/L)	114-AS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Nickel Total (ug/L)	114-AS (bg)	0	72	158	No	34	55.88	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	114-AS (bg)	0	-62	-158	No	34	82.35	n/a	n/a	0.02	NP
pH [Field] (su)	114-AS (bg)	0.01653	132	158	No	34	0	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	**114-AS (bg)**	**0.08413**	**268**	**158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Selenium Total (ug/L)	114-AS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	114-AS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Sodium Total (ug/L)	114-AS (bg)	2002	54	158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	114-AS (bg)	-23.23	-61	-158	No	34	0	n/a	n/a	0.02	NP
Sulfate as SO4 (mg/L)	**114-AS (bg)**	**-2.479**	**-333**	**-158**	**Yes**	**34**	**35.29**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**114-AS (bg)**	**-0.1202**	**-300**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	114-AS (bg)	-17.55	-117	-158	No	34	0	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	114-AS (bg)	0.425	108	158	No	34	5.882	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	114-AS (bg)	0	-4	-158	No	34	97.06	n/a	n/a	0.02	NP
Zinc Total (ug/L)	114-AS (bg)	0	-111	-158	No	34	88.24	n/a	n/a	0.02	NP

Trend Test

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:11 AM

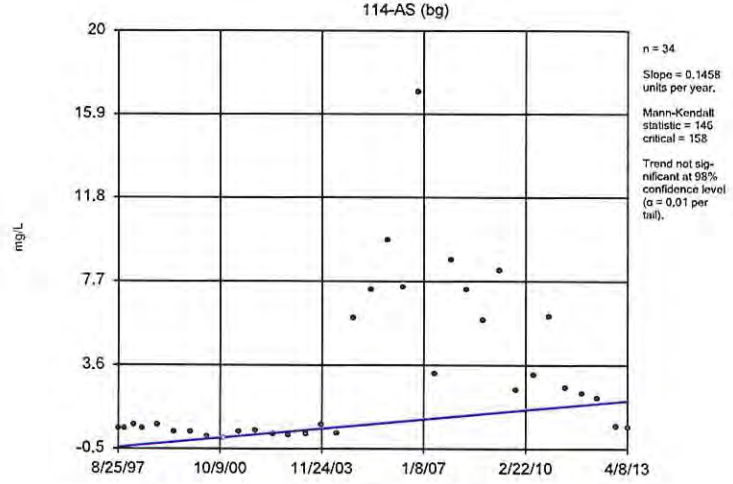
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Ammonia as N (mg/L)	114-AS (bg)	0.1458	146	158	No	34	2.941	n/a	n/a	0.02	NP
Antimony Total (ug/L)	114-AS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	**114-AS (bg)**	**7.464**	**290**	**158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Barium Total (ug/L)	114-AS (bg)	-6.728	-88	-158	No	34	0	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	114-AS (bg)	0	30	158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	114-AS (bg)	4.317	111	158	No	34	0	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	114-AS (bg)	0	-35	-158	No	34	91.18	n/a	n/a	0.02	NP
Calcium Total (ug/L)	**114-AS (bg)**	**-5330**	**-214**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	**114-AS (bg)**	**6.667**	**217**	**158**	**Yes**	**34**	**5.882**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	114-AS (bg)	3.378	66	158	No	34	0	n/a	n/a	0.02	NP
Chromium Total (ug/L)	114-AS (bg)	0	-26	-158	No	34	97.06	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	114-AS (bg)	-0.3657	-113	-158	No	34	26.47	n/a	n/a	0.02	NP
Copper Total (ug/L)	114-AS (bg)	0	-27	-158	No	34	85.29	n/a	n/a	0.02	NP
Fluoride (mg/L)	114-AS (bg)	0	-15	-145	No	32	18.75	n/a	n/a	0.02	NP
Hardness Total (mg/L)	**114-AS (bg)**	**-18.16**	**-204**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**114-AS (bg)**	**3813**	**190**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Lead Total (ug/L)	114-AS (bg)	0	-28	-158	No	34	97.06	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	**114-AS (bg)**	**-1496**	**-202**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	114-AS (bg)	-158.4	-156	-158	No	34	0	n/a	n/a	0.02	NP
Mercury Total (ug/L)	114-AS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Nickel Total (ug/L)	114-AS (bg)	0	72	158	No	34	55.88	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	114-AS (bg)	0	-62	-158	No	34	82.35	n/a	n/a	0.02	NP
pH [Field] (su)	114-AS (bg)	0.01653	132	158	No	34	0	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	**114-AS (bg)**	**0.08413**	**268**	**158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Selenium Total (ug/L)	114-AS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	114-AS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Sodium Total (ug/L)	114-AS (bg)	2002	54	158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	114-AS (bg)	-23.23	-61	-158	No	34	0	n/a	n/a	0.02	NP
Sulfate as SO4 (mg/L)	**114-AS (bg)**	**-2.479**	**-333**	**-158**	**Yes**	**34**	**35.29**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**114-AS (bg)**	**-0.1202**	**-300**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	114-AS (bg)	-17.55	-117	-158	No	34	0	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	114-AS (bg)	0.425	108	158	No	34	5.882	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	114-AS (bg)	0	-4	-158	No	34	97.06	n/a	n/a	0.02	NP
Zinc Total (ug/L)	114-AS (bg)	0	-111	-158	No	34	88.24	n/a	n/a	0.02	NP



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Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)

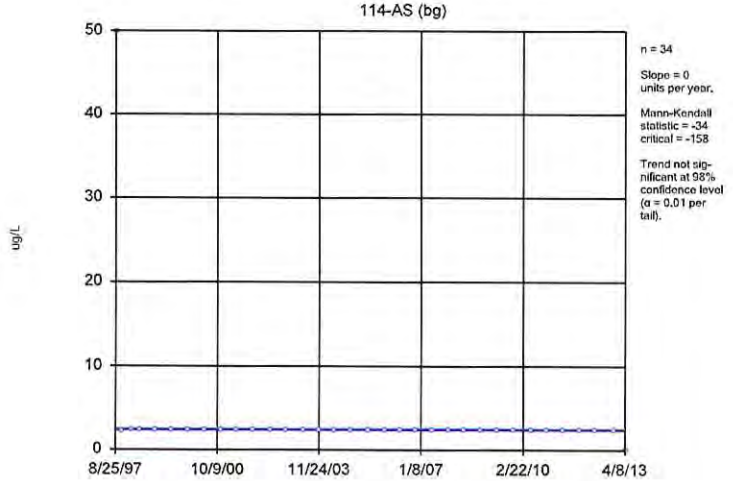


Constituent: Ammonia as N Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)

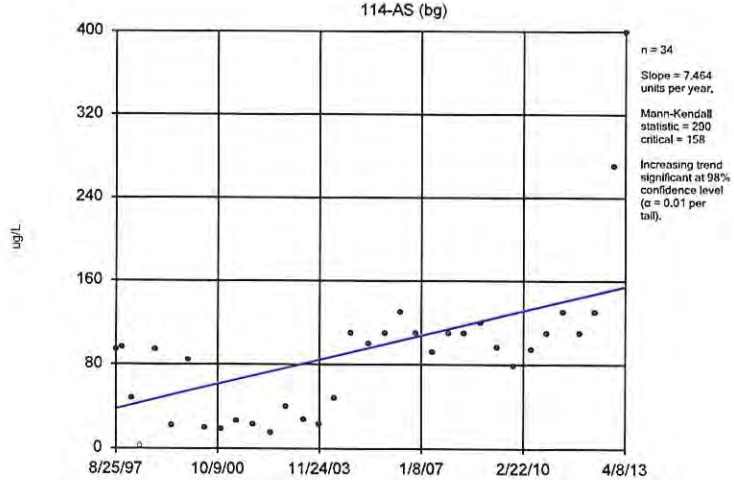


Constituent: Antimony Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)

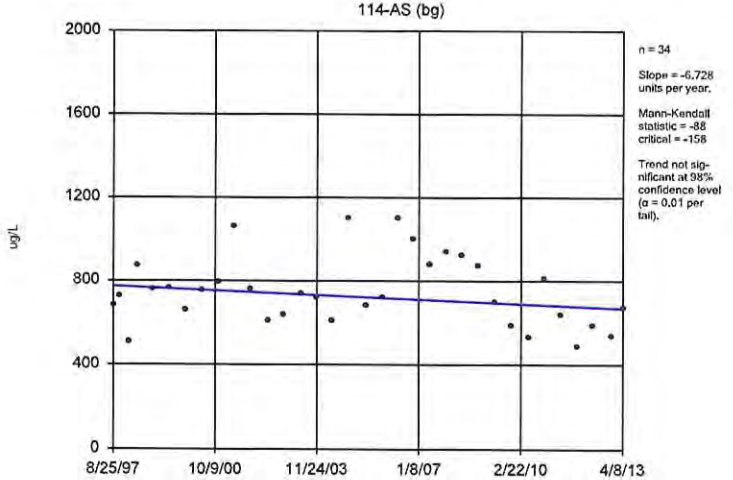


Constituent: Arsenic Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

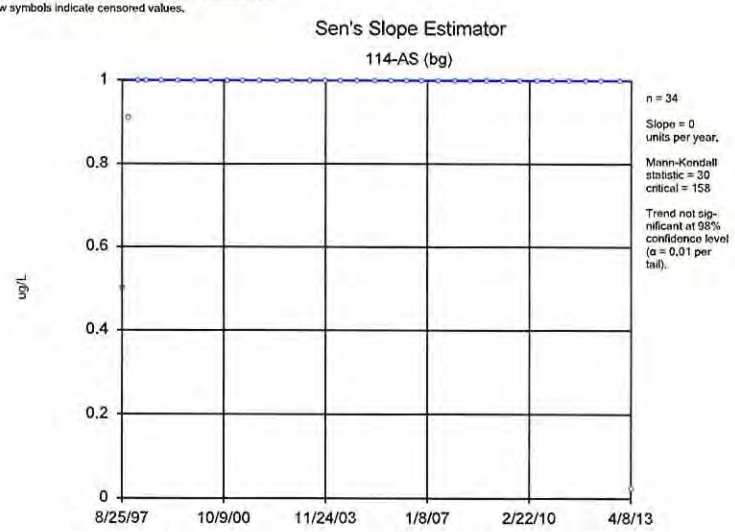
114-AS (bg)



Constituent: Barium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

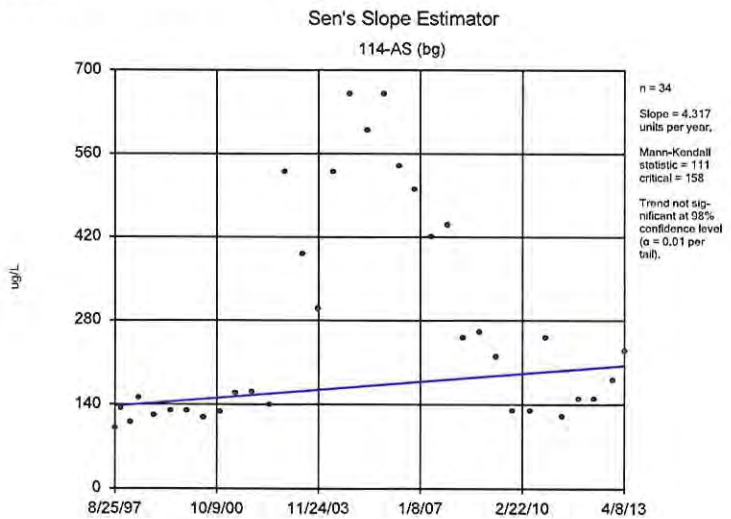
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Hollow symbols indicate censored values.



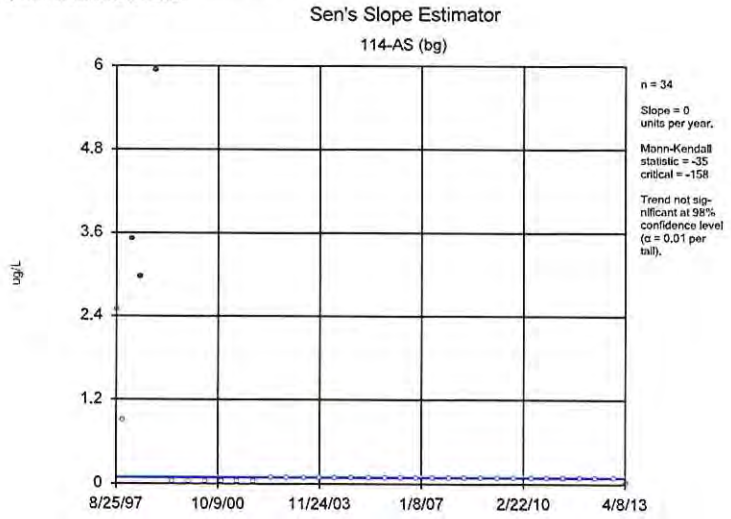
Constituent: Beryllium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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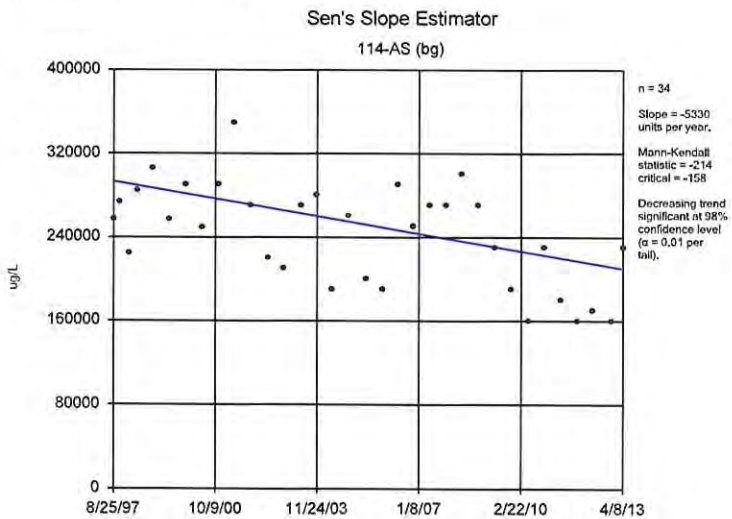
Constituent: Boron Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.



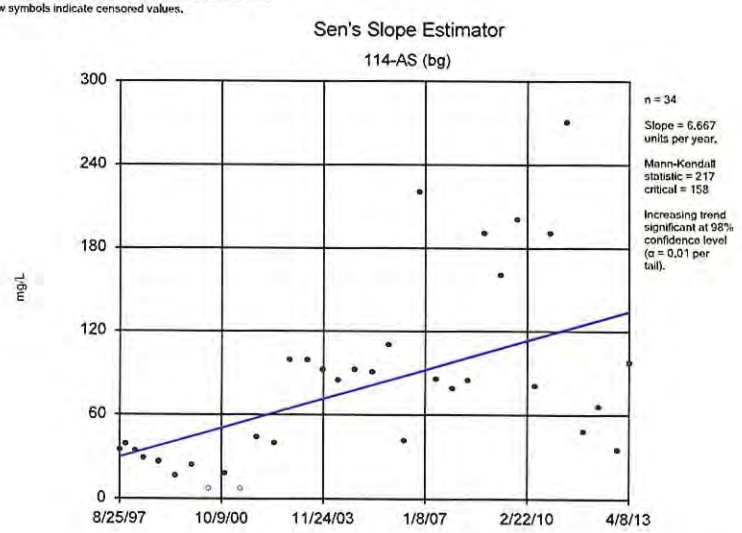
Constituent: Cadmium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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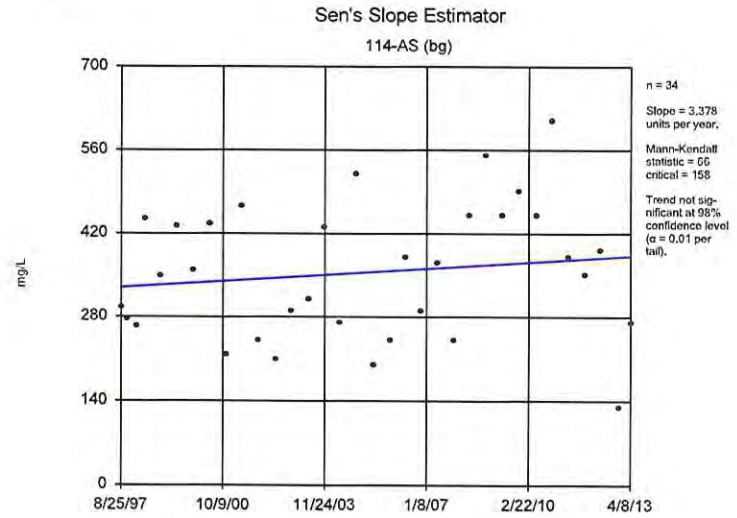
Constituent: Calcium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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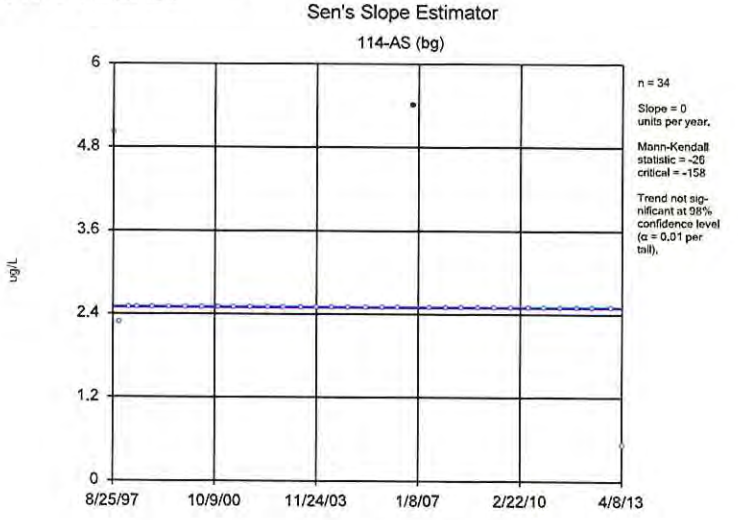
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



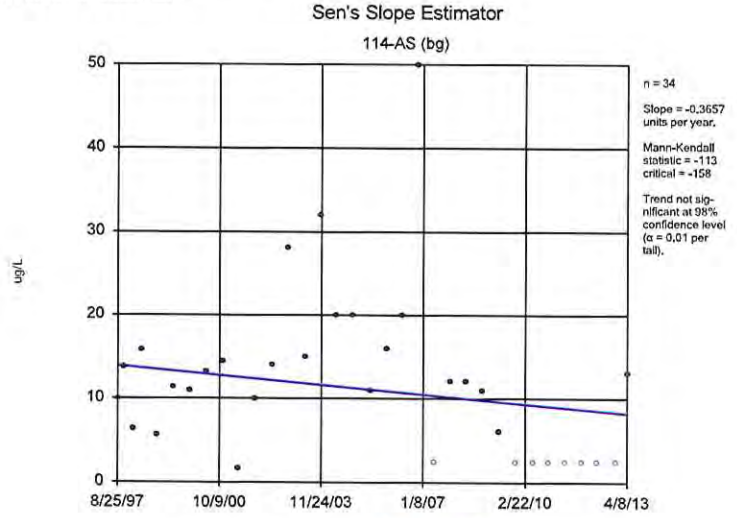
Constituent: Chloride Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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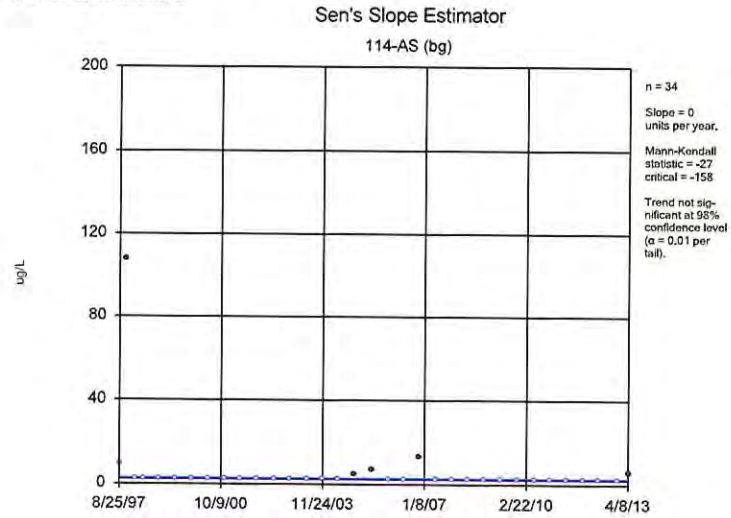
Constituent: Chromium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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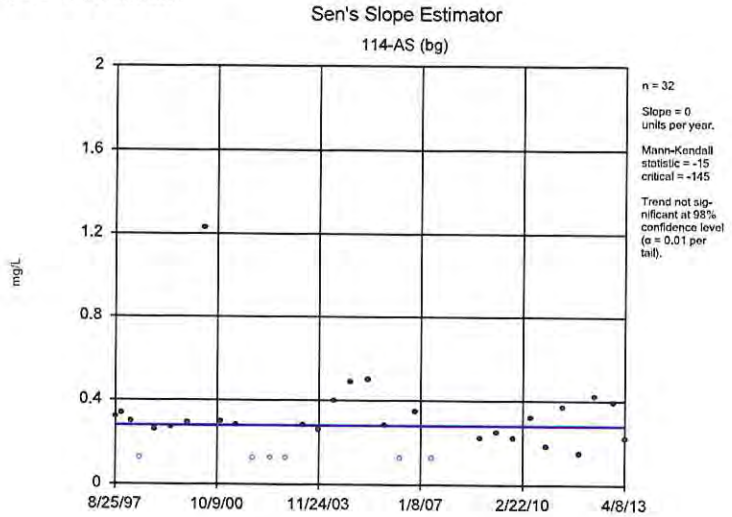
Constituent: Cobalt Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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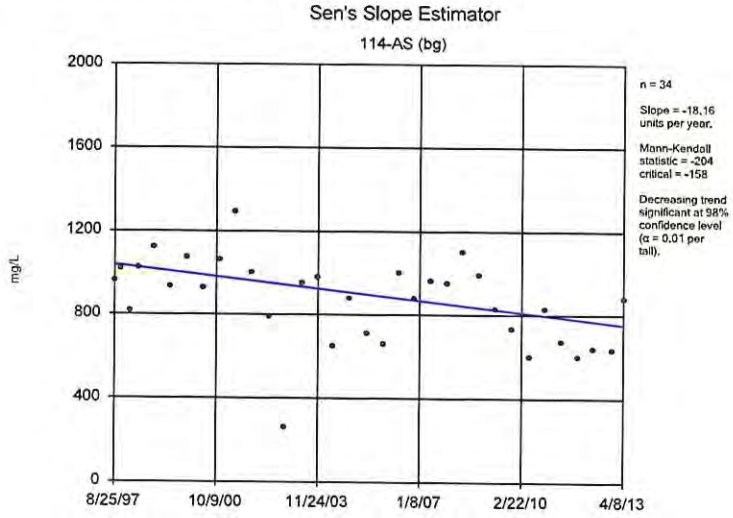
Constituent: Copper Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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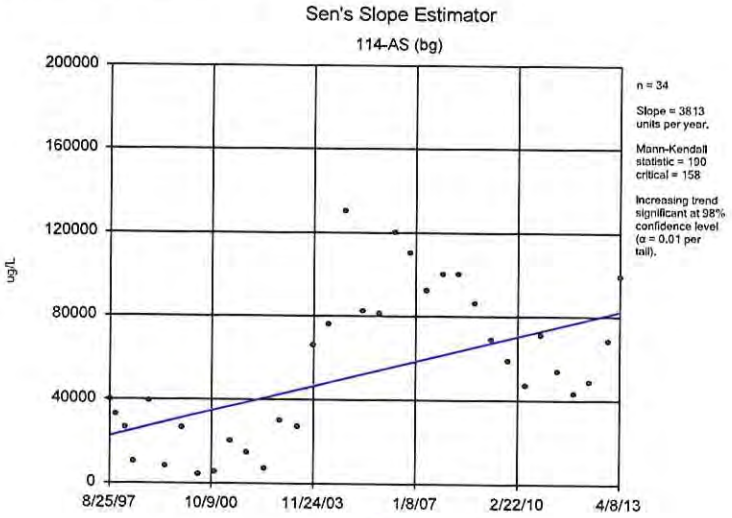
Constituent: Fluoride Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: Hardness Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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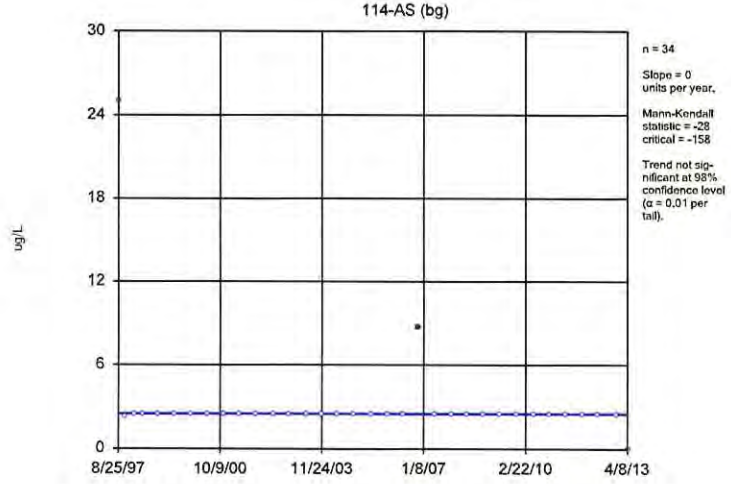
Constituent: Iron Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)

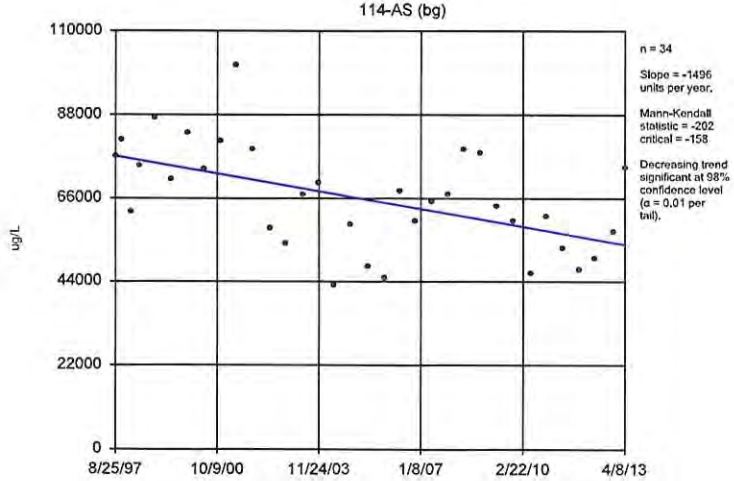


Constituent: Lead Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

114-AS (bg)

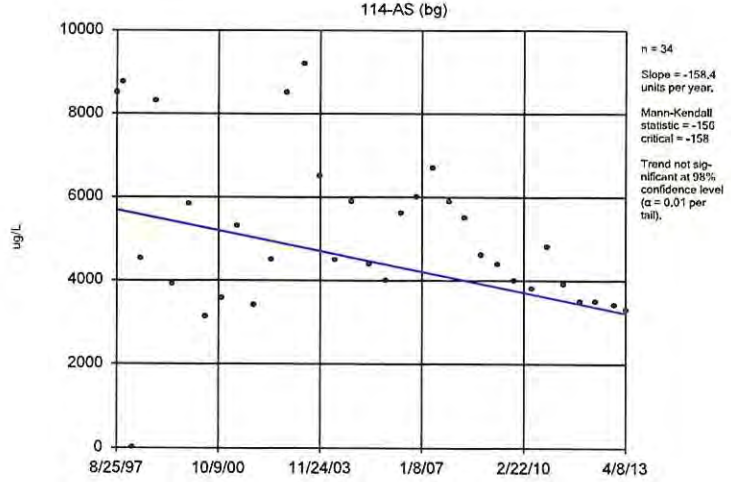


Constituent: Magnesium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

114-AS (bg)

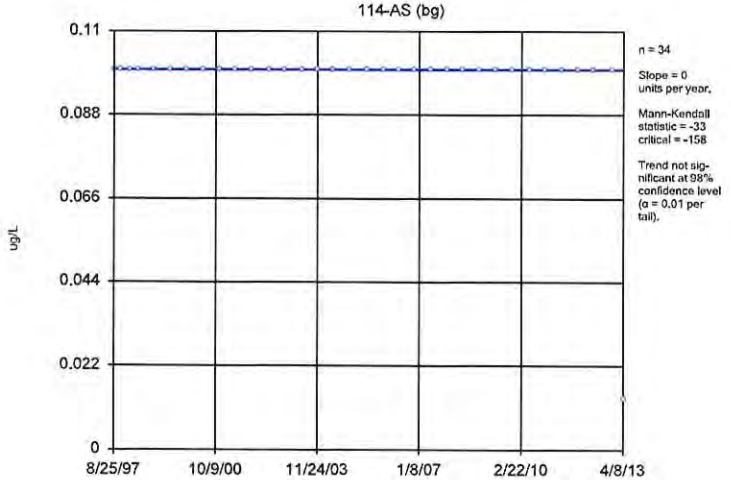


Constituent: Manganese Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

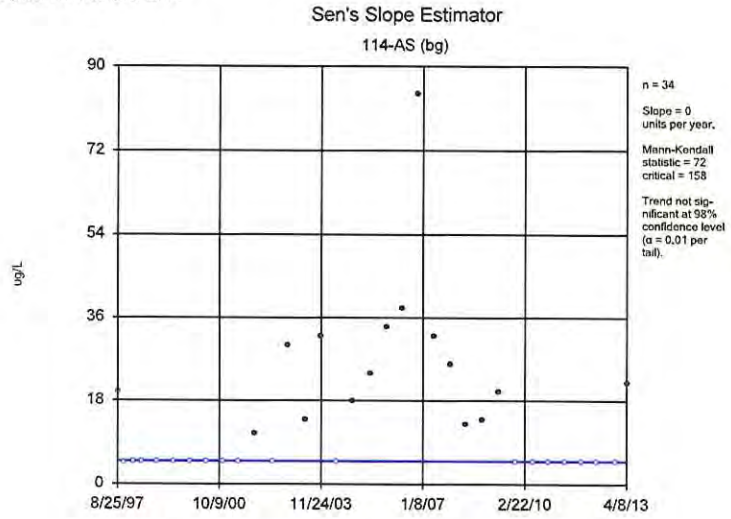
114-AS (bg)



Constituent: Mercury Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

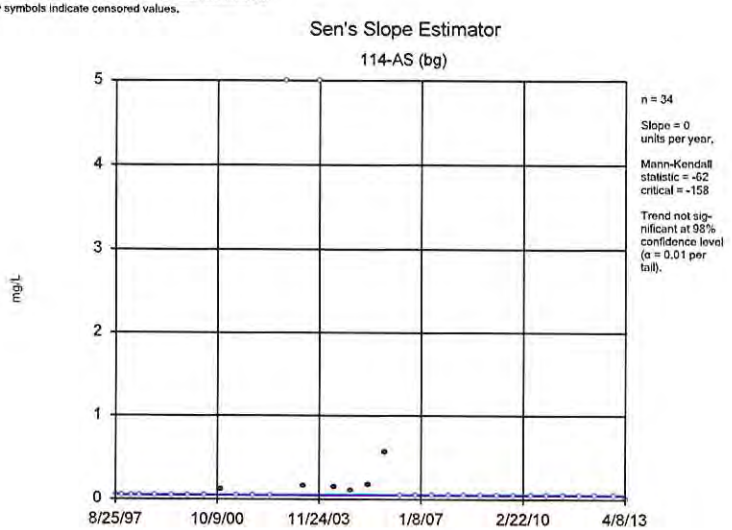
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Hollow symbols indicate censored values.



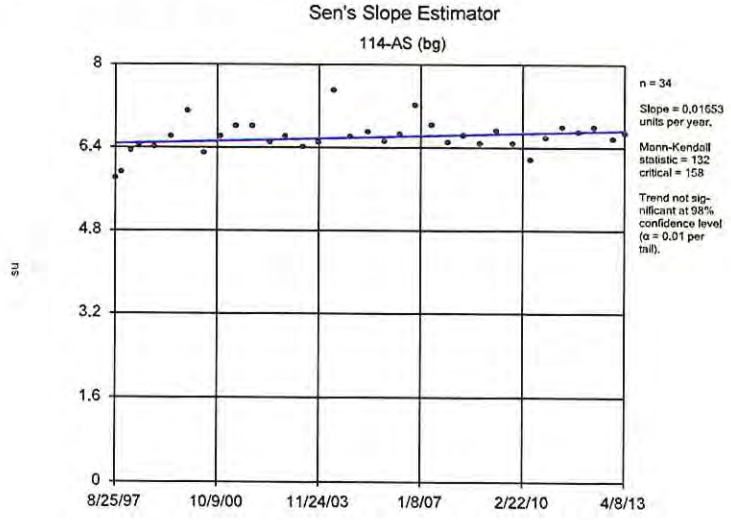
Constituent: Nickel Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.



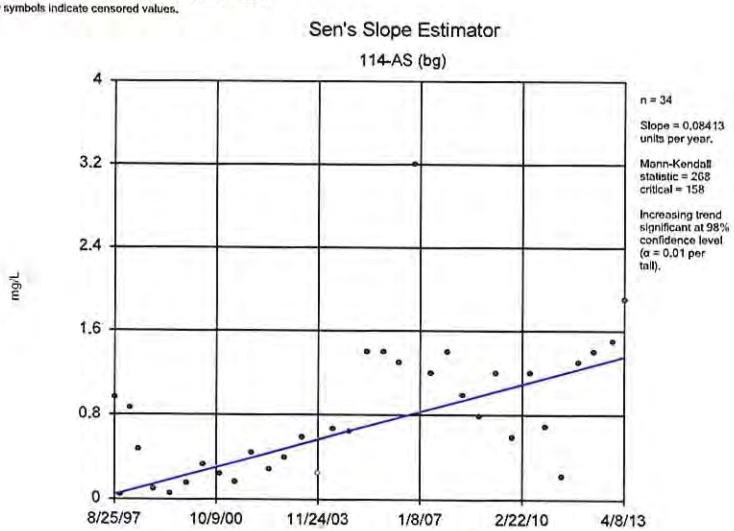
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: pH [Field] Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

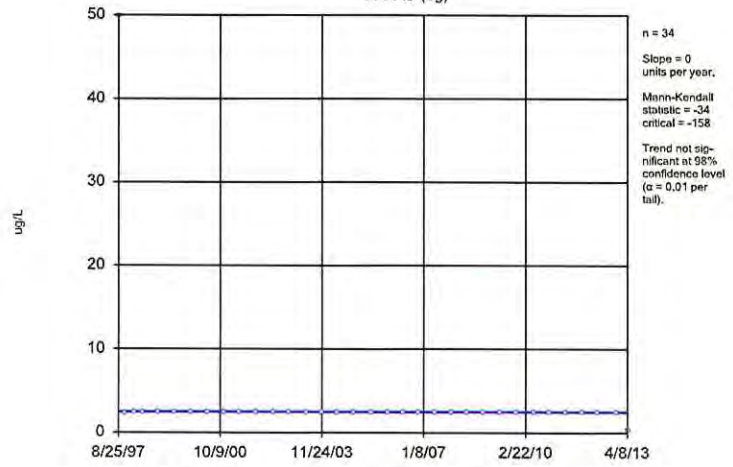


Constituent: Phosphorus Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

114-AS (bg)

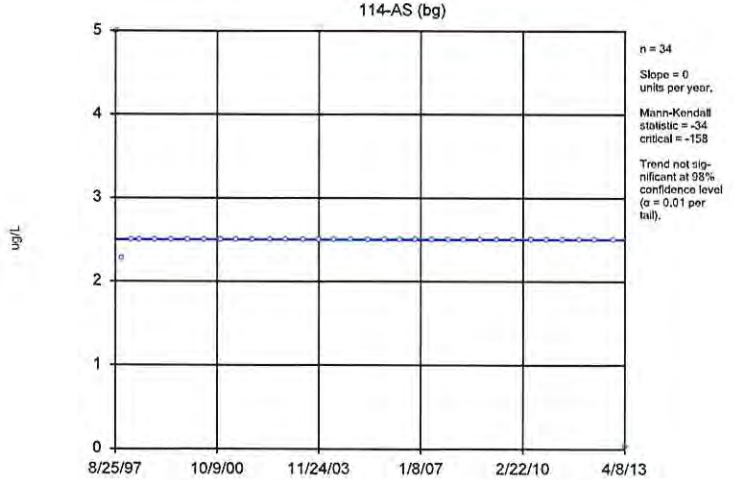


Constituent: Selenium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)

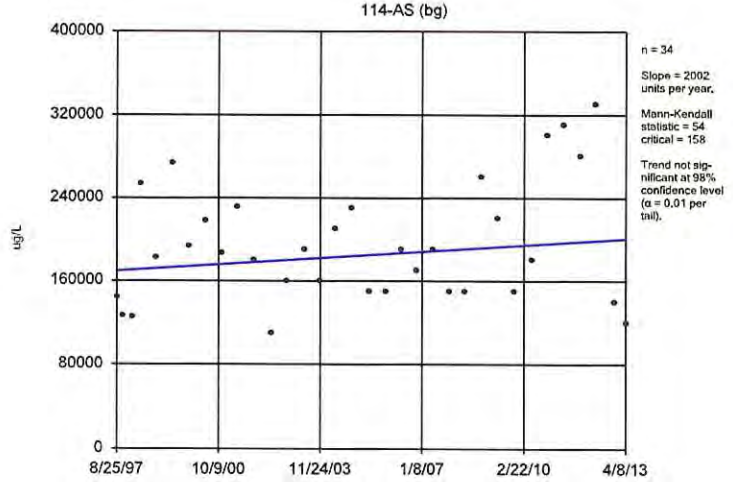


Constituent: Silver Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

114-AS (bg)

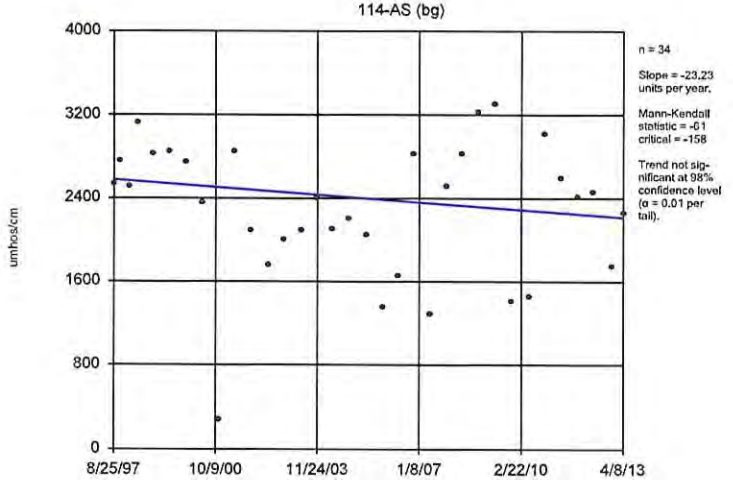


Constituent: Sodium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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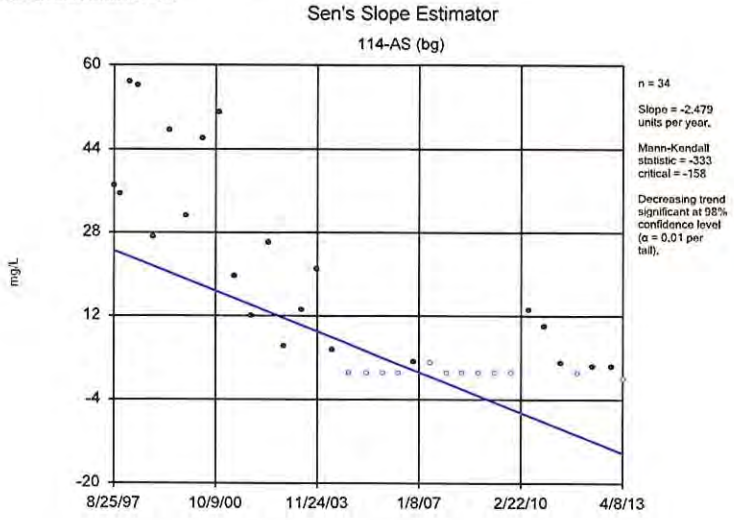
Sen's Slope Estimator

114-AS (bg)



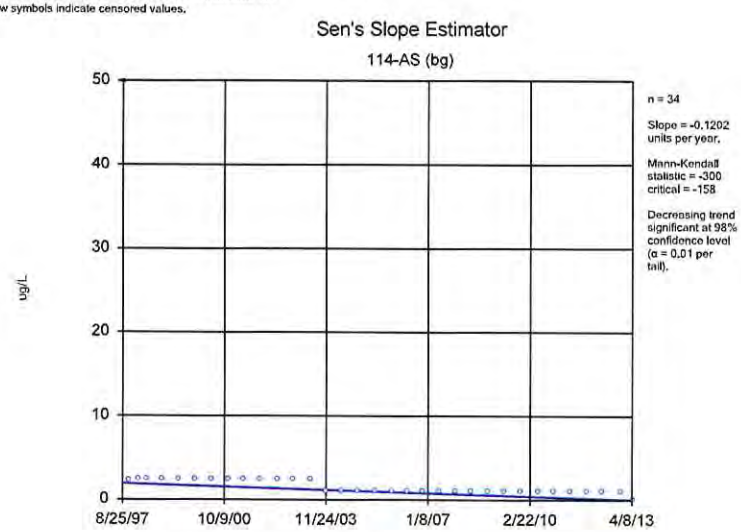
Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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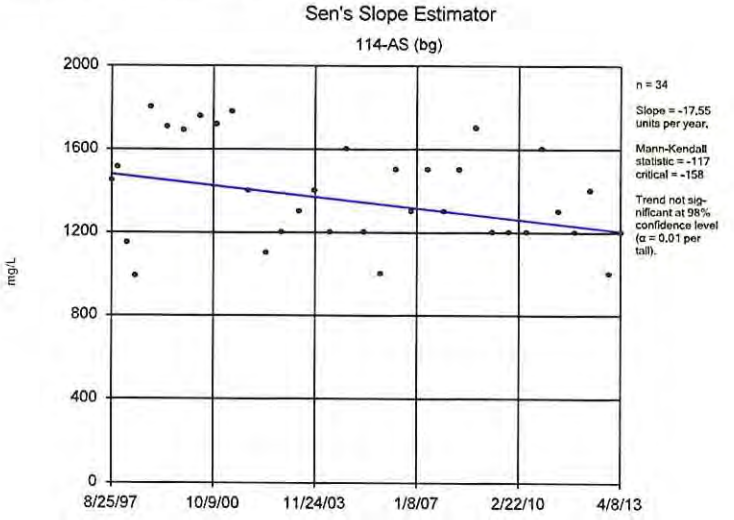
Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.



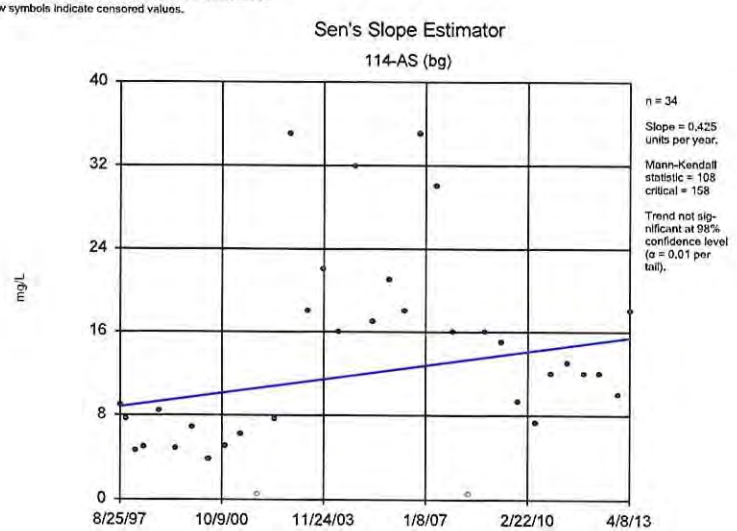
Constituent: Thallium Total Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

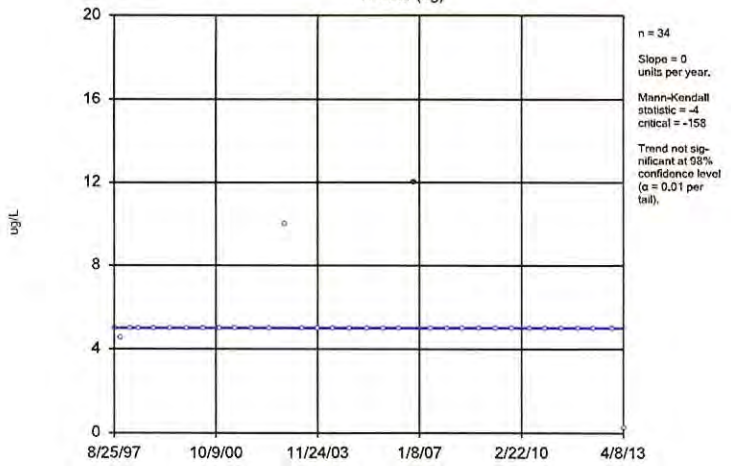


Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:10 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

114-AS (bg)



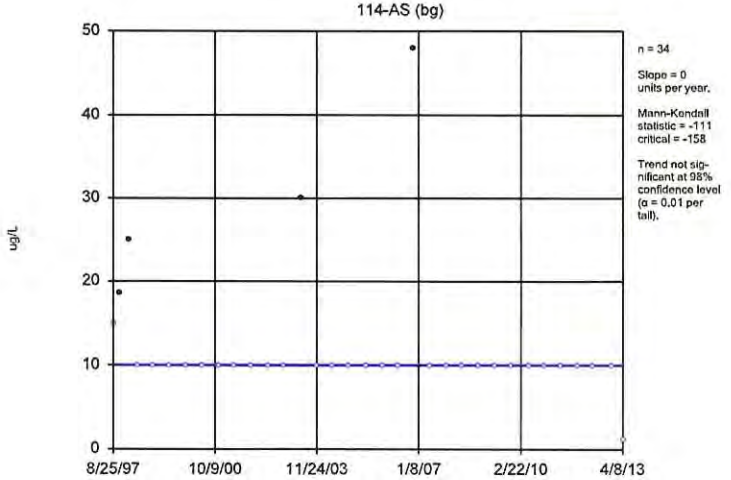
Constituent: Vanadium Total Analysis Run 12/17/2013 10:10 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

114-AS (bg)



Constituent: Zinc Total Analysis Run 12/17/2013 10:10 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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INTRA-WELL PREDICTION LIMITS
ALLUVIAL ZONE

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:11 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Ammonia as N (mg/L)	114-AS	23.22	1.4	No	34	0.1828	1.544	2.941	None	ln(x)	0.001548	Param Intra 1 of 2
Antimony Total (ug/L)	114-AS	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	114-AS	272.2	200	No	34	4.187	1.196	2.941	None	x^(1/3)	0.001548	Param Intra 1 of 2
Barium Total (ug/L)	114-AS	1062	440	No	34	748.3	163.3	0	None	No	0.001548	Param Intra 1 of 2
Beryllium Total (ug/L)	114-AS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	114-AS	660	160	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Cadmium Total (ug/L)	114-AS	5.94	0.1ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Calcium Total (ug/L)	114-AS	334257	140000	No	34	242059	48060	0	None	No	0.001548	Param Intra 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	114-AS	229.9	5ND	No	34	8.46	3.494	5.882	None	sqrt(x)	0.001548	Param Intra 1 of 2
Chloride (mg/L)	114-AS	569	160	No	34	354.3	111.9	0	None	No	0.001548	Param Intra 1 of 2
Chromium Total (ug/L)	114-AS	5.4	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	114-AS	42.02	2.5ND	No	34	2.759	1.941	26.47	Aitchison`s	sqrt(x)	0.001548	Param Intra 1 of 2
Copper Total (ug/L)	114-AS	108	2.5ND	No	34	n/a	n/a	85.29	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	114-AS	0.5285	0.34	No	31	0.247	0.1455	19.35	Aitchison`s	No	0.001548	Param Intra 1 of 2
Hardness Total (mg/L)	114-AS	1214	490	No	33	882.4	172.3	0	None	No	0.001548	Param Intra 1 of 2
Iron Total (ug/L)	114-AS	124461	70000	No	34	55722	35832	0	None	No	0.001548	Param Intra 1 of 2
Lead Total (ug/L)	114-AS	25	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Magnesium Total (ug/L)	114-AS	92341	36000	No	34	66015	13723	0	None	No	0.001548	Param Intra 1 of 2
Manganese Total (ug/L)	114-AS	8880	1700	No	33	17.13	1.861	0	None	x^(1/3)	0.001548	Param Intra 1 of 2
Mercury Total (ug/L)	114-AS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	114-AS	84	5ND	No	34	n/a	n/a	55.88	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	114-AS	5	0.05ND	No	34	n/a	n/a	82.35	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	114-AS	2.362	2.2	No	34	0.8391	0.3637	2.941	None	sqrt(x)	0.001548	Param Intra 1 of 2
Selenium Total (ug/L)	114-AS	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	114-AS	0.06	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Sodium Total (ug/L)	114-AS	304869	110000	No	34	194500	57532	0	None	No	0.001548	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	114-AS	3418	1556	No	33	2351	554.4	0	None	No	0.001548	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	114-AS	56.8	5.4	No	34	n/a	n/a	35.29	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Thallium Total (ug/L)	114-AS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	114-AS	1847	820	No	34	1384	241.4	0	None	No	0.001548	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	114-AS	34.81	9.9	No	34	3.428	1.289	5.882	None	sqrt(x)	0.001548	Param Intra 1 of 2
Vanadium Total (ug/L)	114-AS	12	5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	114-AS	48	10ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:11 AM

Constituent	Well	Upper Lim.	Lower Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH [Field] (su)	114-AS	7.203	5.987	6.59	No	34	6.595	0.3168	0	None	No	0.0007741	Param Intra 1 of 2

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Intrawell Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 12:04 PM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic Total (ug/L)	**114-AS**	**174.5**	**200**	**Yes**	**23**	**7.394**	**2.888**	**4.348**	**None**	**sqrt(x)**	**0.001548**	Param 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	114-AS	142	5ND	No	20	6.741	2.519	10	None	sqrt(x)	0.001548	Param 1 of 2
Iron Total (ug/L)	114-AS	136878	70000	No	20	186.6	89.3	0	None	sqrt(x)	0.001548	Param 1 of 2
Phosphorus Total (mg/L)	**114-AS**	**1.56**	**2.2**	**Yes**	**19**	**0.6448**	**0.2909**	**5.263**	**None**	**sqrt(x)**	**0.001548**	Param 1 of 2

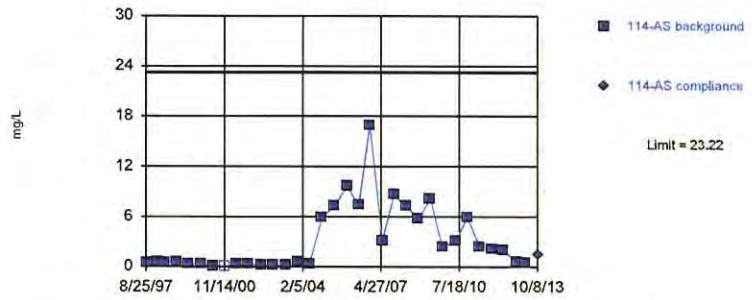


Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=0.1828, Std. Dev.=1.544, n=34, 2.941% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9383, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

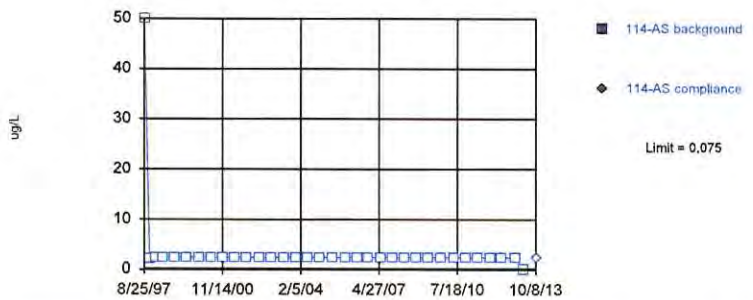
Constituent: Ammonia as N Analysis Run 12/17/2013 11:08 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

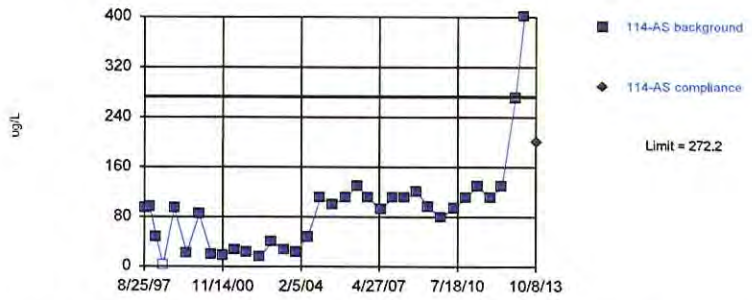
Constituent: Antimony Total Analysis Run 12/17/2013 11:08 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=4.187, Std. Dev.=1.196, n=34, 2.941% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9209, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. After outlier removal distribution was non-normal, so outlier results were invalidated.

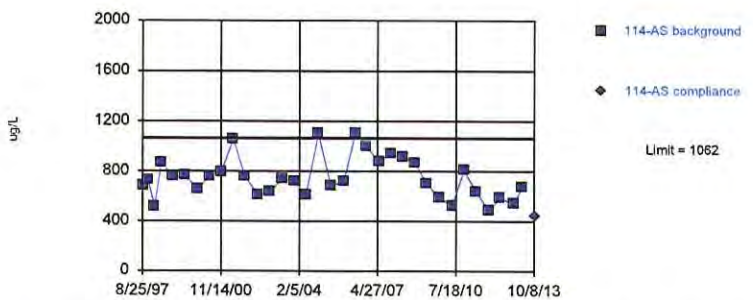
Constituent: Arsenic Total Analysis Run 12/17/2013 11:08 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=748.3, Std. Dev.=163.3, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9464, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Barium Total Analysis Run 12/17/2013 11:08 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

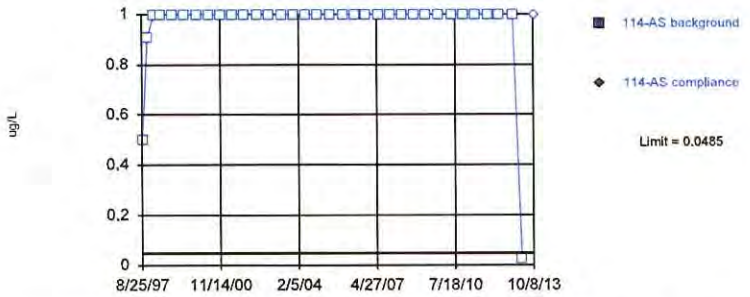
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Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

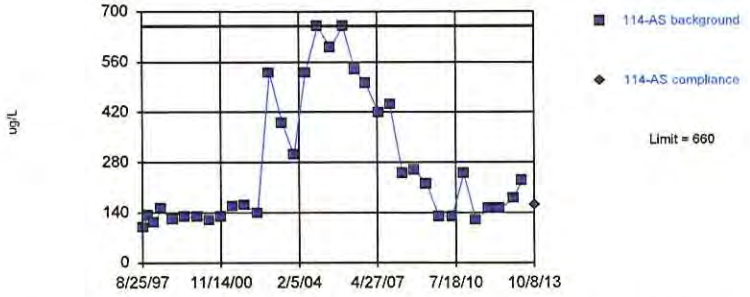
Constituent: Beryllium Total Analysis Run 12/17/2013 11:08 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

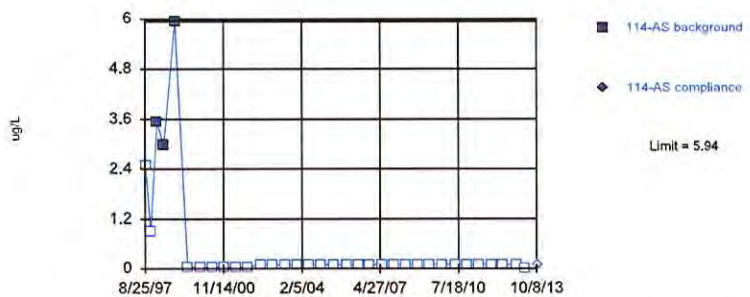
Constituent: Boron Total Analysis Run 12/17/2013 11:08 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

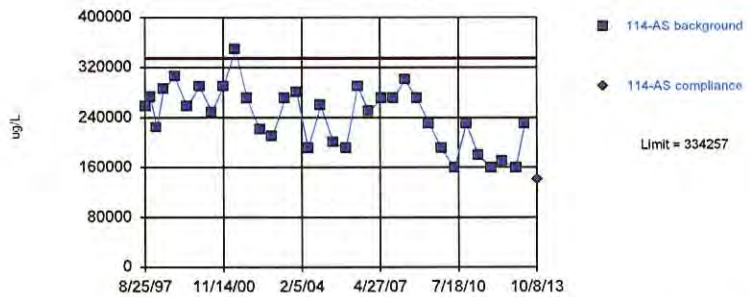
Constituent: Cadmium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



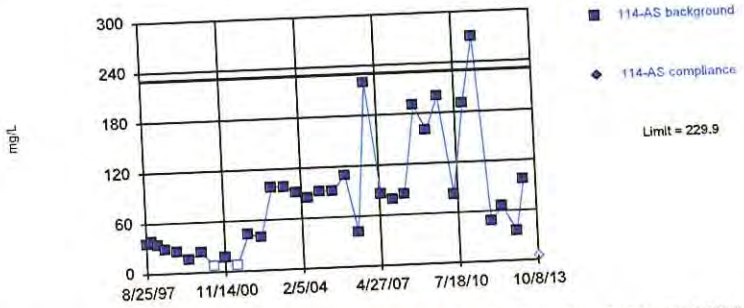
Background Data Summary: Mean=242059, Std. Dev.=48060, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9521, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Calcium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Parametric

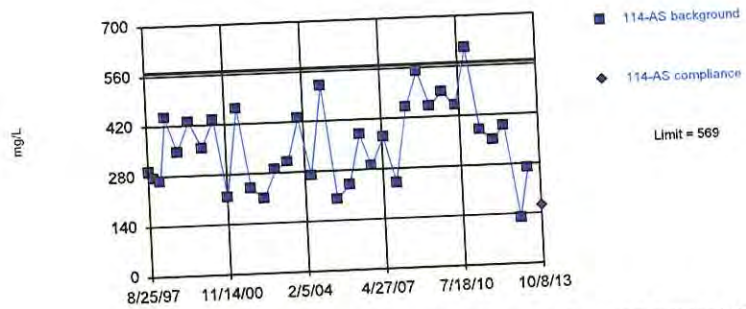


Background Data Summary (based on square root transformation): Mean=8.46, Std. Dev.=3.494, n=34, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9511, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric

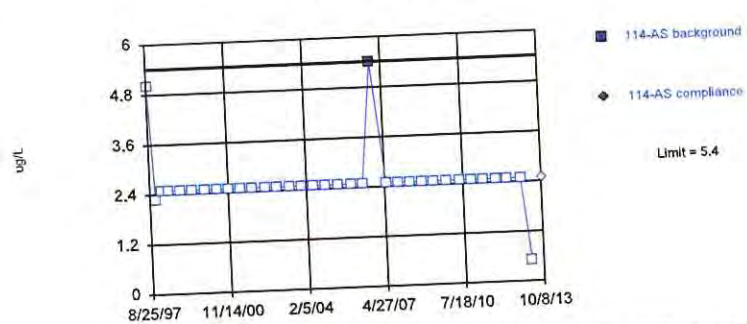


Background Data Summary: Mean=354.3, Std. Dev.=111.9, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9766, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chloride Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

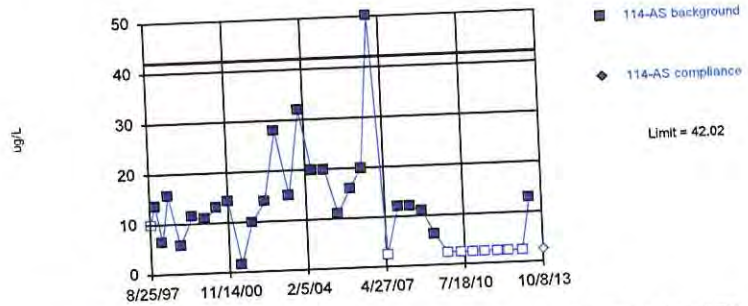


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=2.759, Std. Dev.=1.941, n=34, 26.47% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9214, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. After outlier removal distribution was non-normal, so outlier results were invalidated.

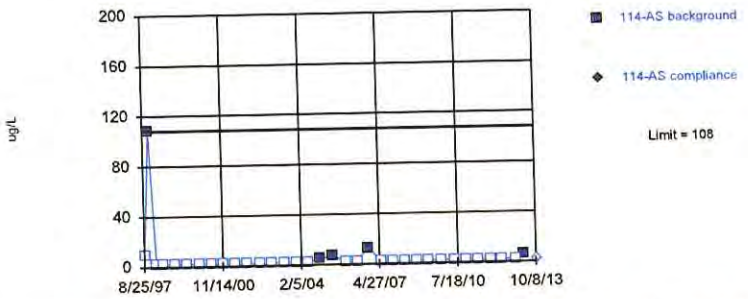
Constituent: Cobalt Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



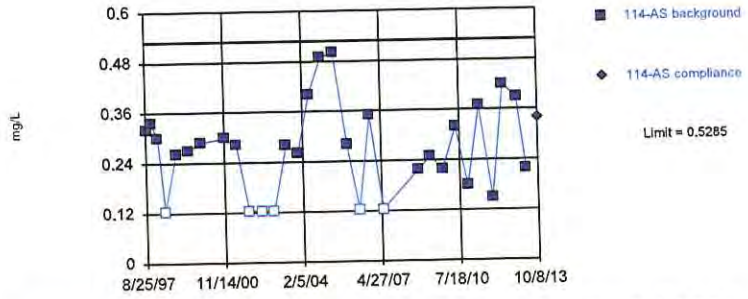
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 85.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Parametric



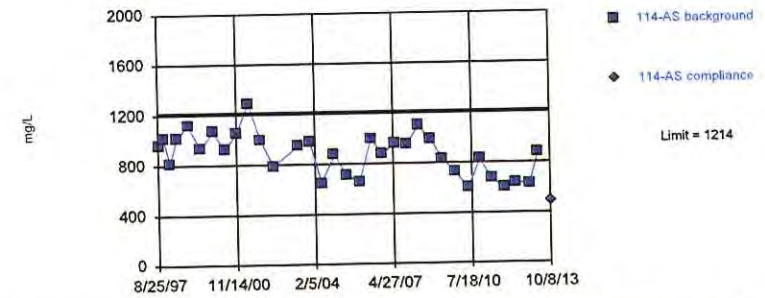
Background Data Summary (after Aitchison's Adjustment): Mean=0.247, Std. Dev.=0.1455, n=31, 19.35% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9398, critical = 0.902. Kappa = 1.935 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 1.23 (5/23/2000).

Constituent: Fluoride Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit
Intrawell Parametric



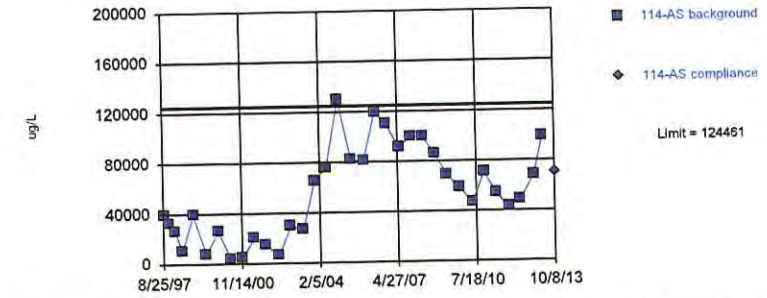
Background Data Summary: Mean=882.4, Std. Dev.=172.3, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9535, critical = 0.906. Kappa = 1.924 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 260 (11/19/2002).

Constituent: Hardness Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=55722, Std. Dev.=35832, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9508, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Iron Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

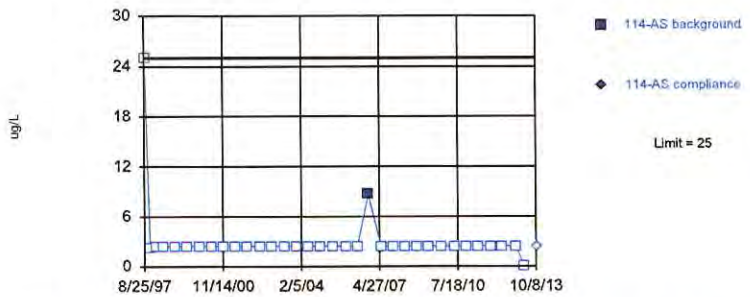
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Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

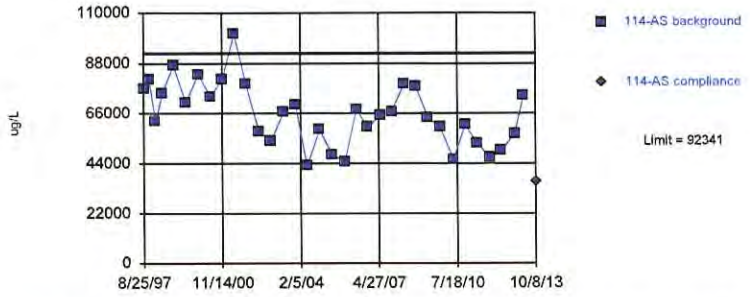
Constituent: Lead Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=66015, Std. Dev.=13723, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9747, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

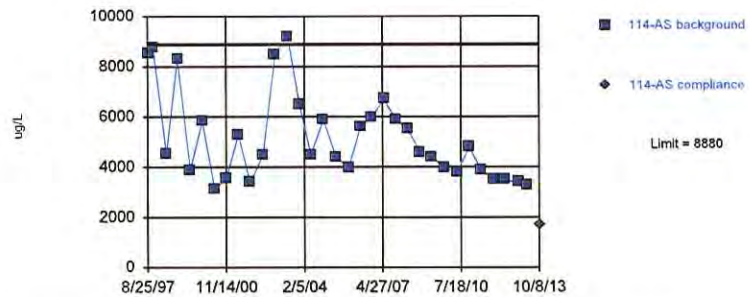
Constituent: Magnesium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=17.13, Std. Dev.=1.861, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9094, critical = 0.906. Kappa = 1.924 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 6.38 (2/16/1998).

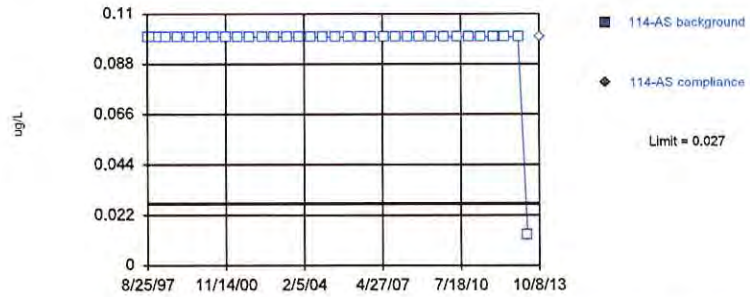
Constituent: Manganese Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

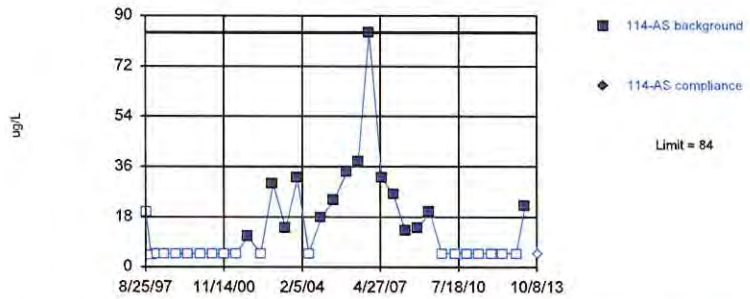
Constituent: Mercury Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 55.88% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

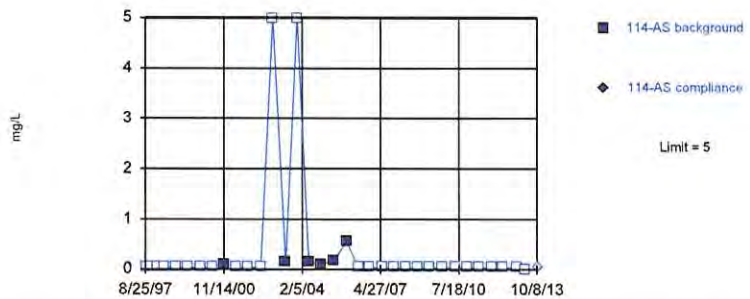
Constituent: Nickel Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

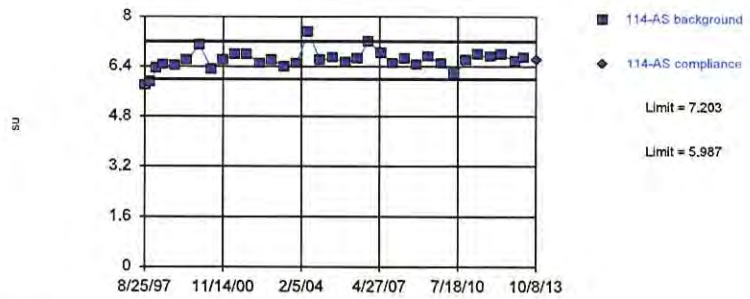
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.595, Std. Dev.=0.3168, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9374, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

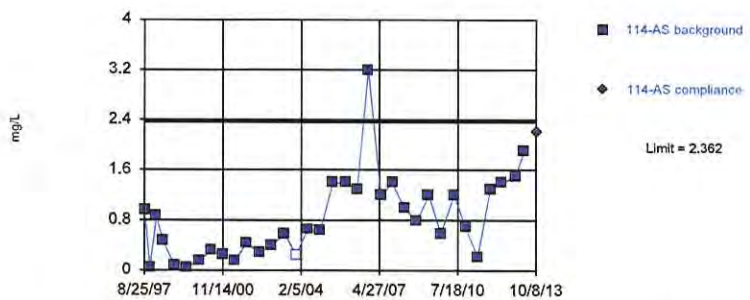
Constituent: pH [Field] Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.8391, Std. Dev.=0.3637, n=34, 2.941% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9666, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Phosphorus Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

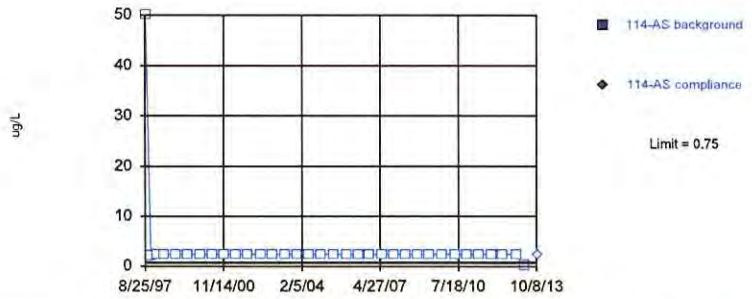
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

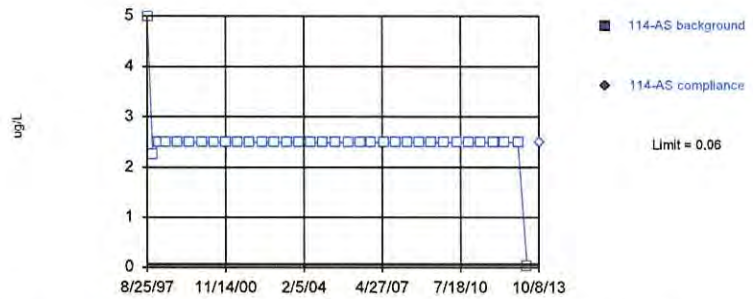
Constituent: Selenium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

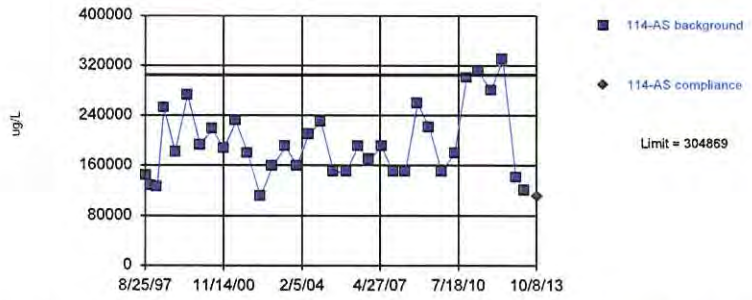
Constituent: Silver Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=194500, Std. Dev.=57532, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9318, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

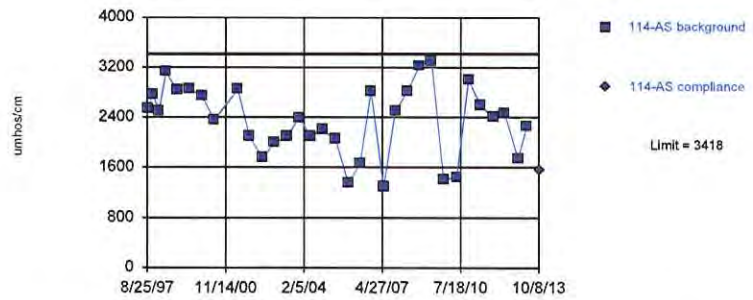
Constituent: Sodium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2351, Std. Dev.=554.4, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9584, critical = 0.906. Kappa = 1.924 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 280 (11/13/2000).

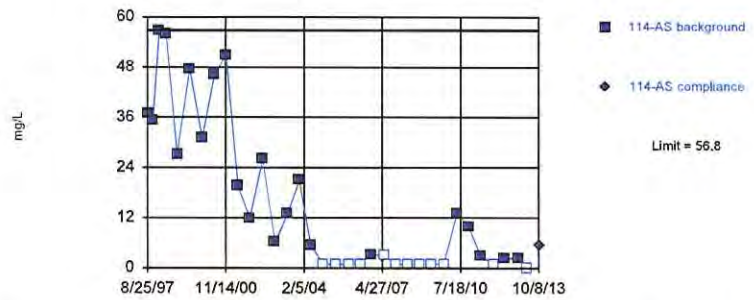
Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 35.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

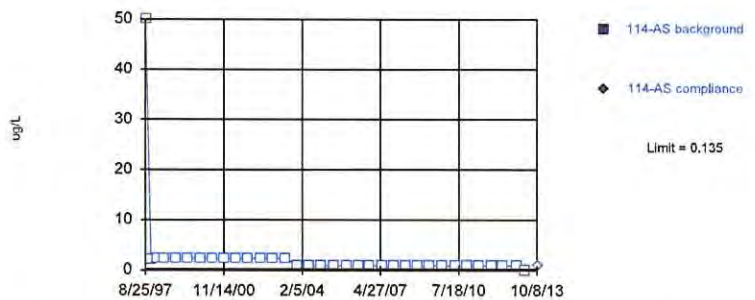
Constituent: Sulfate as SO4 Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

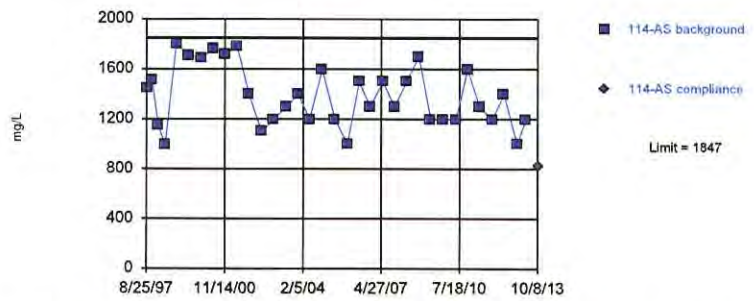
Constituent: Thallium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1384, Std. Dev.=241.4, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9331, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

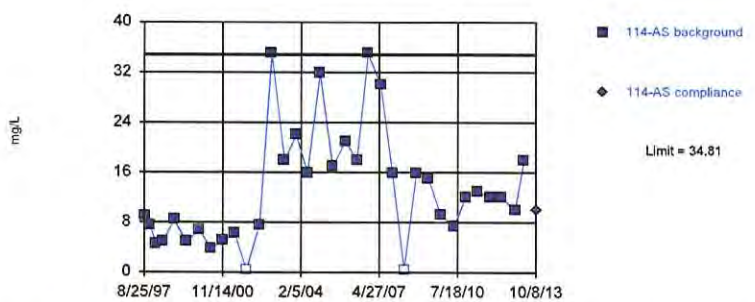
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=3.428, Std. Dev.=1.289, n=34, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9669, critical = 0.908. Kappa = 1.918 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. Rosner's Outlier Test was performed on the background data. No background outliers were found.

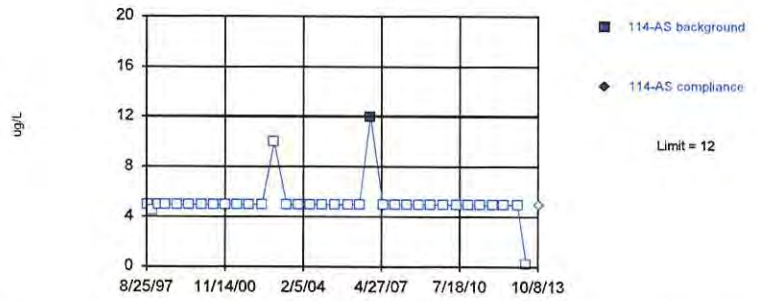
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

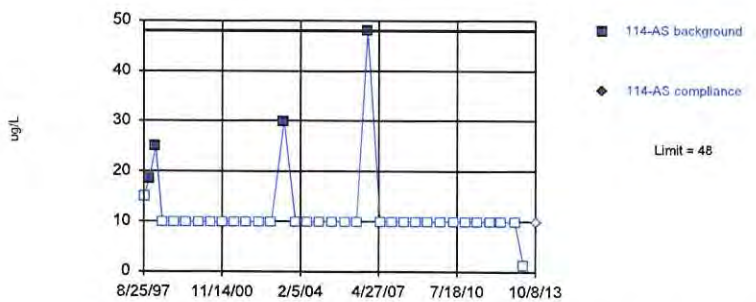
Constituent: Vanadium Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

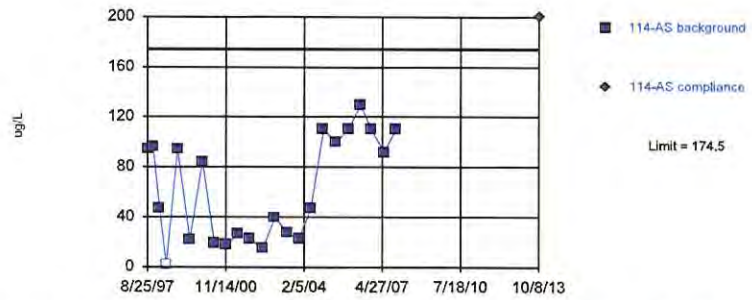
Constituent: Zinc Total Analysis Run 12/17/2013 11:09 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Exceeds Limit

Prediction Limit

Intrawell Parametric



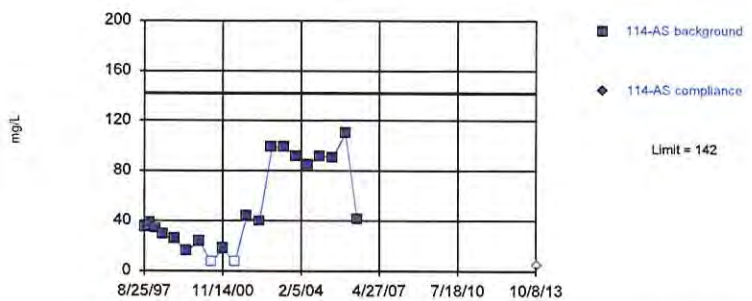
Background Data Summary (based on square root transformation): Mean=7.394, Std. Dev.=2.888, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8921, critical = 0.881. Kappa = 2.014 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 12:01 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



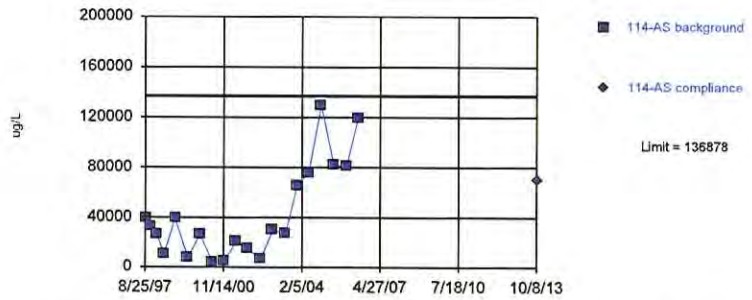
Background Data Summary (based on square root transformation): Mean=6.741, Std. Dev.=2.519, n=20, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9098, critical = 0.868. Kappa = 2.054 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 12:02 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Within Limit

Prediction Limit

Intrawell Parametric



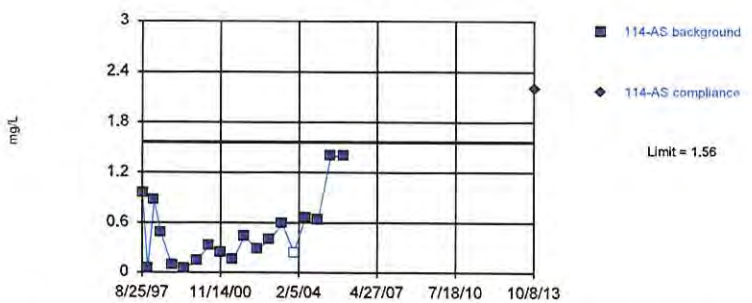
Background Data Summary (based on square root transformation): Mean=186.6, Std. Dev.=89.3, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9386, critical = 0.868. Kappa = 2.054 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Iron Total Analysis Run 12/17/2013 12:02 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.6448, Std. Dev.=0.2909, n=19, 5.263% NDs. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9616, critical = 0.901. Kappa = 2.077 (c=34, w=1, 1 of 2, event alpha = 0.05132). Report alpha = 0.001548. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

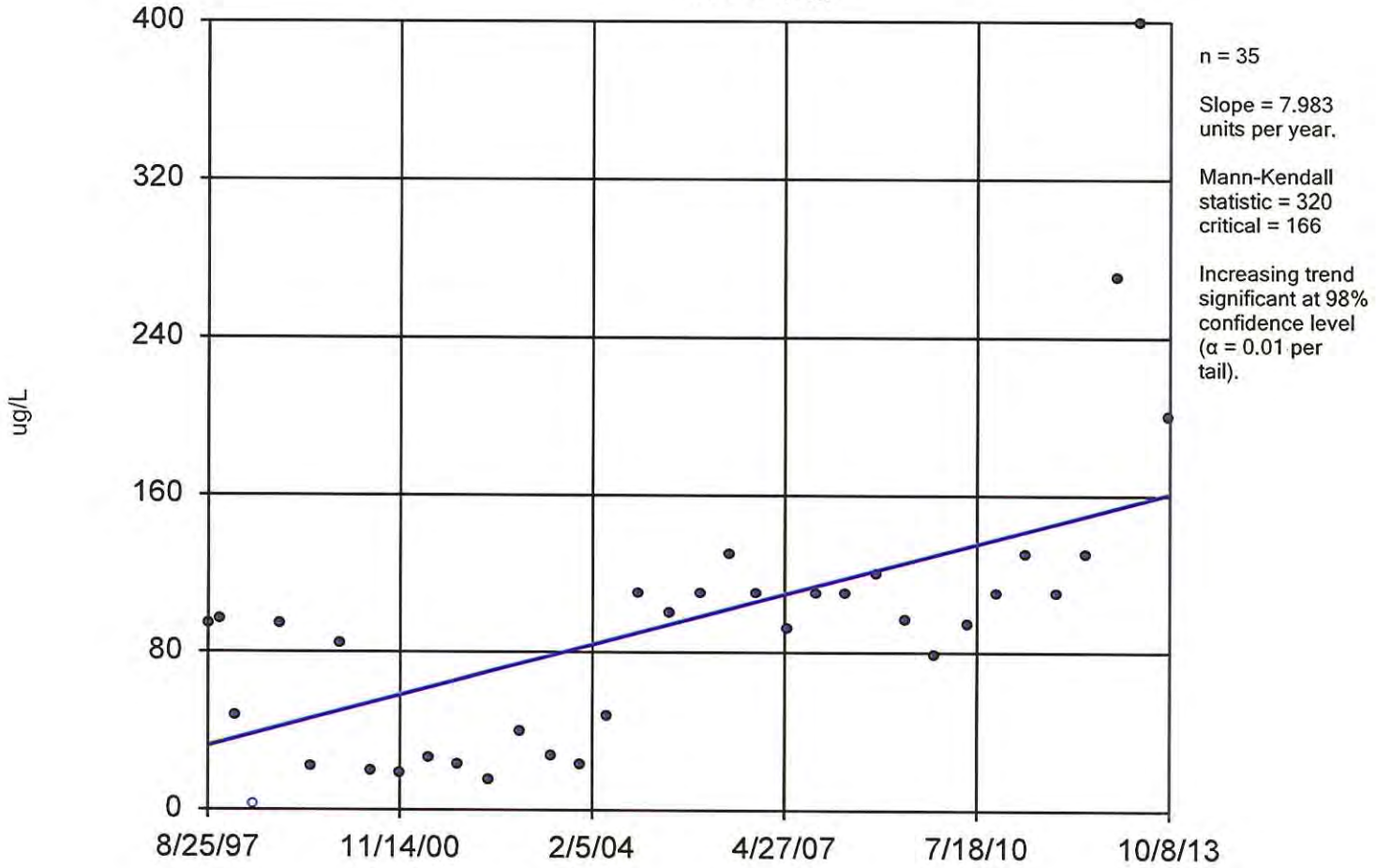
Constituent: Phosphorus Total Analysis Run 12/17/2013 12:03 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

TREND EVALUATION OF EXCEEDING CONSTITUENTS
ALLUVIAL ZONE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)



Constituent: Arsenic Total Analysis Run 12/17/2013 3:36 PM View: 1

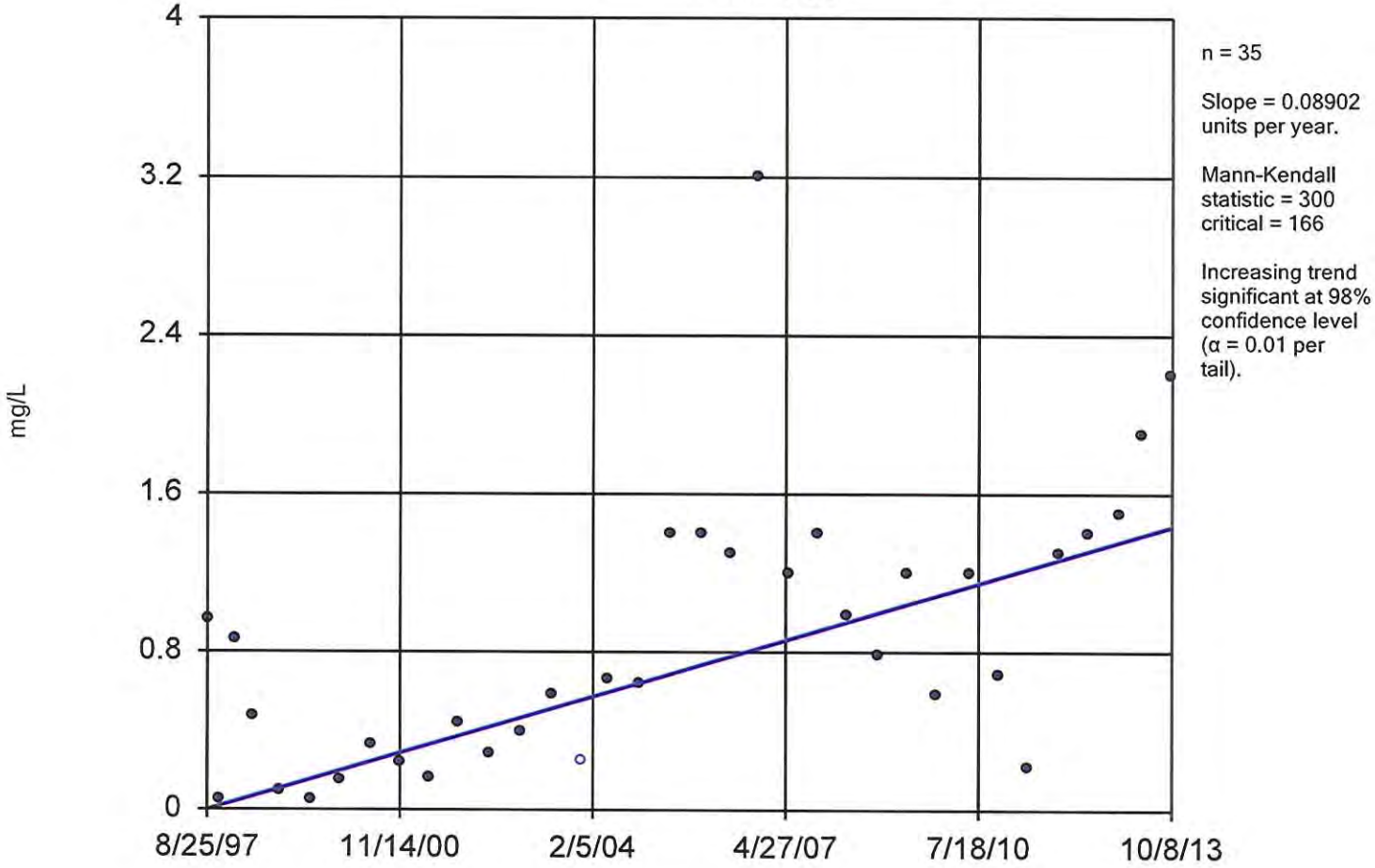
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

114-AS (bg)



Constituent: Phosphorus Total Analysis Run 12/17/2013 3:36 PM View: 1

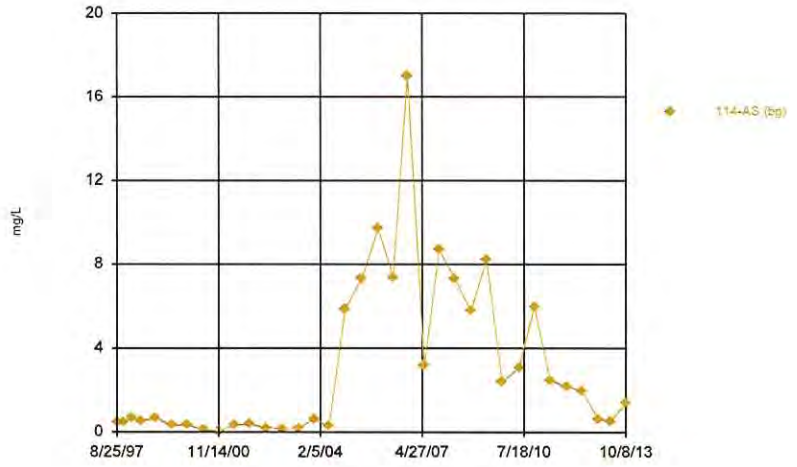
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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TIME SERIES TREND ANALYSIS
ALLUVIAL ZONE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

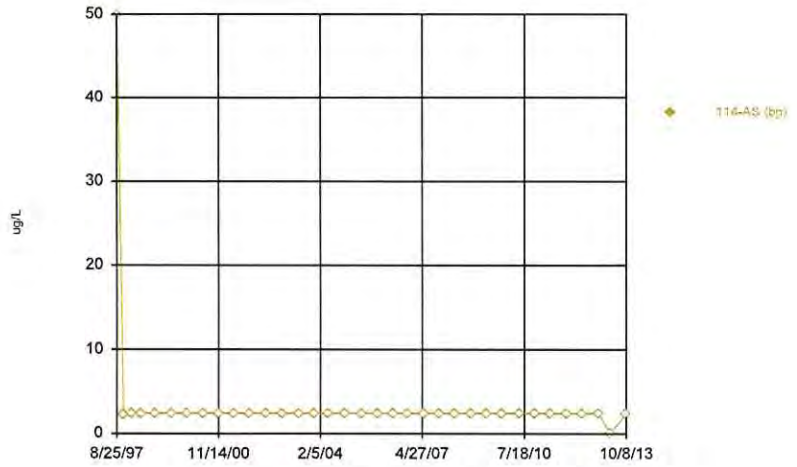
Time Series



Constituent: Ammonia as N Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

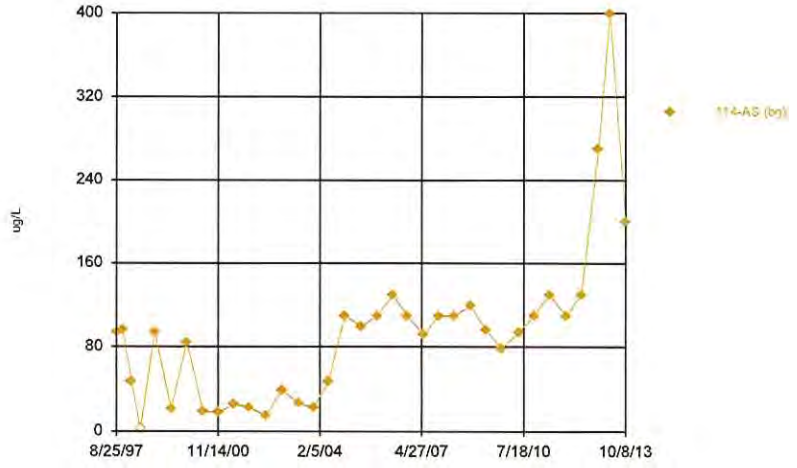
Time Series



Constituent: Antimony Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

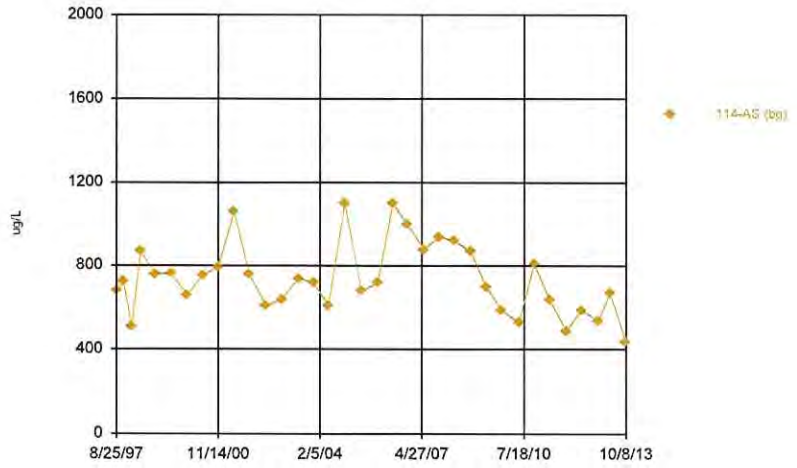
Time Series



Constituent: Arsenic Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Time Series

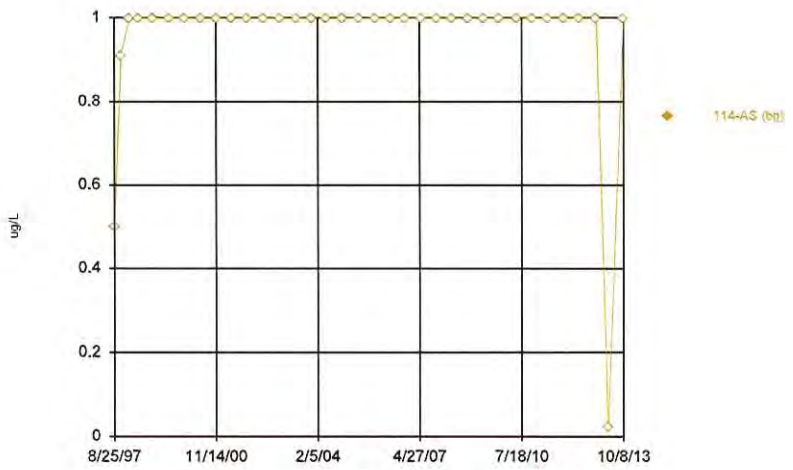


Constituent: Barium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

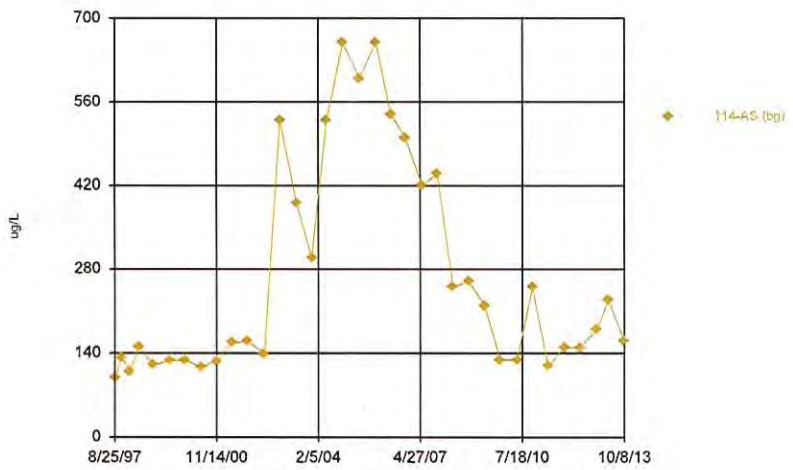
Time Series



Constituent: Beryllium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

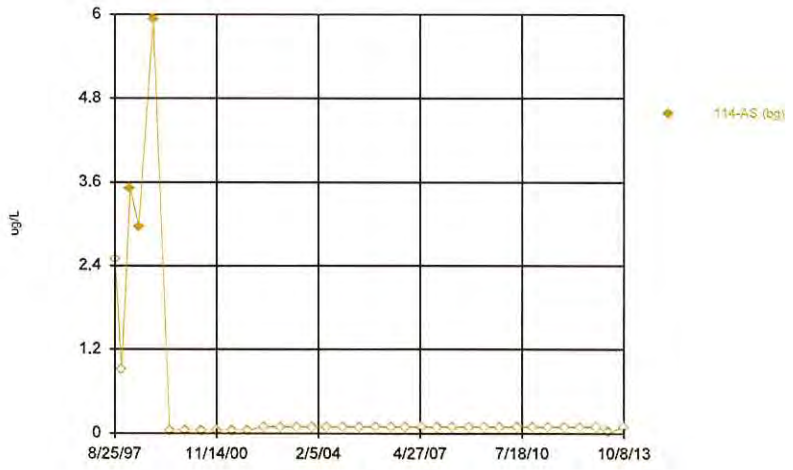
Time Series



Constituent: Boron Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

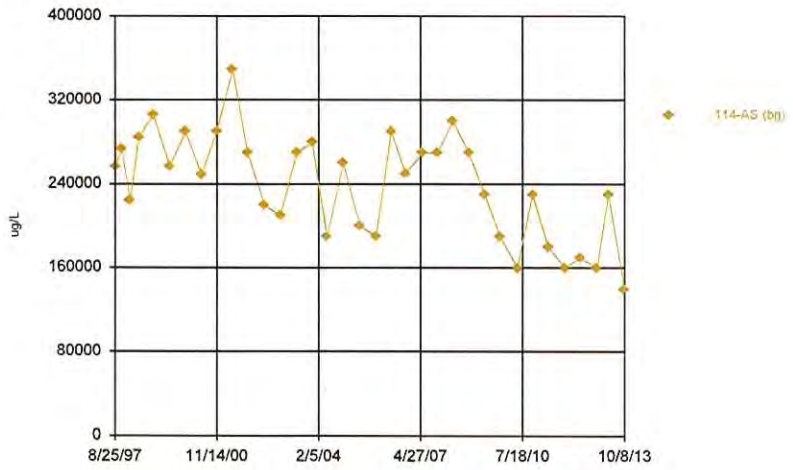
Time Series



Constituent: Cadmium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Time Series

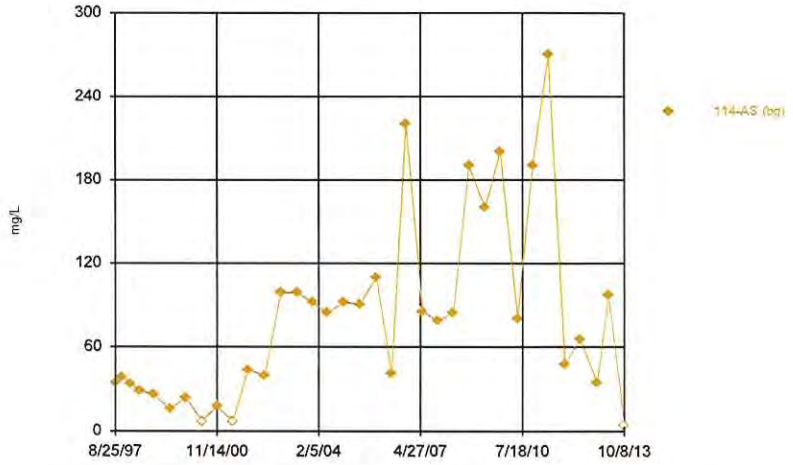


Constituent: Calcium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

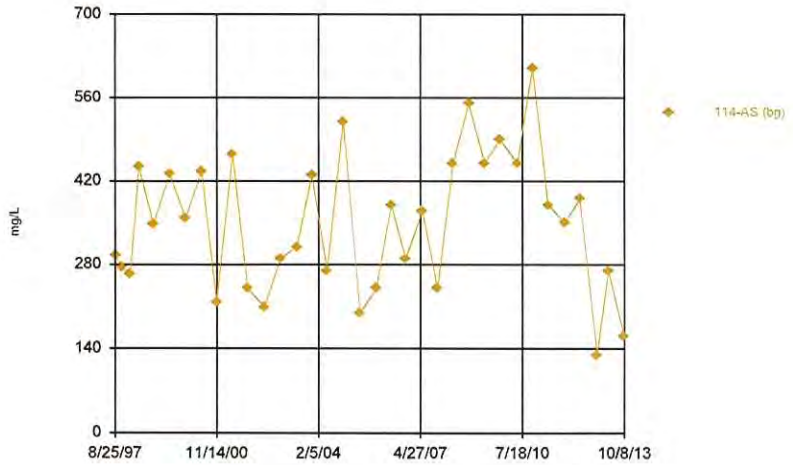
Time Series



Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

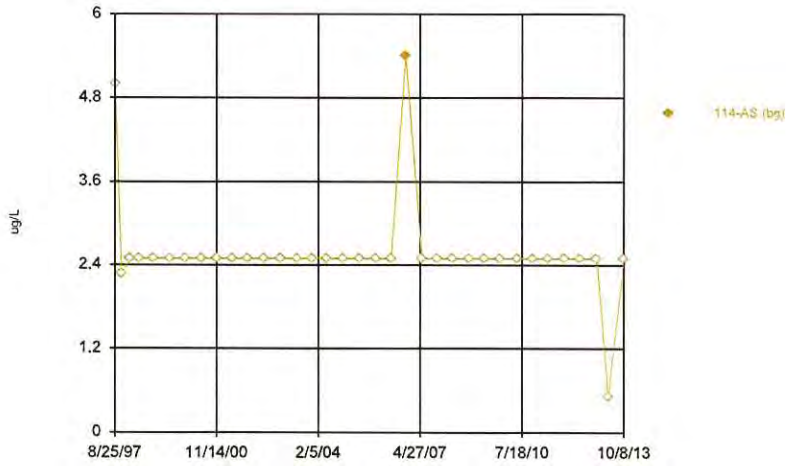
Time Series



Constituent: Chloride Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

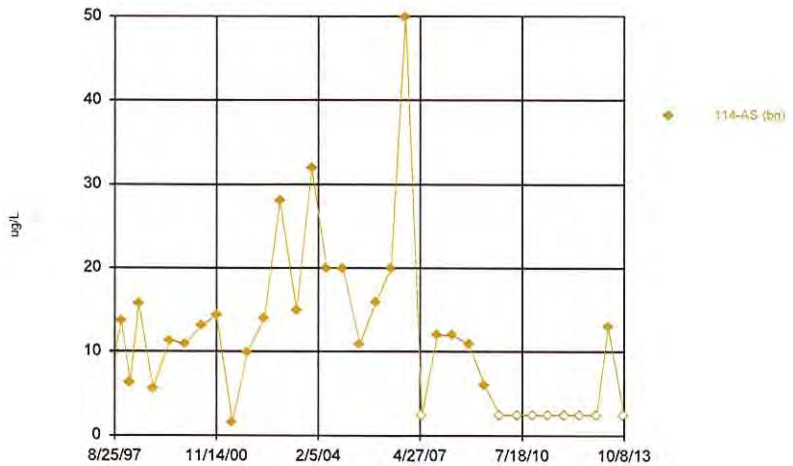
Time Series



Constituent: Chromium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Time Series

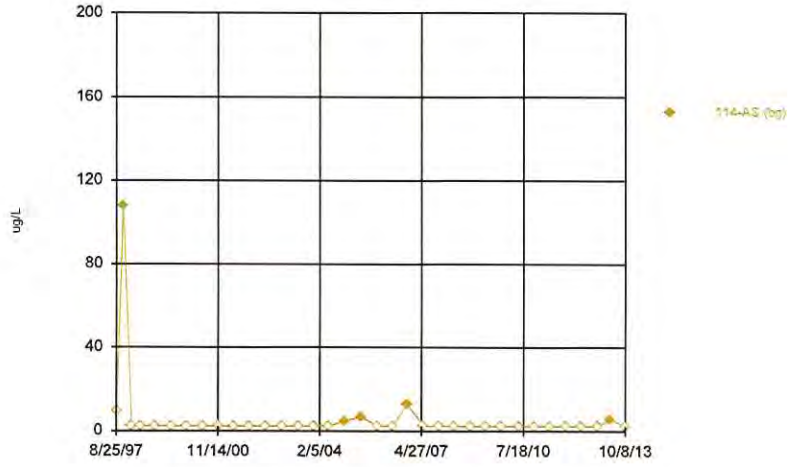


Constituent: Cobalt Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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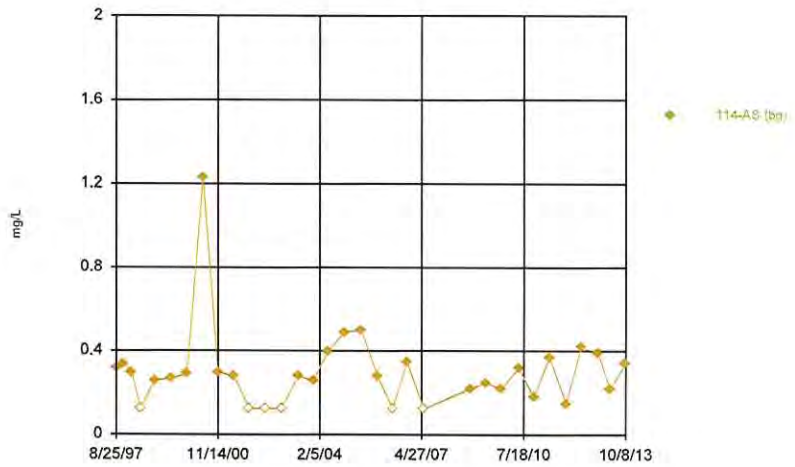
Time Series



Constituent: Copper Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

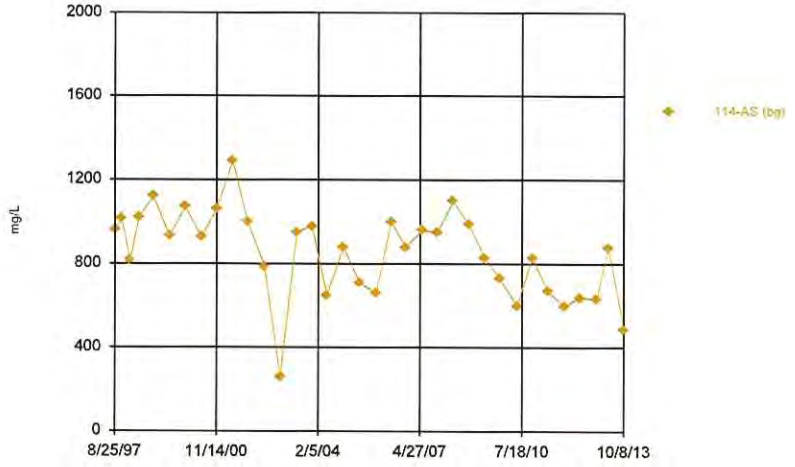
Time Series



Constituent: Fluoride Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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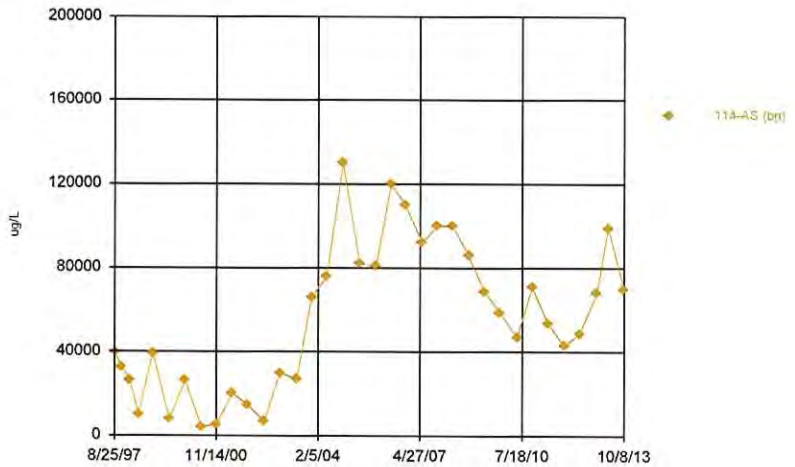
Time Series



Constituent: Hardness Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Time Series

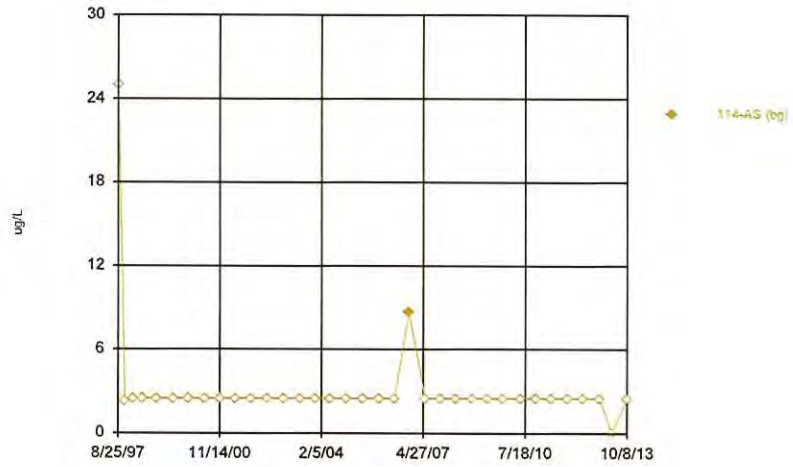


Constituent: Iron Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

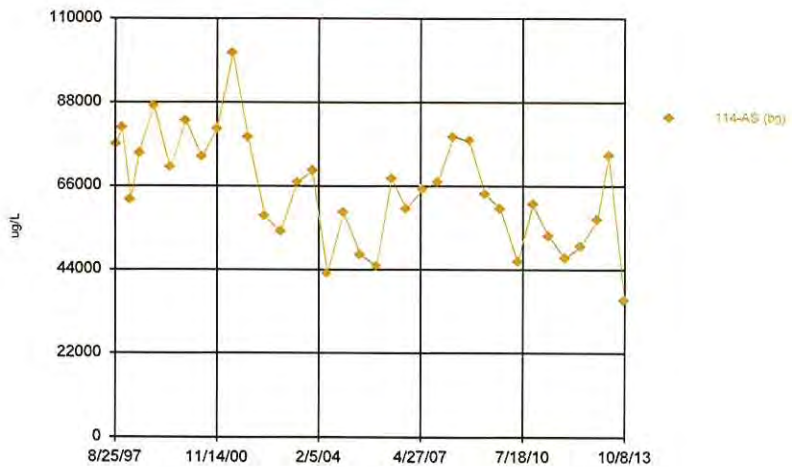
Time Series



Constituent: Lead Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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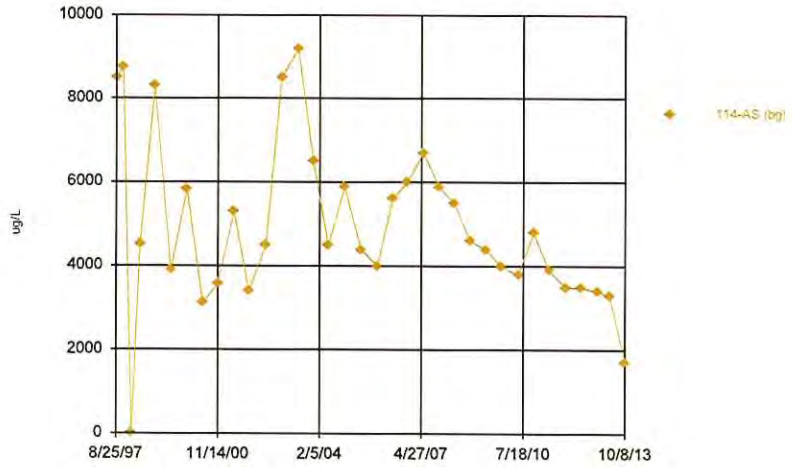
Time Series



Constituent: Magnesium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

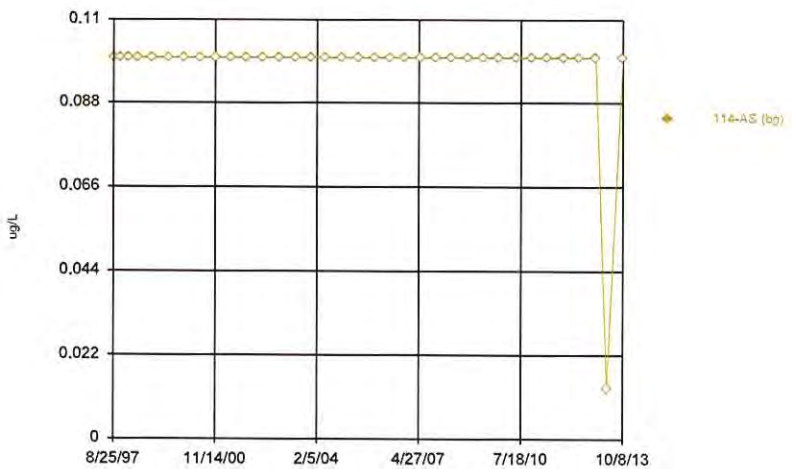
Time Series



Constituent: Manganese Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

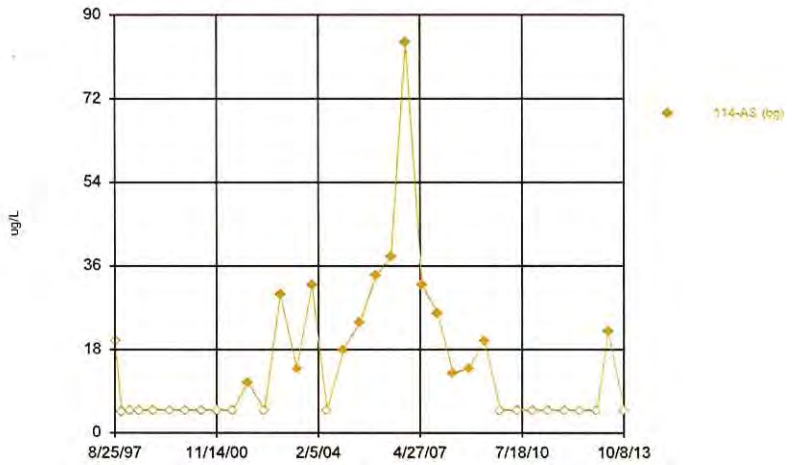
Time Series



Constituent: Mercury Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

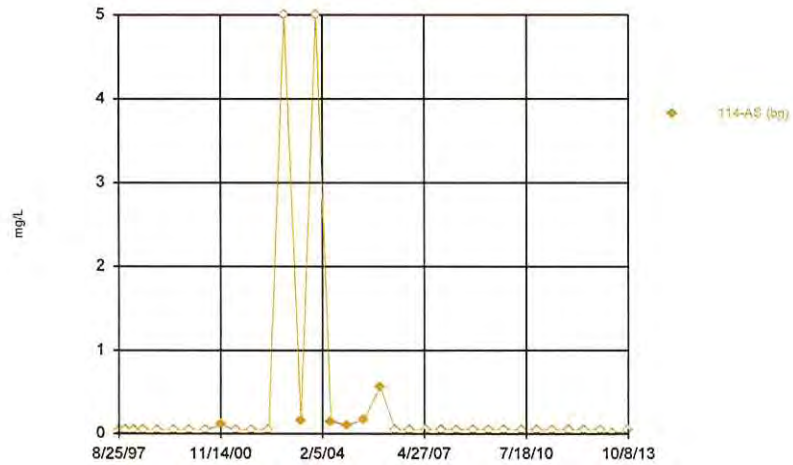
Time Series



Constituent: Nickel Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

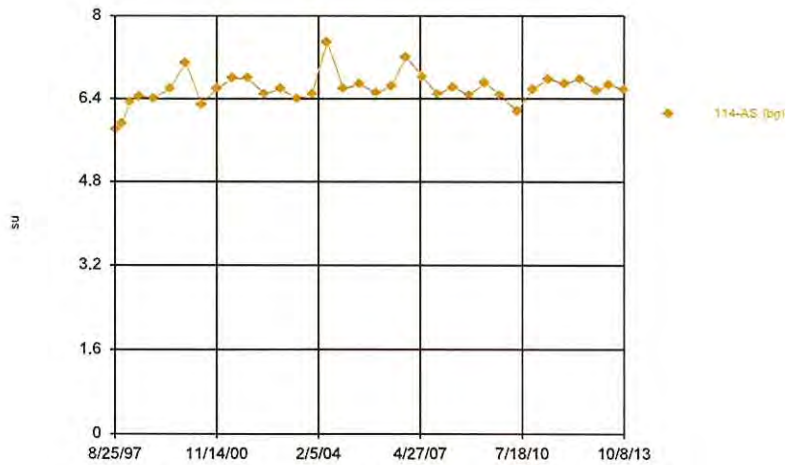
Time Series



Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

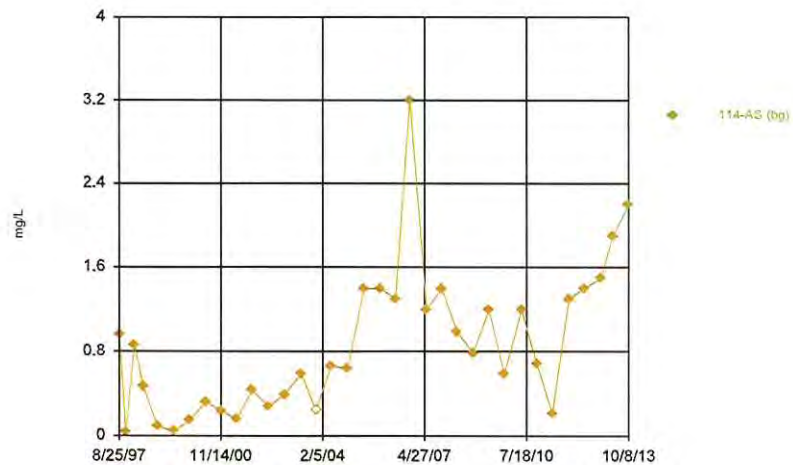
Time Series



Constituent: pH [Field] Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Time Series

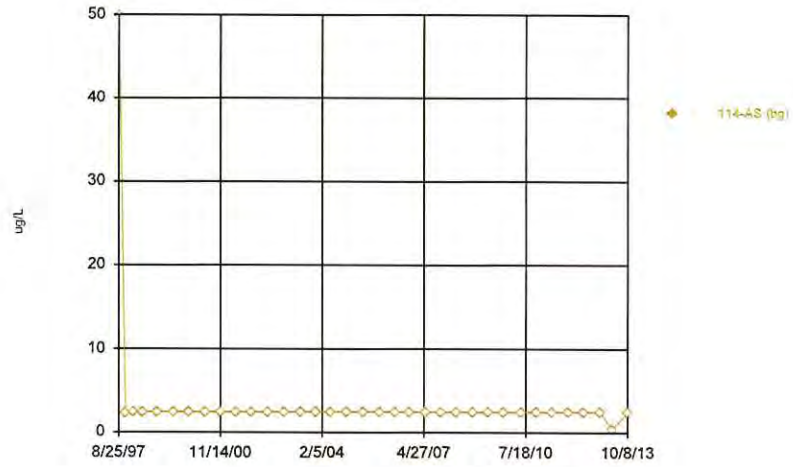


Constituent: Phosphorus Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

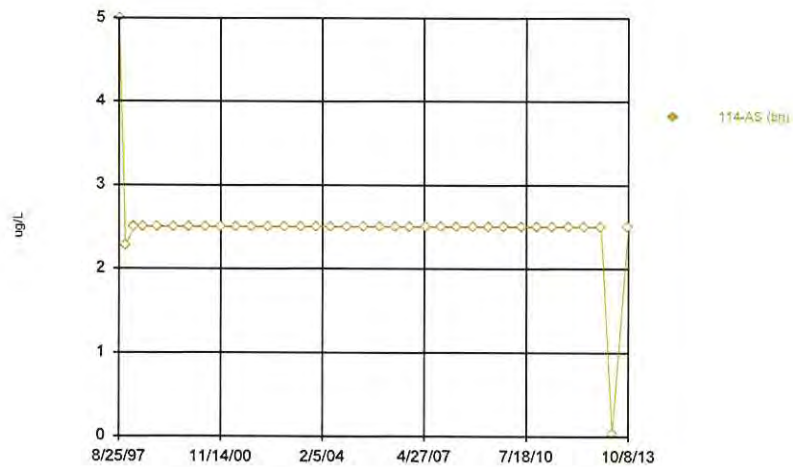
Time Series



Constituent: Selenium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

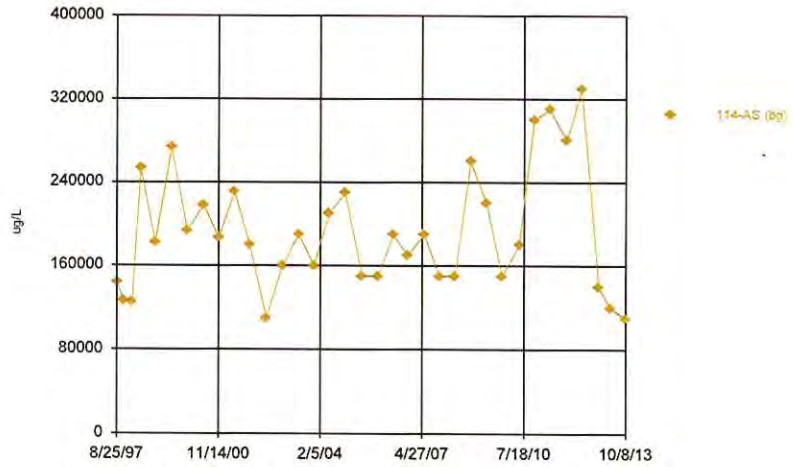
Time Series



Constituent: Silver Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

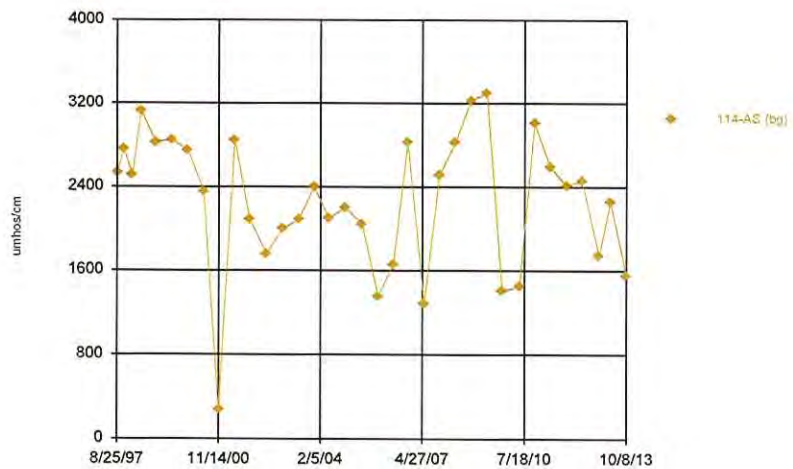
Time Series



Constituent: Sodium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Time Series

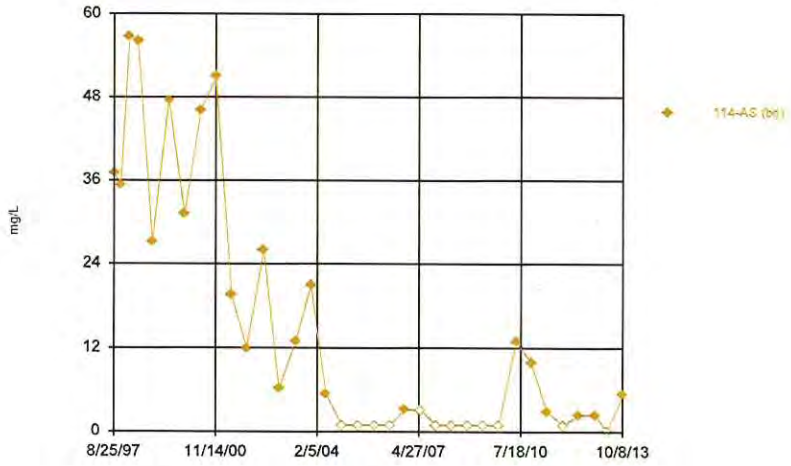


Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

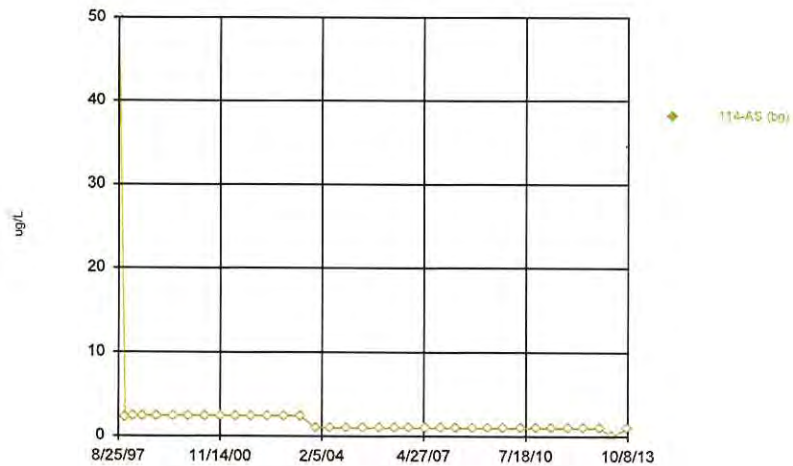
Time Series



Constituent: Sulfate as SO4 Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

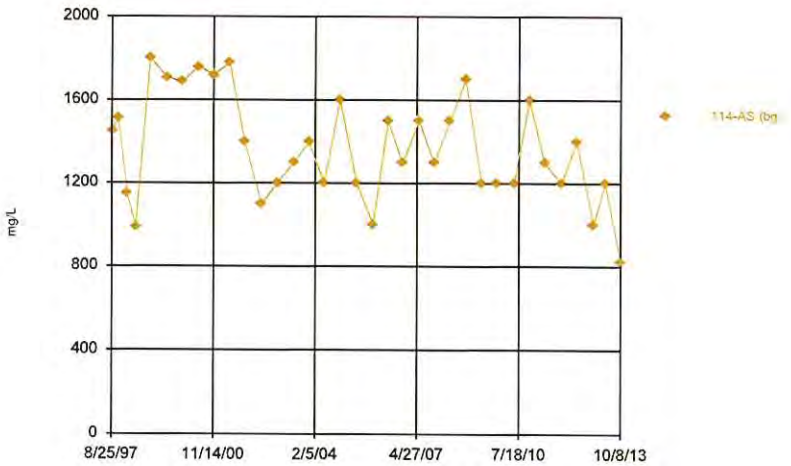
Time Series



Constituent: Thallium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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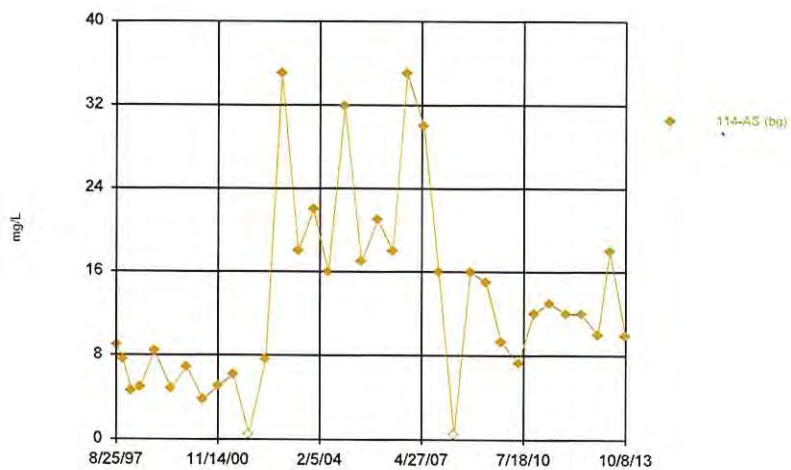
Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

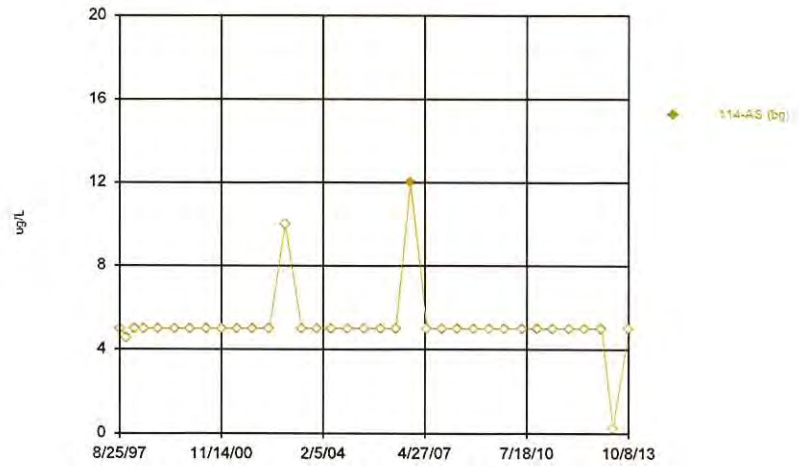
Time Series



Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

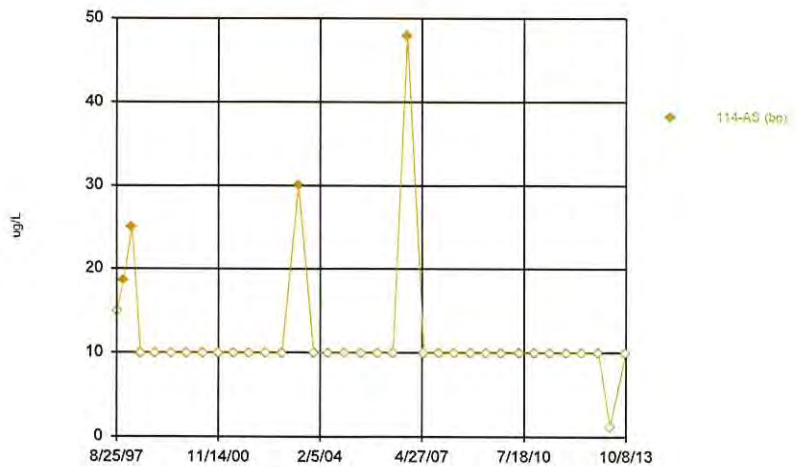
Time Series



Constituent: Vanadium Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Time Series



Constituent: Zinc Total Analysis Run 12/17/2013 11:49 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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APPENDIX D
STATISTICAL EVALUATIONS
ST. LOUIS FORMATION

TREND EVALUATION OF BACKGROUND DATA
ST. LOUIS FORMATION

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, 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

- Ammonia at 110-SS (2/97 through 5/09)
- Barium at 105-SS (8/97 through 11/02)
- Barium at 110-SS (2/97 through 5/07)
- Boron at 100-SS (2/97 through 5/12)
- Boron at 104-SS (2/97 through 5/06)
- Calcium at 105-SS (8/97 through 11/01)
- Calcium at 106-SS (2/97 through 11/11)
- Calcium at 110-SS (2/97 through 11/06)
- Calcium at 201A-SS (2/97 through 5/07)
- Calcium at 205-SS (8/97 through 11/09)
- Chemical oxygen demand at 110-SS (2/97 through 11/07)
- Chemical oxygen demand at 115-SS (8/97 through 11/03)
- Chloride at 104-SS (2/97 through 11/12)
- Chloride at 105-SS (8/97 through 11/99)
- Chloride at 106-SS (2/97 through 11/10)
- Chloride at 110-SS (2/97 through 11/10)
- Chloride at 201A-SS (2/97 through 5/08)
- Chloride at 205-SS (8/97 through 5/12)
- Fluoride at 109-SS (8/97 through 5/06)
- Hardness at 105-SS (8/97 through 5/04)
- Hardness at 106-SS (2/97 through 11/11)
- Hardness at 110-SS (2/97 through 11/06)
- Hardness at 201A-SS (2/97 through 5/07)
- Hardness at 205-SS (8/97 through 11/07)
- Iron at 106-SS (2/97 through 5/09)
- Iron at 110-SS (2/97 through 11/01)
- Iron at 115-SS (8/97 through 5/08)
- Magnesium at 100-SS (2/97 through 11/02)
- Magnesium at 104-SS (2/97 through 5/12)
- Magnesium at 105-SS (8/97 through 11/01)
- Magnesium at 106-SS (2/97 through 5/09)
- Magnesium at 110-SS (2/97 through 5/05)
- Magnesium at 201A-SS (2/97 through 11/02)
- Magnesium at 205-SS (8/97 through 11/04)
- Manganese at 110-SS (2/97 through 5/03)
- Manganese at 115-SS (8/97 through 5/02)
- Nitrate/Nitrite at 201A-SS (2/97 through 11/09)
- pH at 105-SS (8/97 through 5/12)
- pH at 106-SS (2/97 through 11/11)
- pH at 110-SS (2/97 through 11/12)
- pH at 201A-SS (2/97 through 5/11)
- pH at 205-SS (8/97 through 5/12)
- Phosphorous at 115-SS (8/97 through 11/11)
- Sodium at 105-SS (8/97 through 11/10)
- Sodium at 106-SS (2/97 through 11/09)
- Specific conductance at 105-SS (8/97 through 5/07)
- Specific conductance at 110-SS (2/97 through 11/07)
- Sulfate at 105-SS (11/97 through 11/00)
- Total dissolved solids at 105-SS (8/97 through 5/06)
- Total organic carbon at 110-SS (2/97 through 5/11)

Trend Test

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:18 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Ammonia as N (mg/L)	100-SS (bg)	0	-45	-158	No	34	91.18	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	104-SS (bg)	0	106	158	No	34	79.41	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	105-SS (bg)	0	-108	-158	No	34	82.35	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	106-SS (bg)	0	79	158	No	34	64.71	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	109-SS (bg)	0	-44	-158	No	34	85.29	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	**110-SS (bg)**	**0.01166**	**184**	**158**	**Yes**	**34**	**5.882**	**n/a**	**n/a**	**0.02**	**NP**
Ammonia as N (mg/L)	115-SS (bg)	0	-1	-158	No	34	67.65	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	201A-SS (bg)	0	-29	-158	No	34	88.24	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	205-SS (bg)	0	-83	-158	No	34	88.24	n/a	n/a	0.02	NP
Antimony Total (ug/L)	100-SS (bg)	0	-28	-158	No	34	97.06	n/a	n/a	0.02	NP
Antimony Total (ug/L)	104-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	105-SS (bg)	0	-65	-158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	106-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	109-SS (bg)	0	-94	-158	No	34	97.06	n/a	n/a	0.02	NP
Antimony Total (ug/L)	110-SS (bg)	0	28	158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	115-SS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	201A-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	205-SS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	100-SS (bg)	0	28	158	No	34	97.06	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	104-SS (bg)	0	18	158	No	34	91.18	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	105-SS (bg)	0	-65	-158	No	34	97.06	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	106-SS (bg)	0	93	158	No	34	52.94	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	109-SS (bg)	0	-153	-158	No	34	88.24	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	110-SS (bg)	0	-90	-158	No	34	91.18	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	115-SS (bg)	0	113	158	No	34	61.76	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	201A-SS (bg)	0	-73	-158	No	34	85.29	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	205-SS (bg)	0	-32	-158	No	34	97.06	n/a	n/a	0.02	NP
Barium Total (ug/L)	100-SS (bg)	0.2864	97	158	No	34	0	n/a	n/a	0.02	NP
Barium Total (ug/L)	104-SS (bg)	0.5028	106	158	No	34	0	n/a	n/a	0.02	NP
Barium Total (ug/L)	**105-SS (bg)**	**7.242**	**311**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Barium Total (ug/L)	106-SS (bg)	0	32	158	No	34	0	n/a	n/a	0.02	NP
Barium Total (ug/L)	109-SS (bg)	0.1473	63	158	No	34	0	n/a	n/a	0.02	NP
Barium Total (ug/L)	**110-SS (bg)**	**11.42**	**380**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Barium Total (ug/L)	115-SS (bg)	10.64	145	158	No	34	0	n/a	n/a	0.02	NP
Barium Total (ug/L)	201A-SS (bg)	0	32	158	No	34	0	n/a	n/a	0.02	NP
Barium Total (ug/L)	205-SS (bg)	0	101	158	No	34	0	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	100-SS (bg)	0	86	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	104-SS (bg)	0	57	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	105-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	106-SS (bg)	0	57	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	109-SS (bg)	0	30	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	110-SS (bg)	0	86	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	115-SS (bg)	0	30	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	201A-SS (bg)	0	57	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	205-SS (bg)	0	30	158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	**100-SS (bg)**	**1.337**	**172**	**158**	**Yes**	**34**	**11.76**	**n/a**	**n/a**	**0.02**	**NP**
Boron Total (ug/L)	**104-SS (bg)**	**4.031**	**272**	**158**	**Yes**	**34**	**23.53**	**n/a**	**n/a**	**0.02**	**NP**
Boron Total (ug/L)	105-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	106-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	109-SS (bg)	1.534	105	158	No	34	0	n/a	n/a	0.02	NP



Trend Test

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:18 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron Total (ug/L)	110-SS (bg)	0	6	158	No	34	2.941	n/a	n/a	0.02	NP
Boron Total (ug/L)	115-SS (bg)	9.275	135	158	No	34	32.35	n/a	n/a	0.02	NP
Boron Total (ug/L)	201A-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	205-SS (bg)	0	-63	-158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	100-SS (bg)	0	-67	-158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	104-SS (bg)	0	-47	-158	No	34	100	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	105-SS (bg)	0	-92	-158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	106-SS (bg)	0	-90	-158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	109-SS (bg)	0	-87	-158	No	34	94.12	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	110-SS (bg)	0	-46	-158	No	34	100	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	115-SS (bg)	0	-89	-158	No	34	94.12	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	201A-SS (bg)	0	-72	-158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	**205-SS (bg)**	**0**	**-180**	**-158**	**Yes**	**34**	**88.24**	**n/a**	**n/a**	**0.02**	**NP**
Calcium Total (ug/L)	100-SS (bg)	0	5	158	No	34	0	n/a	n/a	0.02	NP
Calcium Total (ug/L)	104-SS (bg)	0	6	158	No	34	0	n/a	n/a	0.02	NP
Calcium Total (ug/L)	**105-SS (bg)**	**2555**	**354**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium Total (ug/L)	**106-SS (bg)**	**564.1**	**187**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium Total (ug/L)	109-SS (bg)	34.68	16	158	No	34	0	n/a	n/a	0.02	NP
Calcium Total (ug/L)	**110-SS (bg)**	**5038**	**329**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium Total (ug/L)	115-SS (bg)	3319	127	158	No	34	0	n/a	n/a	0.02	NP
Calcium Total (ug/L)	**201A-SS (bg)**	**975.9**	**270**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium Total (ug/L)	**205-SS (bg)**	**671.8**	**250**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	100-SS (bg)	0	-133	-158	No	34	97.06	n/a	n/a	0.02	NP
Chemical Oxygen Demand [COD] (mg/L)	104-SS (bg)	0	-77	-158	No	34	88.24	n/a	n/a	0.02	NP
Chemical Oxygen Demand [COD] (mg/L)	105-SS (bg)	0	13	158	No	34	70.59	n/a	n/a	0.02	NP
Chemical Oxygen Demand [COD] (mg/L)	**106-SS (bg)**	**0**	**-171**	**-158**	**Yes**	**34**	**88.24**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	109-SS (bg)	0	-100	-158	No	34	94.12	n/a	n/a	0.02	NP
Chemical Oxygen Demand [COD] (mg/L)	**110-SS (bg)**	**2.137**	**215**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	**115-SS (bg)**	**1.816**	**162**	**158**	**Yes**	**34**	**32.35**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	**201A-SS (bg)**	**0**	**-198**	**-158**	**Yes**	**34**	**94.12**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	205-SS (bg)	0	-55	-158	No	34	88.24	n/a	n/a	0.02	NP
Chloride (mg/L)	100-SS (bg)	-0.06426	-57	-158	No	34	0	n/a	n/a	0.02	NP
Chloride (mg/L)	**104-SS (bg)**	**0.05489**	**159**	**158**	**Yes**	**34**	**47.06**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**105-SS (bg)**	**6.127**	**397**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**106-SS (bg)**	**0.6673**	**260**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**109-SS (bg)**	**-0.1384**	**-262**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**110-SS (bg)**	**4.816**	**212**	**158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	115-SS (bg)	8.018	104	158	No	34	0	n/a	n/a	0.02	NP
Chloride (mg/L)	**201A-SS (bg)**	**0.1437**	**322**	**158**	**Yes**	**34**	**35.29**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**205-SS (bg)**	**0.6488**	**170**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chromium Total (ug/L)	100-SS (bg)	0	-127	-158	No	34	88.24	n/a	n/a	0.02	NP
Chromium Total (ug/L)	104-SS (bg)	0	-156	-158	No	34	94.12	n/a	n/a	0.02	NP
Chromium Total (ug/L)	105-SS (bg)	0	-76	-158	No	34	97.06	n/a	n/a	0.02	NP
Chromium Total (ug/L)	106-SS (bg)	0	-88	-158	No	34	91.18	n/a	n/a	0.02	NP
Chromium Total (ug/L)	109-SS (bg)	0	-144	-158	No	34	79.41	n/a	n/a	0.02	NP
Chromium Total (ug/L)	**110-SS (bg)**	**0**	**-166**	**-158**	**Yes**	**34**	**94.12**	**n/a**	**n/a**	**0.02**	**NP**
Chromium Total (ug/L)	115-SS (bg)	0	-46	-158	No	34	97.06	n/a	n/a	0.02	NP
Chromium Total (ug/L)	201A-SS (bg)	0	-90	-158	No	34	91.18	n/a	n/a	0.02	NP
Chromium Total (ug/L)	205-SS (bg)	0	-90	-158	No	34	82.35	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	100-SS (bg)	0	-94	-158	No	34	100	n/a	n/a	0.02	NP

Trend Test

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Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt Total (ug/L)	104-SS (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	105-SS (bg)	0	-65	-158	No	34	100	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	106-SS (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	109-SS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	110-SS (bg)	0	-152	-158	No	34	97.06	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	115-SS (bg)	0	42	158	No	34	50	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	201A-SS (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	205-SS (bg)	0	-96	-158	No	34	97.06	n/a	n/a	0.02	NP
Copper Total (ug/L)	100-SS (bg)	0	-146	-158	No	34	97.06	n/a	n/a	0.02	NP
Copper Total (ug/L)	104-SS (bg)	0	-130	-158	No	34	100	n/a	n/a	0.02	NP
Copper Total (ug/L)	105-SS (bg)	0	-74	-158	No	34	97.06	n/a	n/a	0.02	NP
Copper Total (ug/L)	106-SS (bg)	0	-118	-158	No	34	97.06	n/a	n/a	0.02	NP
Copper Total (ug/L)	109-SS (bg)	0	-94	-158	No	34	97.06	n/a	n/a	0.02	NP
Copper Total (ug/L)	110-SS (bg)	0	-66	-158	No	34	67.65	n/a	n/a	0.02	NP
Copper Total (ug/L)	115-SS (bg)	0	-30	-158	No	34	79.41	n/a	n/a	0.02	NP
Copper Total (ug/L)	201A-SS (bg)	0	-120	-158	No	34	97.06	n/a	n/a	0.02	NP
Copper Total (ug/L)	205-SS (bg)	0	-86	-158	No	34	94.12	n/a	n/a	0.02	NP
Fluoride (mg/L)	100-SS (bg)	-0.006194	-115	-145	No	32	3.125	n/a	n/a	0.02	NP
Fluoride (mg/L)	104-SS (bg)	0.005326	79	145	No	32	3.125	n/a	n/a	0.02	NP
Fluoride (mg/L)	**105-SS (bg)**	**-0.01599**	**-230**	**-145**	**Yes**	**32**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	106-SS (bg)	-0.003952	-77	-145	No	32	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	**109-SS (bg)**	**0.01913**	**164**	**145**	**Yes**	**32**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	**110-SS (bg)**	**-0.02113**	**-280**	**-145**	**Yes**	**32**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	**115-SS (bg)**	**-0.04982**	**-179**	**-145**	**Yes**	**32**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	**201A-SS (bg)**	**-0.005198**	**-165**	**-145**	**Yes**	**32**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	205-SS (bg)	-0.004018	-114	-145	No	32	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	100-SS (bg)	1.123	75	158	No	34	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	104-SS (bg)	0.6333	78	158	No	34	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	**105-SS (bg)**	**11.97**	**341**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Hardness Total (mg/L)	**106-SS (bg)**	**2.96**	**177**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Hardness Total (mg/L)	109-SS (bg)	1.116	80	158	No	34	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	**110-SS (bg)**	**17.67**	**330**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Hardness Total (mg/L)	115-SS (bg)	12.87	139	158	No	34	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	**201A-SS (bg)**	**5.266**	**247**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Hardness Total (mg/L)	**205-SS (bg)**	**5.376**	**274**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	100-SS (bg)	1.114	49	158	No	34	17.65	n/a	n/a	0.02	NP
Iron Total (ug/L)	**104-SS (bg)**	**-123**	**-176**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**105-SS (bg)**	**-57.51**	**-161**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**106-SS (bg)**	**51.82**	**299**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**109-SS (bg)**	**-27.83**	**-276**	**-158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**110-SS (bg)**	**216.7**	**267**	**158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**115-SS (bg)**	**117.3**	**241**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**201A-SS (bg)**	**-46.65**	**-182**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	**205-SS (bg)**	**-47.96**	**-169**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Lead Total (ug/L)	100-SS (bg)	0	-87	-158	No	34	94.12	n/a	n/a	0.02	NP
Lead Total (ug/L)	104-SS (bg)	0	-62	-158	No	34	94.12	n/a	n/a	0.02	NP
Lead Total (ug/L)	105-SS (bg)	0	-65	-158	No	34	100	n/a	n/a	0.02	NP
Lead Total (ug/L)	106-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Lead Total (ug/L)	109-SS (bg)	0	-94	-158	No	34	97.06	n/a	n/a	0.02	NP
Lead Total (ug/L)	110-SS (bg)	0	28	158	No	34	100	n/a	n/a	0.02	NP

Trend Test

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Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Lead Total (ug/L)	115-SS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Lead Total (ug/L)	201A-SS (bg)	0	-120	-158	No	34	94.12	n/a	n/a	0.02	NP
Lead Total (ug/L)	205-SS (bg)	0	-51	-158	No	34	88.24	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	**100-SS (bg)**	**334.1**	**201**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Magnesium Total (ug/L)	**104-SS (bg)**	**292.9**	**196**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Magnesium Total (ug/L)	**105-SS (bg)**	**1291**	**355**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Magnesium Total (ug/L)	**106-SS (bg)**	**349**	**212**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Magnesium Total (ug/L)	109-SS (bg)	174.2	97	158	No	34	0	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	**110-SS (bg)**	**1496**	**363**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Magnesium Total (ug/L)	115-SS (bg)	1217	120	158	No	34	0	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	**201A-SS (bg)**	**803.4**	**344**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Magnesium Total (ug/L)	**205-SS (bg)**	**617.3**	**330**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	100-SS (bg)	0	-119	-158	No	34	50	n/a	n/a	0.02	NP
Manganese Total (ug/L)	104-SS (bg)	-1.407	-120	-158	No	34	2.941	n/a	n/a	0.02	NP
Manganese Total (ug/L)	105-SS (bg)	-0.938	-108	-158	No	34	2.941	n/a	n/a	0.02	NP
Manganese Total (ug/L)	106-SS (bg)	0.8161	125	158	No	34	0	n/a	n/a	0.02	NP
Manganese Total (ug/L)	**109-SS (bg)**	**-1.348**	**-272**	**-158**	**Yes**	**34**	**41.18**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	**110-SS (bg)**	**5.077**	**323**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	**115-SS (bg)**	**4.582**	**251**	**158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	**201A-SS (bg)**	**-14.98**	**-216**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	**205-SS (bg)**	**-0.8089**	**-212**	**-158**	**Yes**	**34**	**26.47**	**n/a**	**n/a**	**0.02**	**NP**
Mercury Total (ug/L)	100-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	104-SS (bg)	0	-61	-158	No	34	97.06	n/a	n/a	0.02	NP
Mercury Total (ug/L)	105-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	106-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	109-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	110-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	115-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	201A-SS (bg)	0	-53	-158	No	34	97.06	n/a	n/a	0.02	NP
Mercury Total (ug/L)	205-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Nickel Total (ug/L)	**100-SS (bg)**	**-0.748**	**-186**	**-158**	**Yes**	**34**	**11.76**	**n/a**	**n/a**	**0.02**	**NP**
Nickel Total (ug/L)	104-SS (bg)	0	-112	-158	No	34	97.06	n/a	n/a	0.02	NP
Nickel Total (ug/L)	105-SS (bg)	0	-48	-158	No	34	97.06	n/a	n/a	0.02	NP
Nickel Total (ug/L)	106-SS (bg)	0	-152	-158	No	34	97.06	n/a	n/a	0.02	NP
Nickel Total (ug/L)	109-SS (bg)	0	-120	-158	No	34	94.12	n/a	n/a	0.02	NP
Nickel Total (ug/L)	110-SS (bg)	0	16	158	No	34	29.41	n/a	n/a	0.02	NP
Nickel Total (ug/L)	115-SS (bg)	1.162	113	158	No	34	35.29	n/a	n/a	0.02	NP
Nickel Total (ug/L)	201A-SS (bg)	0	-108	-158	No	34	97.06	n/a	n/a	0.02	NP
Nickel Total (ug/L)	205-SS (bg)	0	-94	-158	No	34	97.06	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	100-SS (bg)	0	-109	-158	No	34	76.47	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	104-SS (bg)	0	42	158	No	34	91.18	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	105-SS (bg)	0	-40	-158	No	34	94.12	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	106-SS (bg)	0	-52	-158	No	34	91.18	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	109-SS (bg)	0	16	158	No	34	94.12	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	110-SS (bg)	0	-45	-158	No	34	100	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	115-SS (bg)	0	-34	-158	No	34	97.06	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	**201A-SS (bg)**	**0.001845**	**195**	**158**	**Yes**	**34**	**58.82**	**n/a**	**n/a**	**0.02**	**NP**
Nitrate/Nitrite (mg/L)	205-SS (bg)	0	-51	-158	No	34	97.06	n/a	n/a	0.02	NP
pH [Field] (su)	100-SS (bg)	-0.02379	-144	-158	No	34	0	n/a	n/a	0.02	NP
pH [Field] (su)	104-SS (bg)	-0.02403	-119	-158	No	34	0	n/a	n/a	0.02	NP

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Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH [Field] (su)	**105-SS (bg)**	**-0.02852**	**-188**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
pH [Field] (su)	**106-SS (bg)**	**-0.03482**	**-192**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
pH [Field] (su)	109-SS (bg)	-0.02149	-117	-158	No	34	0	n/a	n/a	0.02	NP
pH [Field] (su)	**110-SS (bg)**	**-0.02694**	**-161**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
pH [Field] (su)	115-SS (bg)	-0.02465	-115	-158	No	34	0	n/a	n/a	0.02	NP
pH [Field] (su)	**201A-SS (bg)**	**-0.03781**	**-220**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
pH [Field] (su)	**205-SS (bg)**	**-0.02394**	**-183**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Phosphorus Total (mg/L)	**100-SS (bg)**	**-0.001177**	**-162**	**-158**	**Yes**	**34**	**64.71**	**n/a**	**n/a**	**0.02**	**NP**
Phosphorus Total (mg/L)	104-SS (bg)	0	-39	-158	No	34	52.94	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	**105-SS (bg)**	**-0.01107**	**-402**	**-158**	**Yes**	**34**	**41.18**	**n/a**	**n/a**	**0.02**	**NP**
Phosphorus Total (mg/L)	106-SS (bg)	0	-82	-158	No	34	67.65	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	109-SS (bg)	0	-74	-158	No	34	67.65	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	110-SS (bg)	-0.001817	-51	-158	No	34	2.941	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	**115-SS (bg)**	**0.007095**	**172**	**158**	**Yes**	**34**	**11.76**	**n/a**	**n/a**	**0.02**	**NP**
Phosphorus Total (mg/L)	**201A-SS (bg)**	**-0.002002**	**-198**	**-158**	**Yes**	**34**	**64.71**	**n/a**	**n/a**	**0.02**	**NP**
Phosphorus Total (mg/L)	205-SS (bg)	0	-28	-158	No	34	64.71	n/a	n/a	0.02	NP
Selenium Total (ug/L)	100-SS (bg)	0	28	158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	104-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	105-SS (bg)	0	-65	-158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	106-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	109-SS (bg)	0	77	158	No	34	76.47	n/a	n/a	0.02	NP
Selenium Total (ug/L)	110-SS (bg)	0	27	158	No	34	97.06	n/a	n/a	0.02	NP
Selenium Total (ug/L)	115-SS (bg)	0	-62	-158	No	34	97.06	n/a	n/a	0.02	NP
Selenium Total (ug/L)	201A-SS (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	205-SS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	100-SS (bg)	0	-94	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	104-SS (bg)	0	-92	-151	No	33	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	105-SS (bg)	0	-65	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	106-SS (bg)	0	-61	-145	No	32	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	109-SS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	110-SS (bg)	0	-94	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	115-SS (bg)	0	-58	-158	No	34	97.06	n/a	n/a	0.02	NP
Silver Total (ug/L)	201A-SS (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	205-SS (bg)	0	-34	-158	No	34	100	n/a	n/a	0.02	NP
Sodium Total (ug/L)	**100-SS (bg)**	**-801.3**	**-282**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	**104-SS (bg)**	**-629.1**	**-280**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	**105-SS (bg)**	**1069**	**229**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	**106-SS (bg)**	**306.7**	**286**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	**109-SS (bg)**	**-591**	**-196**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	110-SS (bg)	990.9	101	158	No	34	0	n/a	n/a	0.02	NP
Sodium Total (ug/L)	115-SS (bg)	2842	154	158	No	34	0	n/a	n/a	0.02	NP
Sodium Total (ug/L)	**201A-SS (bg)**	**-1339**	**-296**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	205-SS (bg)	-540.4	-146	-158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	100-SS (bg)	-4.113	-125	-158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	104-SS (bg)	-1.818	-46	-158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	**105-SS (bg)**	**21.63**	**256**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Specific Conductance [Field] (umhos/cm)	106-SS (bg)	1.58	41	158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	109-SS (bg)	-2.544	-72	-158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	**110-SS (bg)**	**31.83**	**285**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Specific Conductance [Field] (umhos/cm)	115-SS (bg)	29.86	109	158	No	34	0	n/a	n/a	0.02	NP

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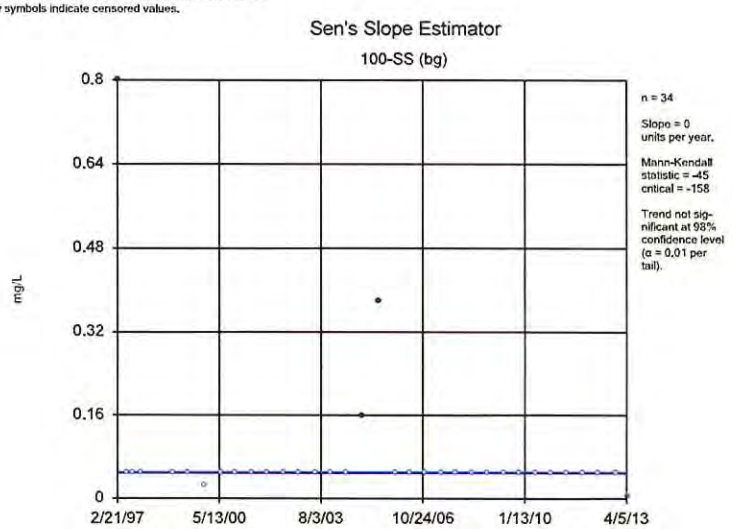
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Specific Conductance [Field] (umhos/cm)	201A-SS (bg)	1.143	38	158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	205-SS (bg)	0.6414	15	158	No	34	0	n/a	n/a	0.02	NP
Sulfate as SO4 (mg/L)	**100-SS (bg)**	**-1.361**	**-319**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	**104-SS (bg)**	**-1.088**	**-330**	**-158**	**Yes**	**34**	**2.941**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	**105-SS (bg)**	**4.942**	**387**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	106-SS (bg)	0.2507	78	158	No	34	0	n/a	n/a	0.02	NP
Sulfate as SO4 (mg/L)	**109-SS (bg)**	**-1.293**	**-188**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	**110-SS (bg)**	**-1.776**	**-189**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	**115-SS (bg)**	**-1.438**	**-293**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	201A-SS (bg)	0.9369	146	158	No	34	0	n/a	n/a	0.02	NP
Sulfate as SO4 (mg/L)	205-SS (bg)	0.4457	83	158	No	34	0	n/a	n/a	0.02	NP
Thallium Total (ug/L)	**100-SS (bg)**	**-0.05877**	**-258**	**-158**	**Yes**	**34**	**97.06**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**104-SS (bg)**	**0**	**-248**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**105-SS (bg)**	**-0.1245**	**-312**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**106-SS (bg)**	**0**	**-248**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**109-SS (bg)**	**-0.1202**	**-300**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**110-SS (bg)**	**0**	**-238**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**115-SS (bg)**	**-0.1202**	**-300**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**201A-SS (bg)**	**0**	**-248**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**205-SS (bg)**	**-0.1201**	**-300**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**100-SS (bg)**	**-4.38**	**-223**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	104-SS (bg)	-3.233	-157	-158	No	34	0	n/a	n/a	0.02	NP
Total Dissolved Solids [TDS] (mg/L)	**105-SS (bg)**	**14.32**	**323**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	106-SS (bg)	1.128	78	158	No	34	0	n/a	n/a	0.02	NP
Total Dissolved Solids [TDS] (mg/L)	109-SS (bg)	-2.2	-110	-158	No	34	0	n/a	n/a	0.02	NP
Total Dissolved Solids [TDS] (mg/L)	110-SS (bg)	6.685	120	158	No	34	0	n/a	n/a	0.02	NP
Total Dissolved Solids [TDS] (mg/L)	115-SS (bg)	11.99	98	158	No	34	0	n/a	n/a	0.02	NP
Total Dissolved Solids [TDS] (mg/L)	201A-SS (bg)	0	17	158	No	34	0	n/a	n/a	0.02	NP
Total Dissolved Solids [TDS] (mg/L)	205-SS (bg)	0	10	158	No	34	0	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	100-SS (bg)	0	23	158	No	34	73.53	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	104-SS (bg)	0	52	158	No	34	50	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	105-SS (bg)	-0.03006	-54	-158	No	34	14.71	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	106-SS (bg)	0	95	158	No	34	55.88	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	109-SS (bg)	0	101	158	No	34	55.88	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	**110-SS (bg)**	**0.4731**	**178**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Organic Carbon [TOC] (mg/L)	115-SS (bg)	0.5893	133	158	No	34	20.59	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	201A-SS (bg)	0	93	158	No	34	52.94	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	205-SS (bg)	0.01537	143	158	No	34	47.06	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	100-SS (bg)	0	-7	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	104-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	105-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	106-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	109-SS (bg)	0	-3	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	110-SS (bg)	0	-7	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	115-SS (bg)	0	-3	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	201A-SS (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	205-SS (bg)	0	-3	-158	No	34	100	n/a	n/a	0.02	NP
Zinc Total (ug/L)	100-SS (bg)	0	-149	-158	No	34	91.18	n/a	n/a	0.02	NP
Zinc Total (ug/L)	104-SS (bg)	0	-150	-158	No	34	82.35	n/a	n/a	0.02	NP
Zinc Total (ug/L)	105-SS (bg)	0	-148	-158	No	34	82.35	n/a	n/a	0.02	NP

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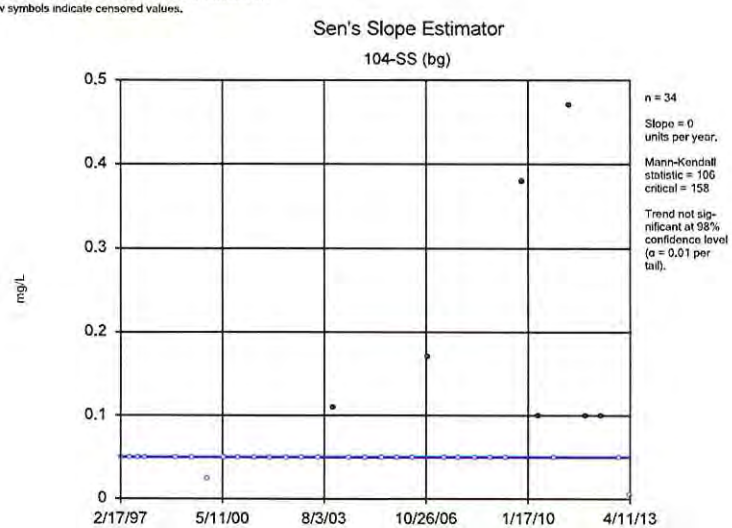
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Zinc Total (ug/L)	106-SS (bg)	0	-147	-158	No	34	91.18	n/a	n/a	0.02	NP
Zinc Total (ug/L)	**109-SS (bg)**	**-4.301**	**-505**	**-158**	**Yes**	**34**	**20.59**	**n/a**	**n/a**	**0.02**	**NP**
Zinc Total (ug/L)	110-SS (bg)	0	-151	-158	No	34	76.47	n/a	n/a	0.02	NP
Zinc Total (ug/L)	115-SS (bg)	0	-114	-158	No	34	85.29	n/a	n/a	0.02	NP
Zinc Total (ug/L)	201A-SS (bg)	0	-149	-158	No	34	88.24	n/a	n/a	0.02	NP
Zinc Total (ug/L)	**205-SS (bg)**	**0**	**-218**	**-158**	**Yes**	**34**	**79.41**	**n/a**	**n/a**	**0.02**	**NP**

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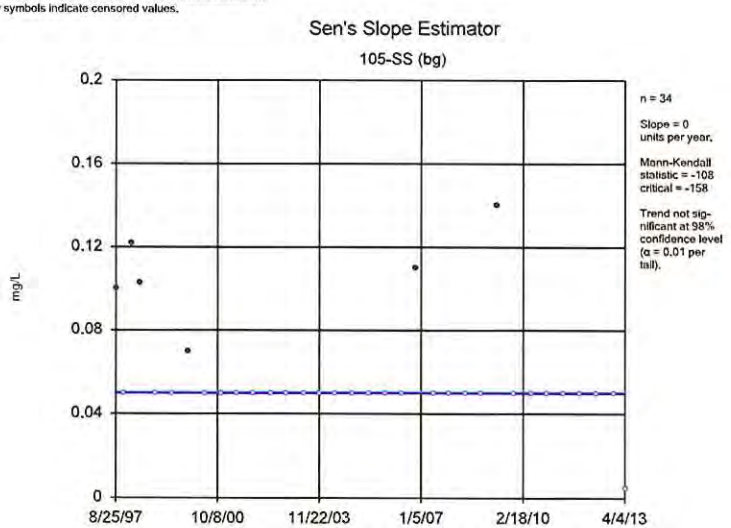
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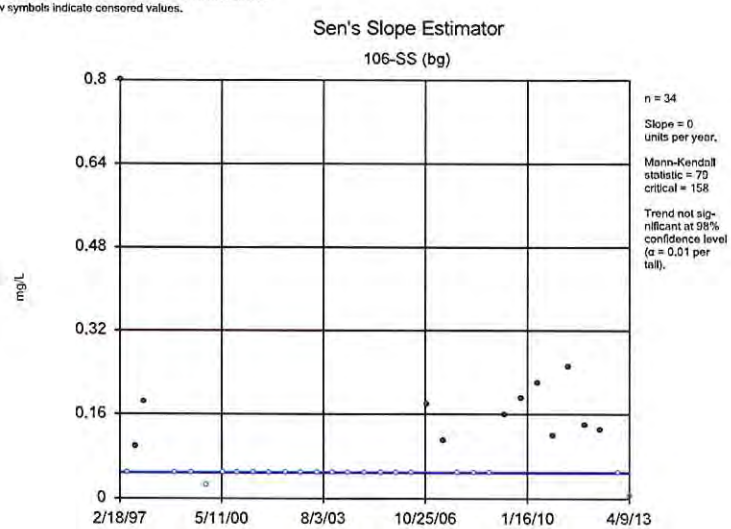
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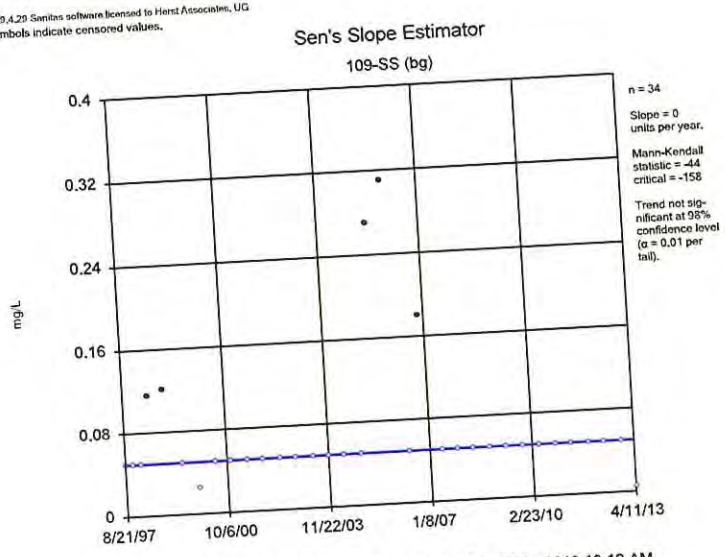
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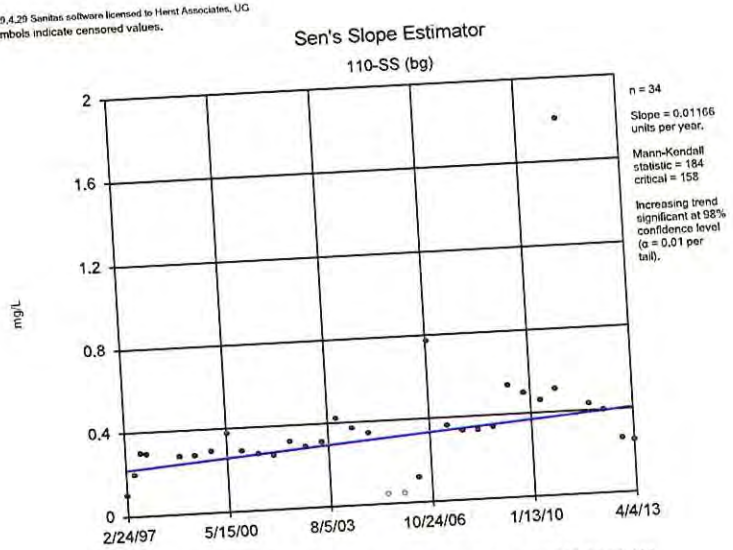
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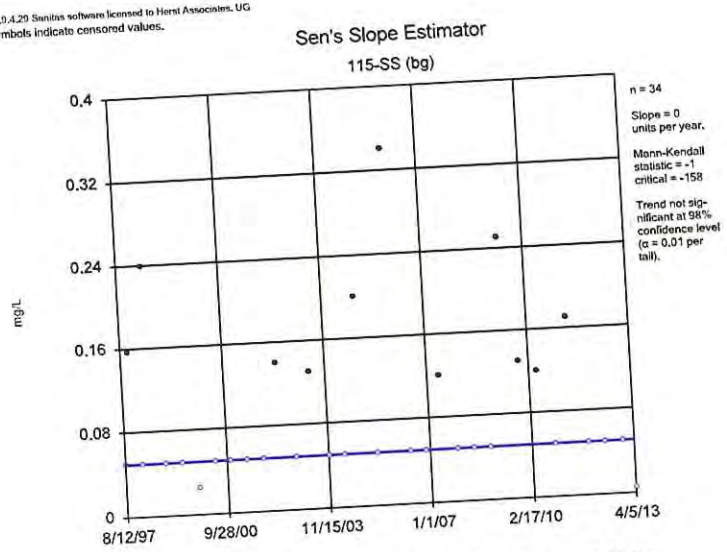
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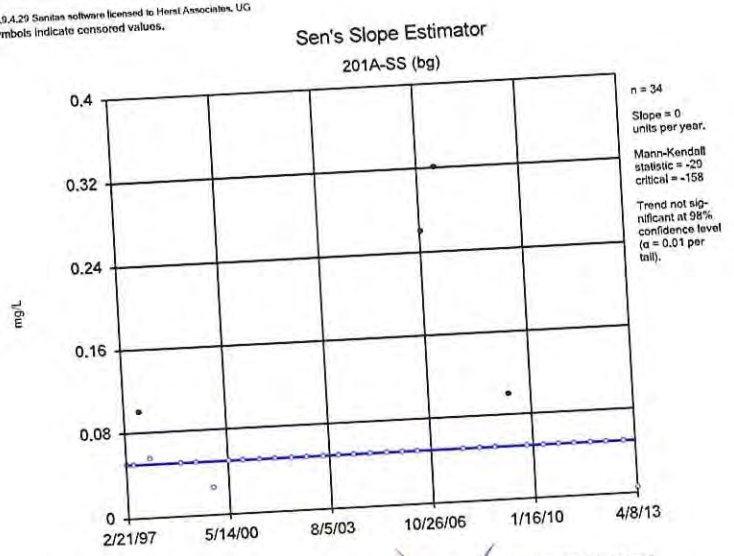
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: Ammonia as N Analysis Run 12/17/2013 10:12 AM
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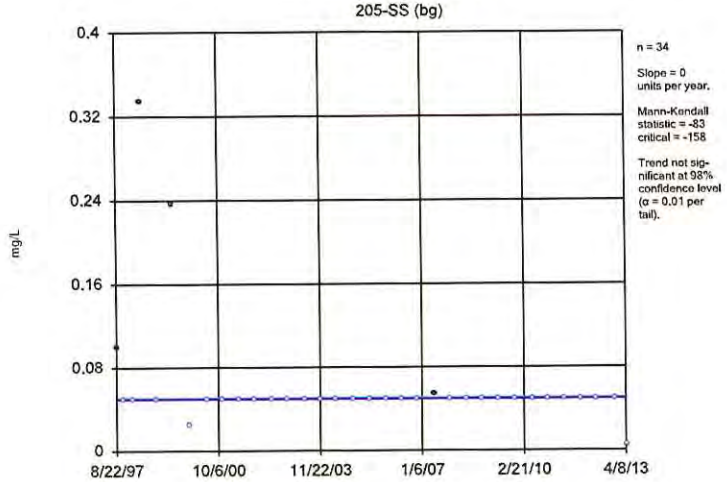
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Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

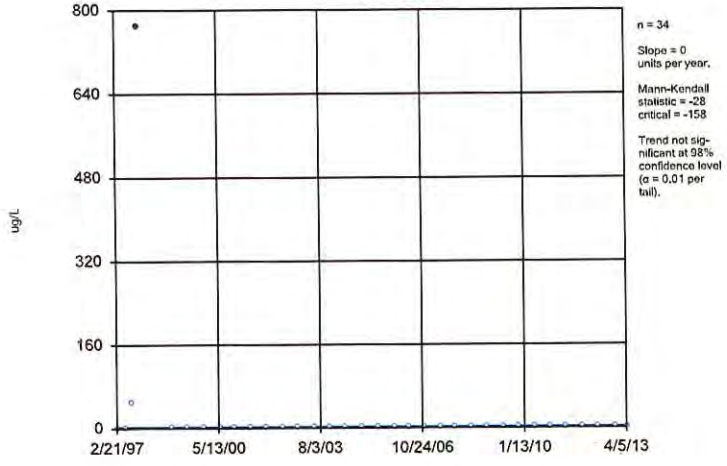


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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

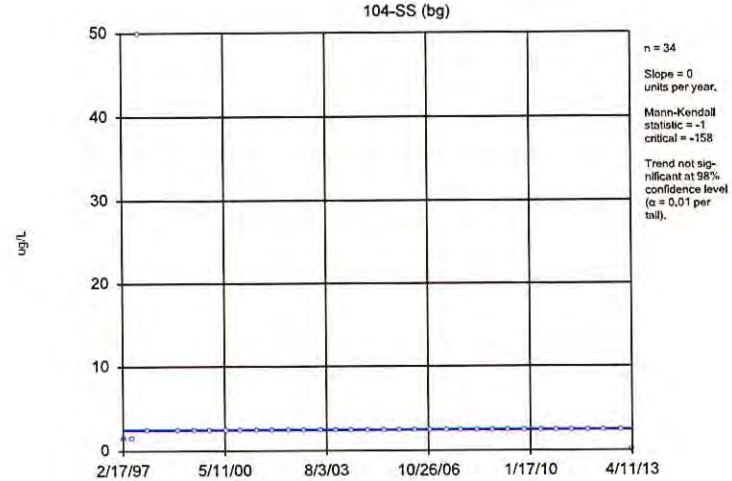


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Sen's Slope Estimator

104-SS (bg)

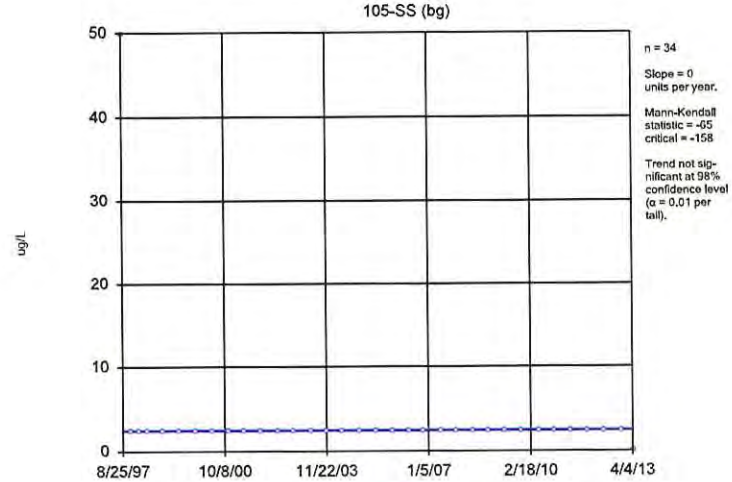


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Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS (bg)

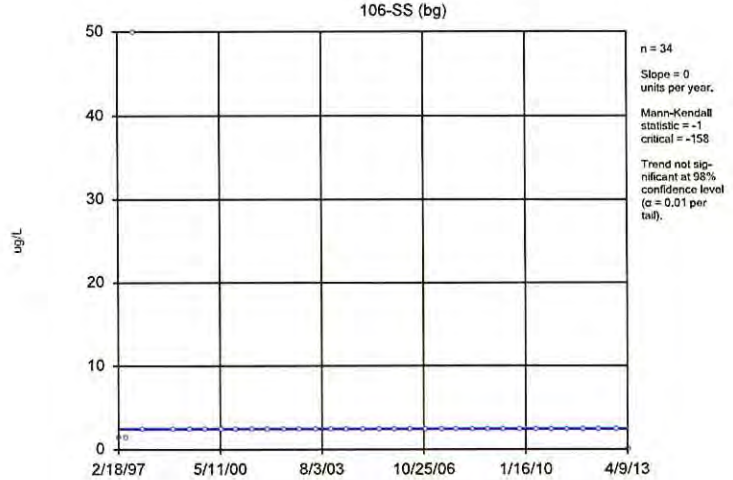


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Sen's Slope Estimator

106-SS (bg)

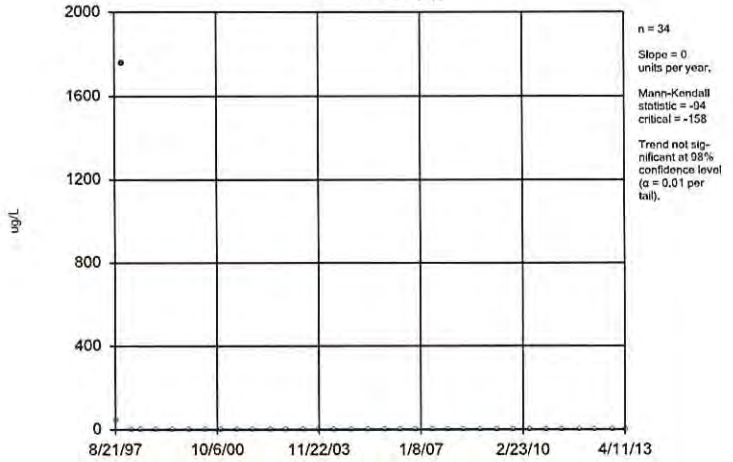


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Sen's Slope Estimator

109-SS (bg)

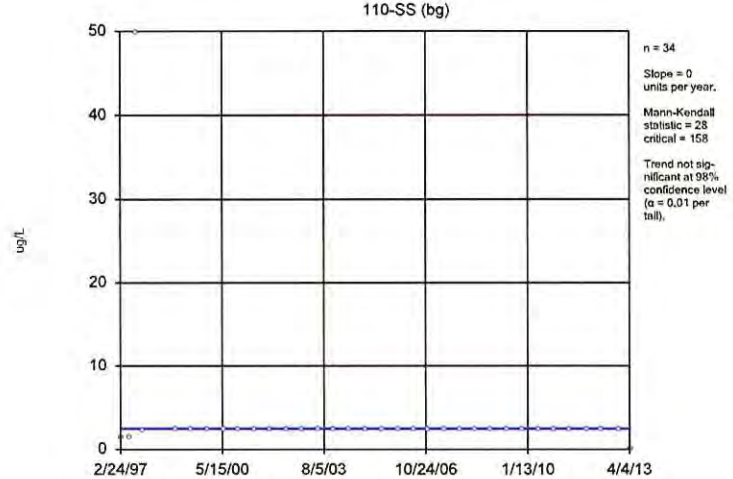


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Sen's Slope Estimator

110-SS (bg)

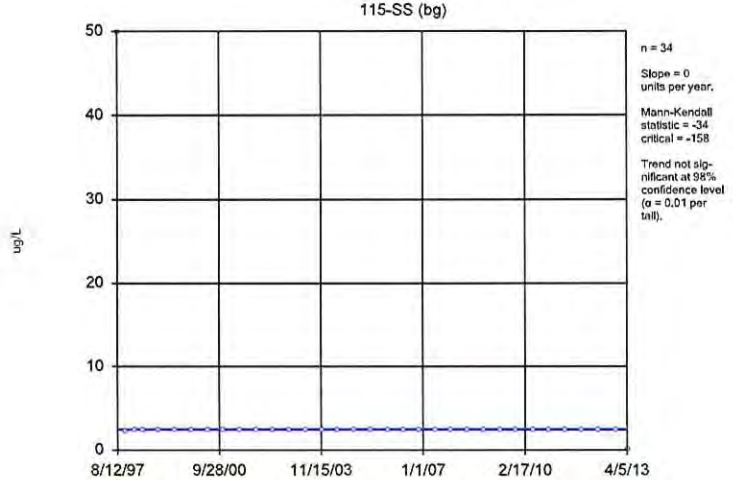


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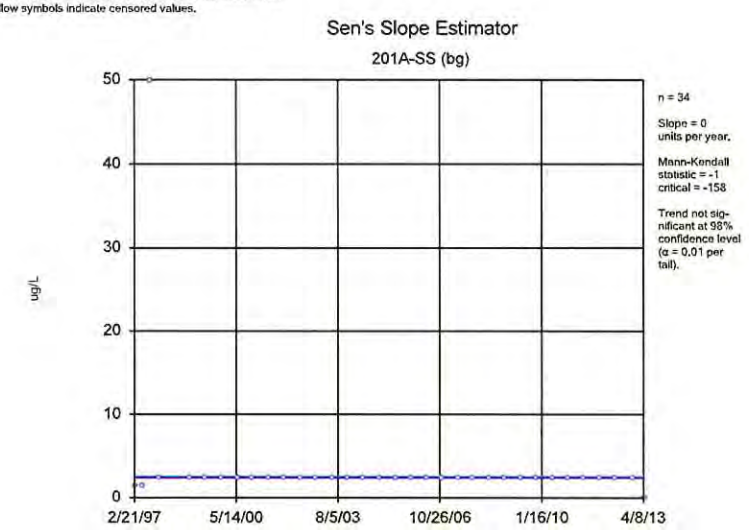
Sen's Slope Estimator

115-SS (bg)



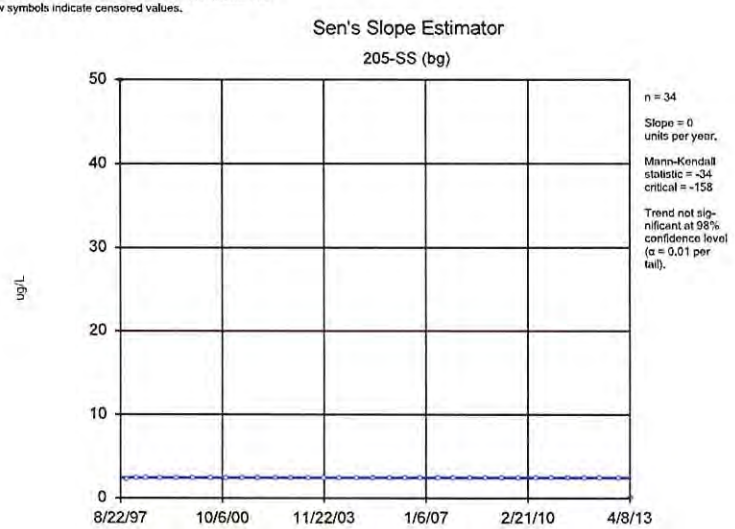
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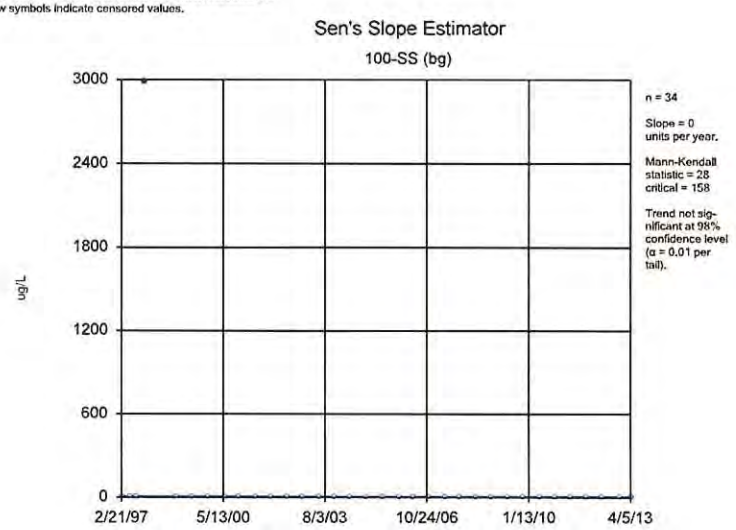
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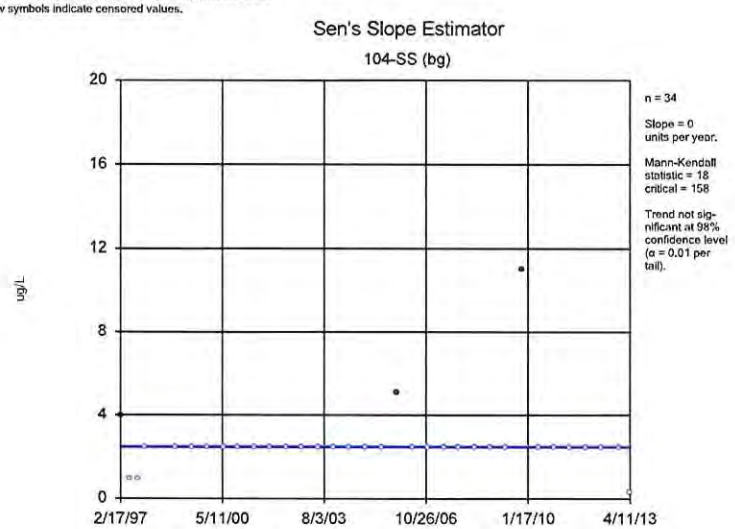
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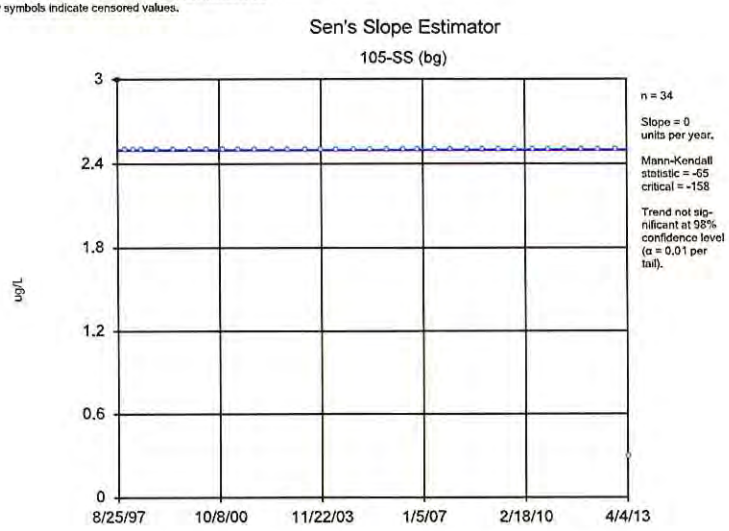
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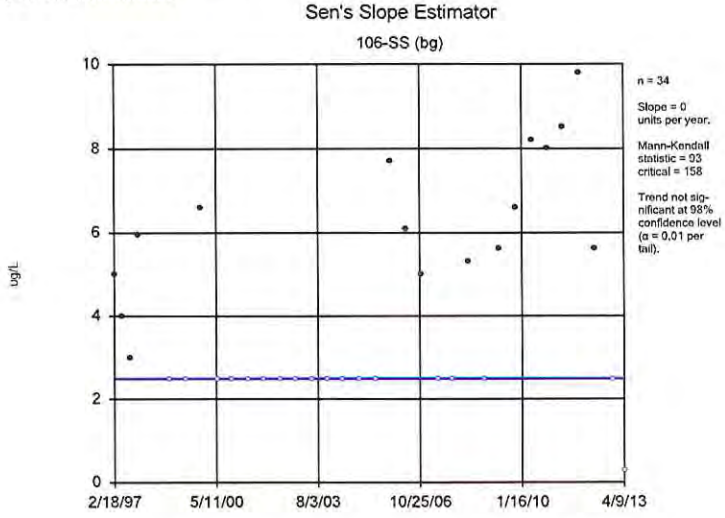
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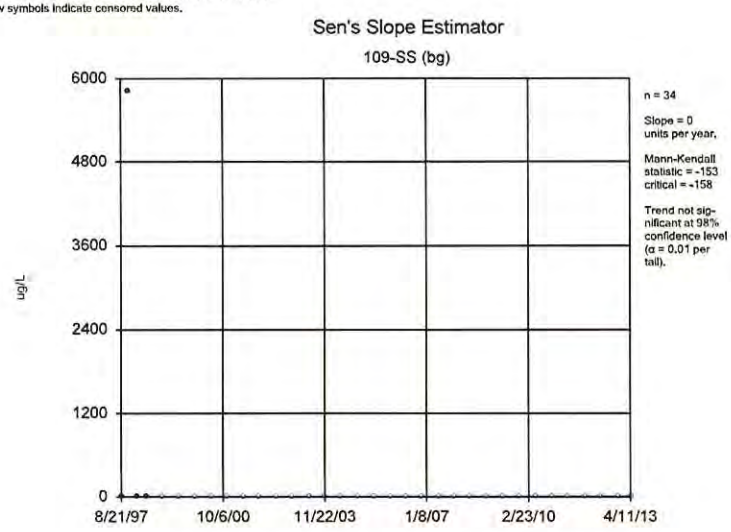
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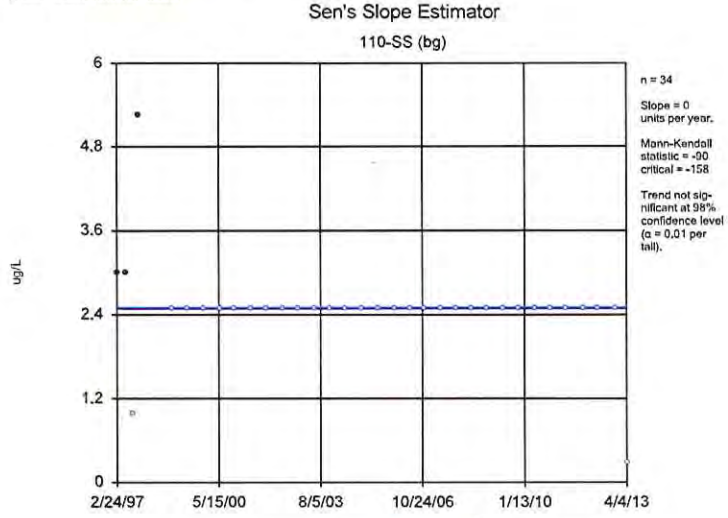
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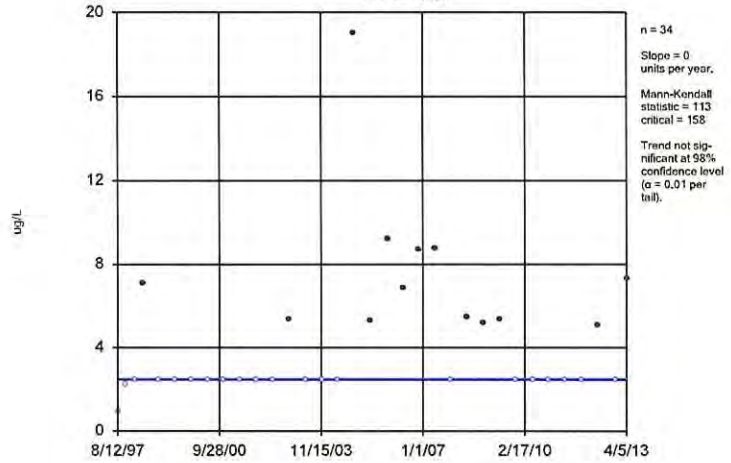


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Sen's Slope Estimator

115-SS (bg)

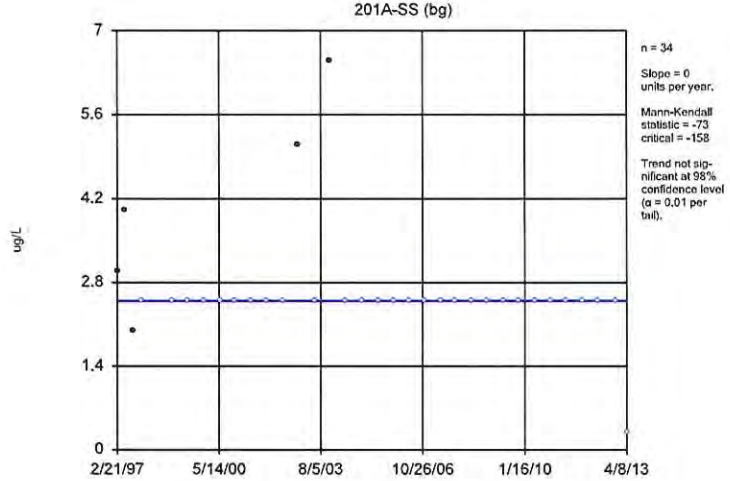


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Sen's Slope Estimator

201A-SS (bg)

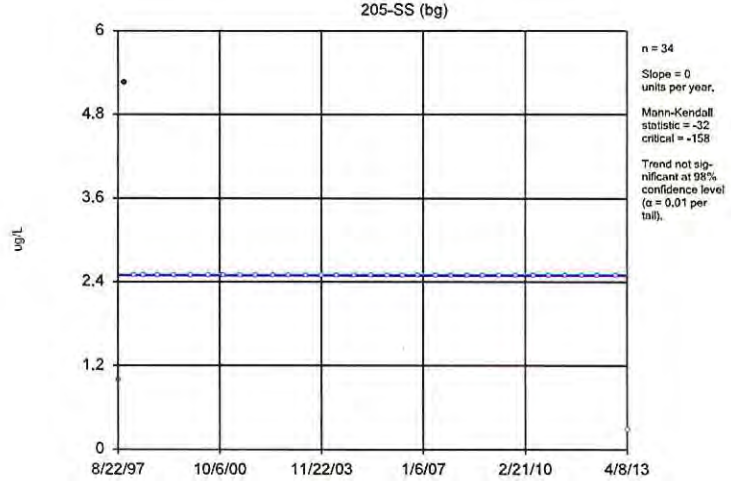


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Sen's Slope Estimator

205-SS (bg)

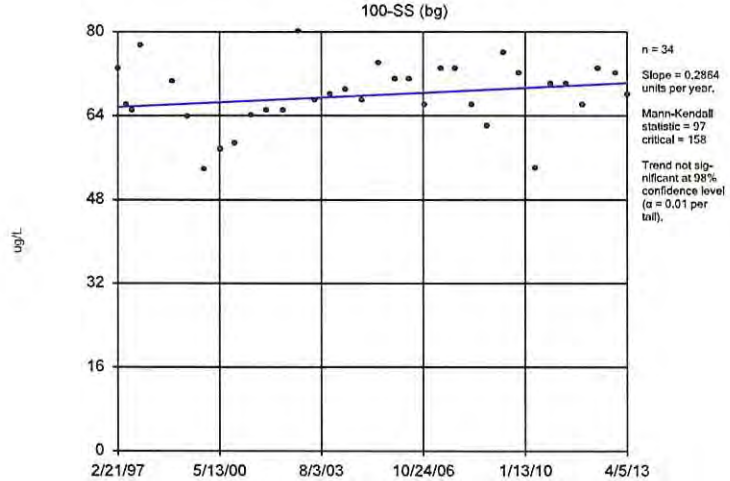


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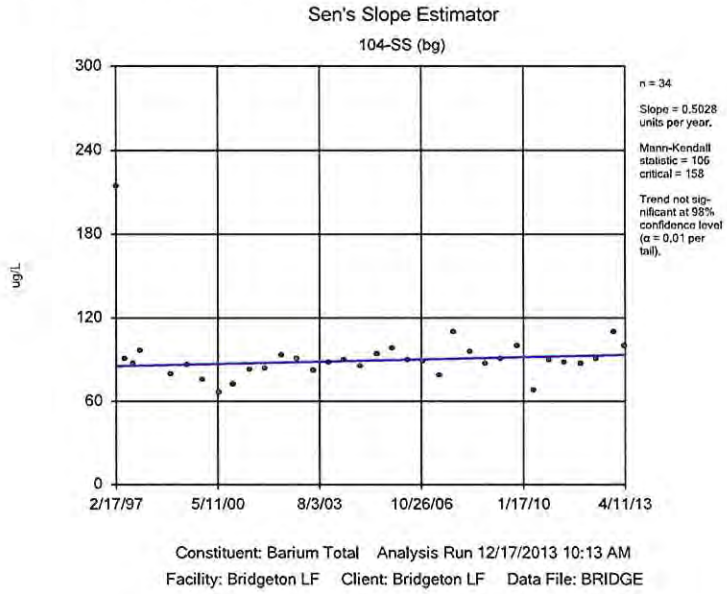
Sen's Slope Estimator

100-SS (bg)



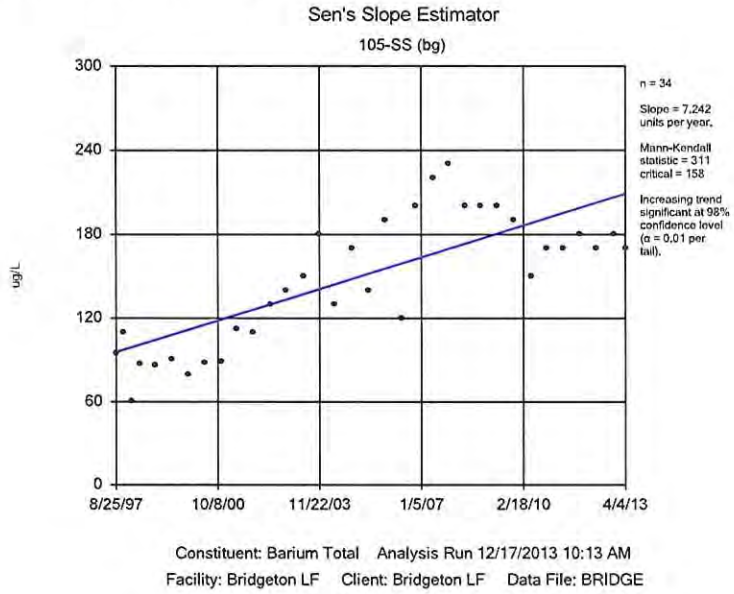
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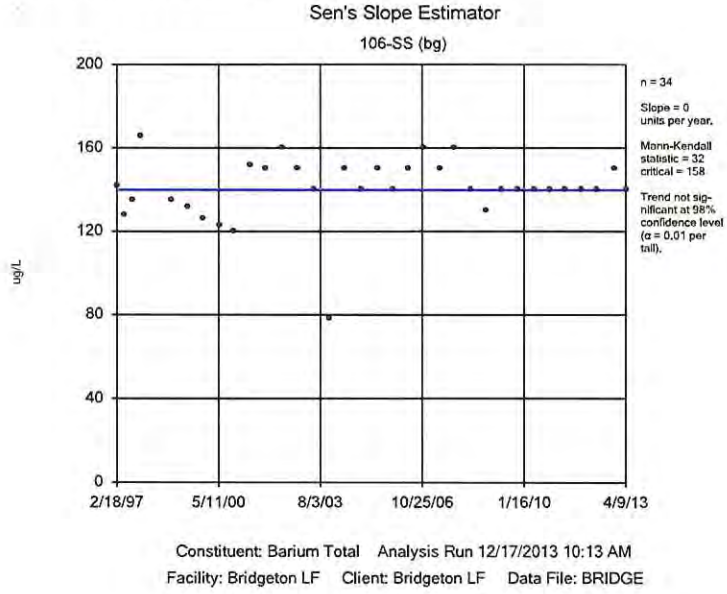
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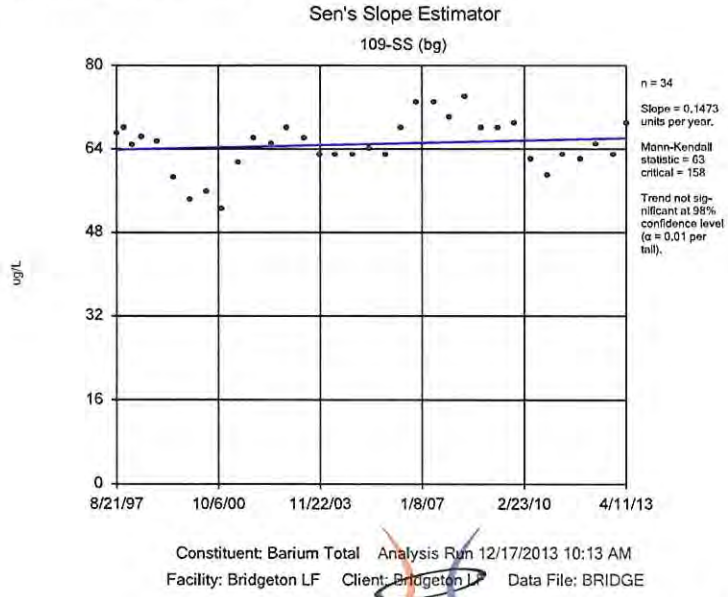
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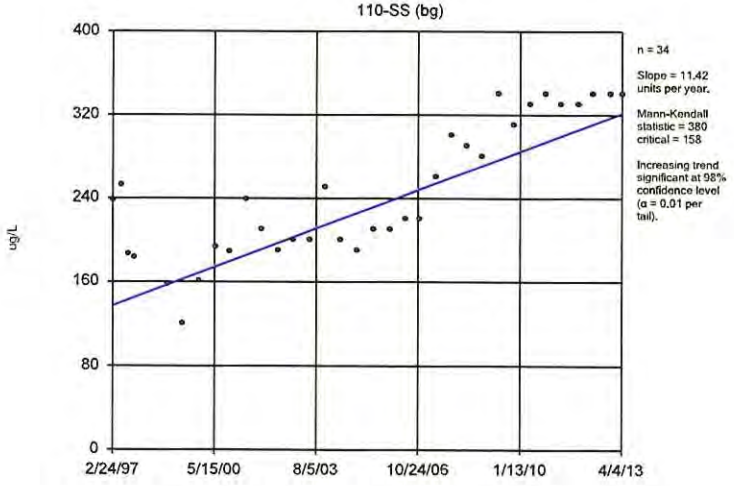


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

110-SS (bg)

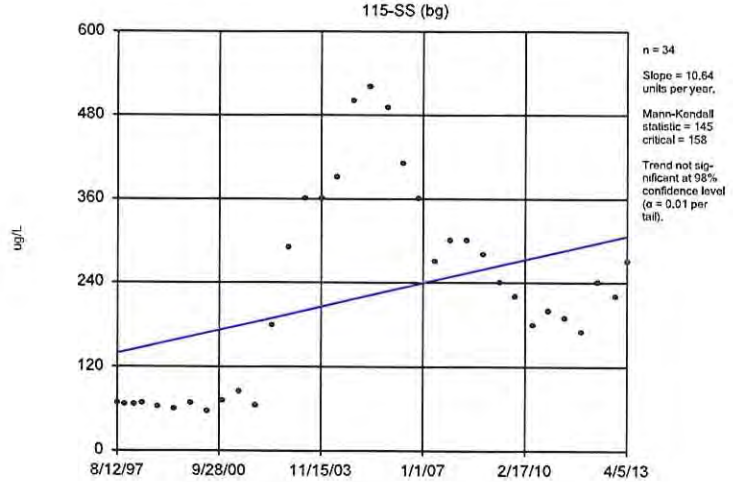


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

115-SS (bg)

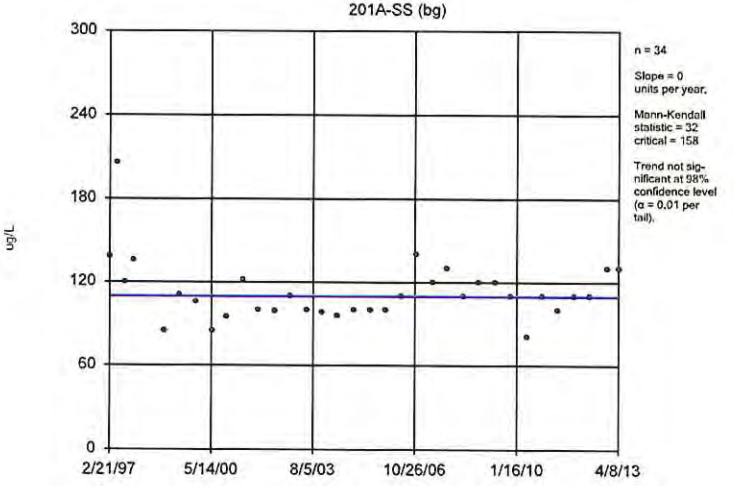


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

201A-SS (bg)

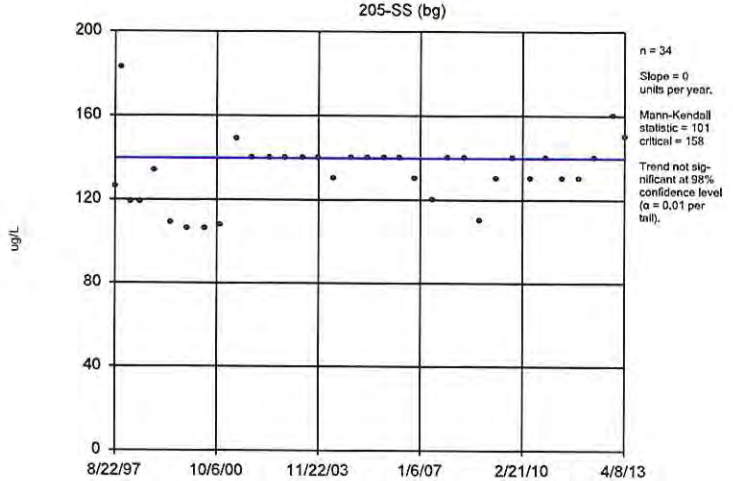


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Sen's Slope Estimator

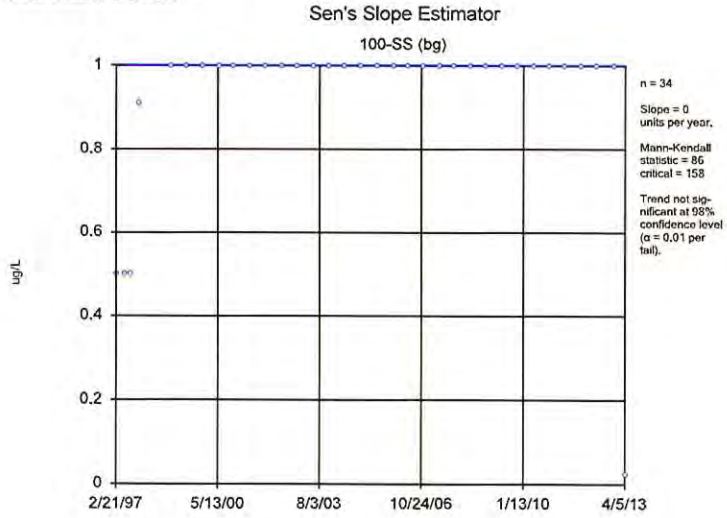
205-SS (bg)



Constituent: Barium Total Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.



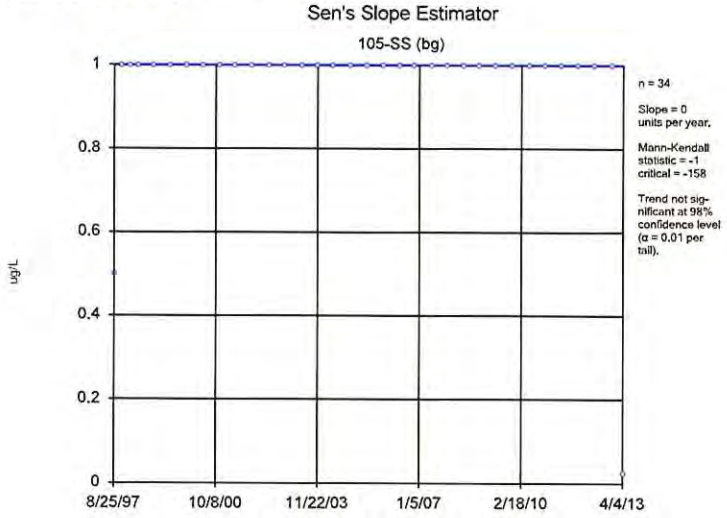
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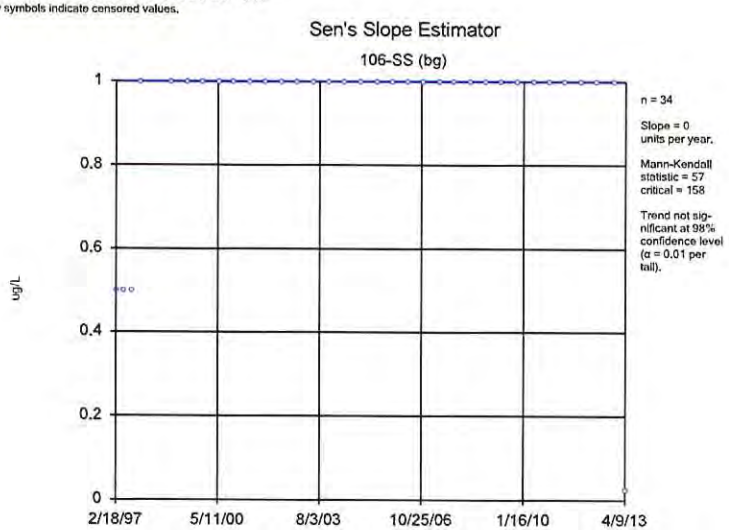
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Constituent: Beryllium Total Analysis Run 12/17/2013 10:13 AM
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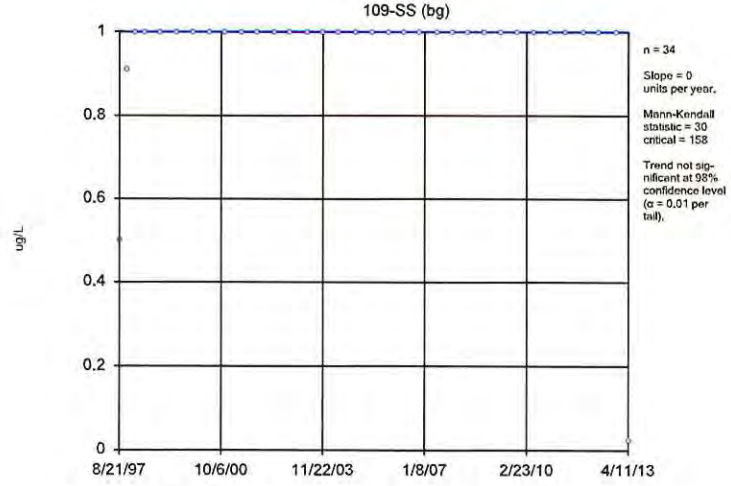
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Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)

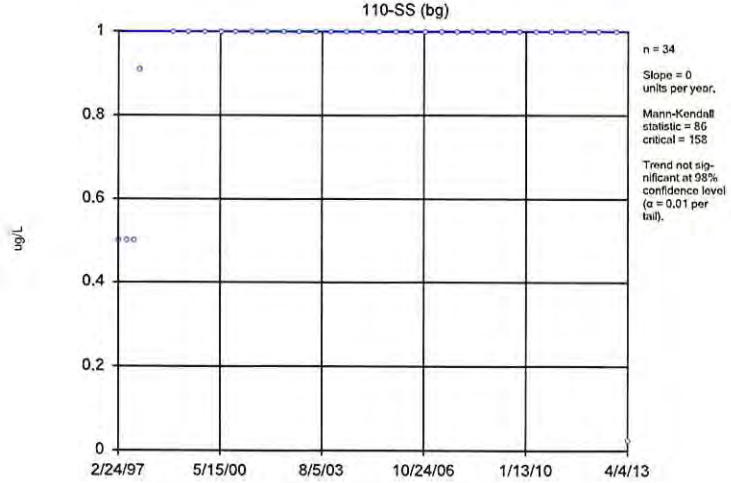


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Sen's Slope Estimator

110-SS (bg)

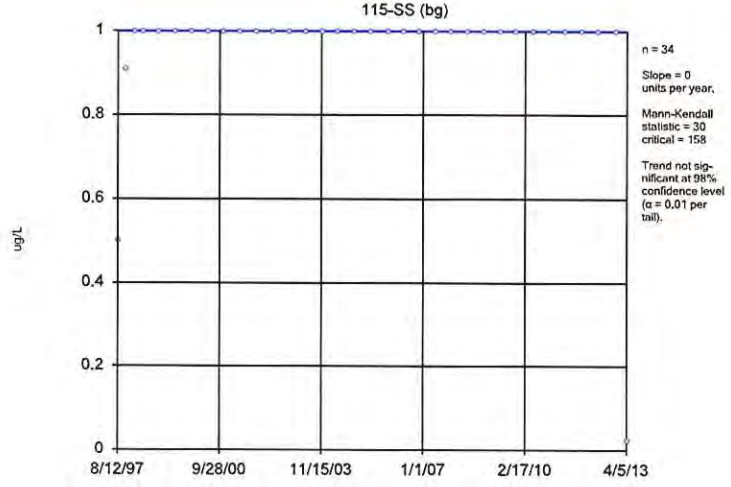


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Sen's Slope Estimator

115-SS (bg)

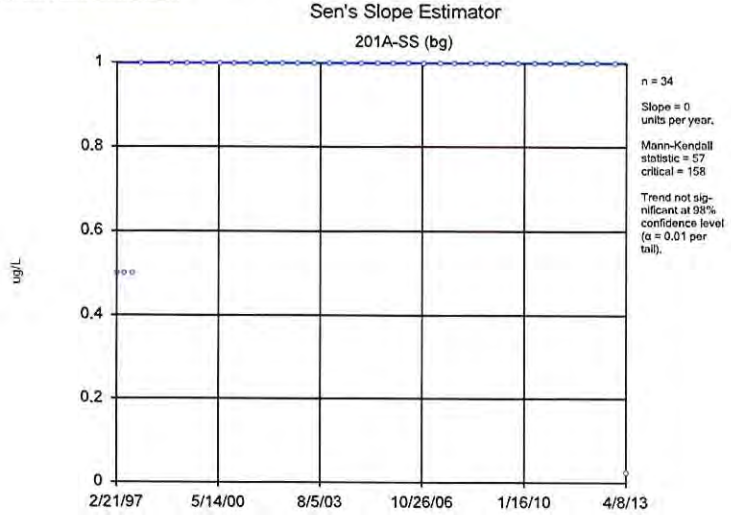


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Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)

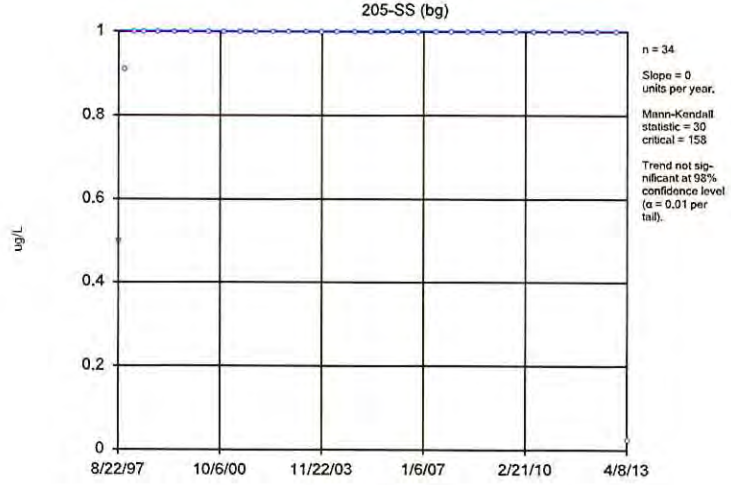


Constituent: Beryllium Total Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

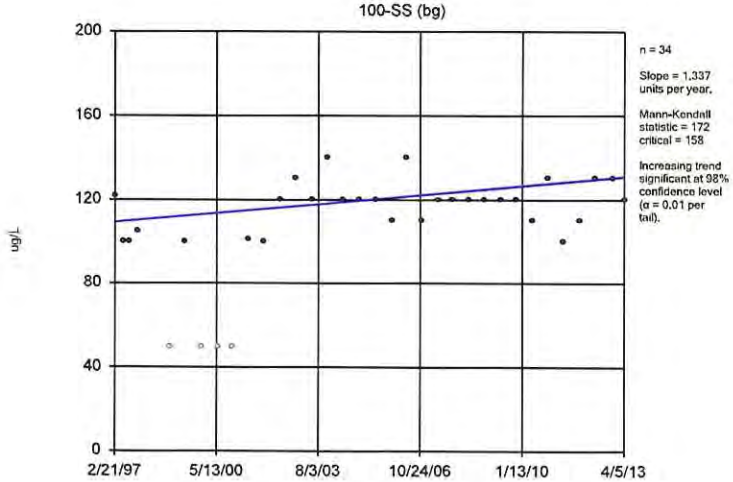


Constituent: Beryllium Total Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

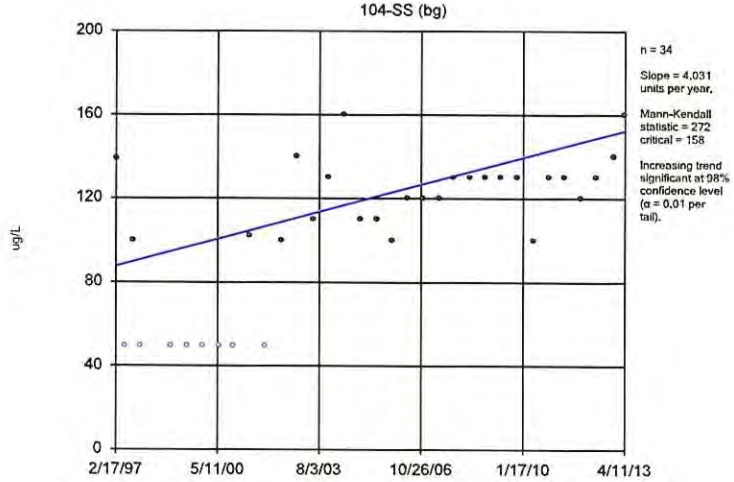


Constituent: Boron Total Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

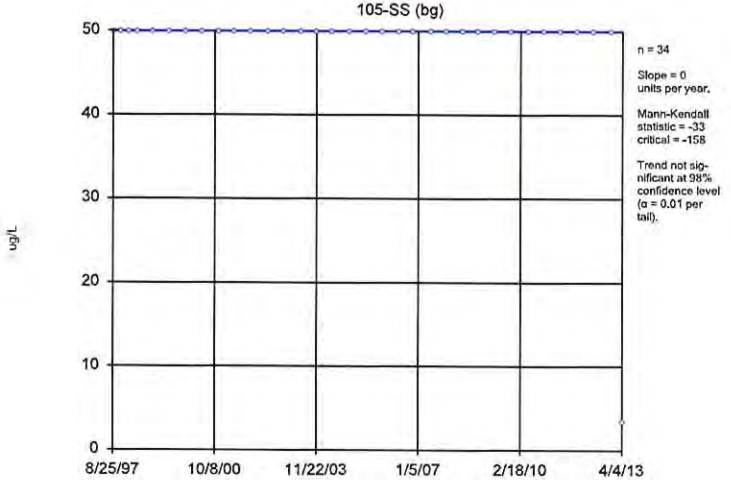


Constituent: Boron Total Analysis Run 12/17/2013 10:13 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS (bg)



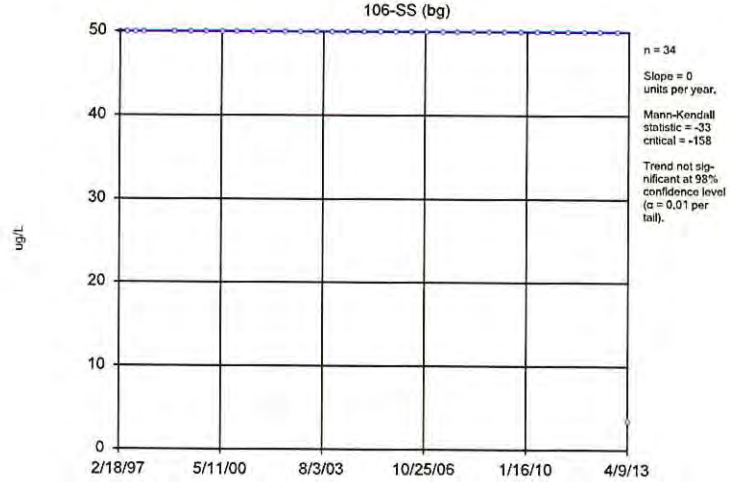
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)

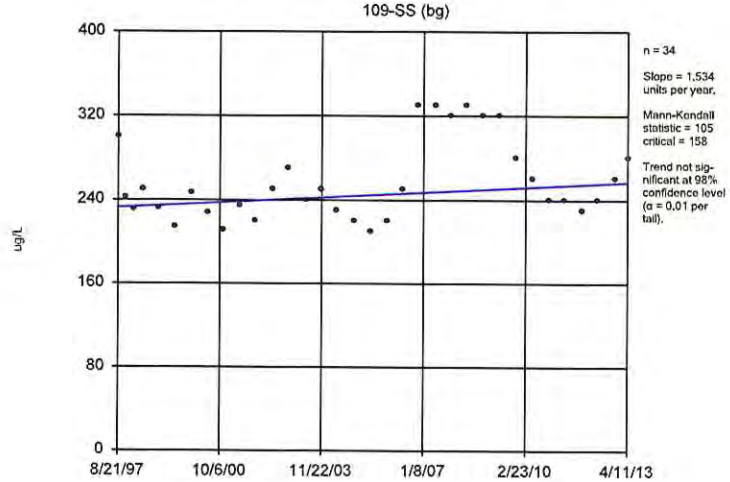


Constituent: Boron Total Analysis Run 12/17/2013 10:13 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

109-SS (bg)

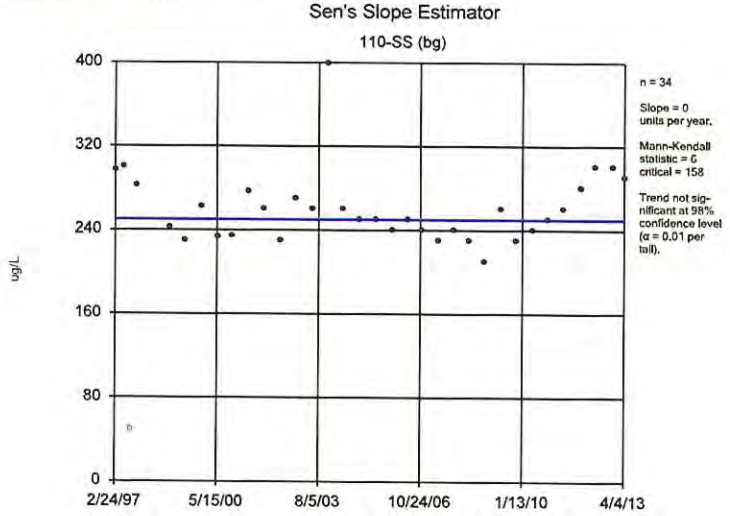


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

110-SS (bg)

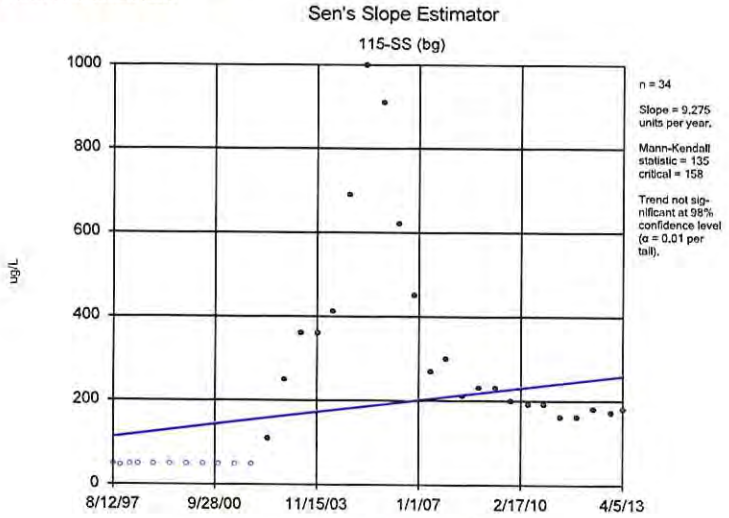


Constituent: Boron Total Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

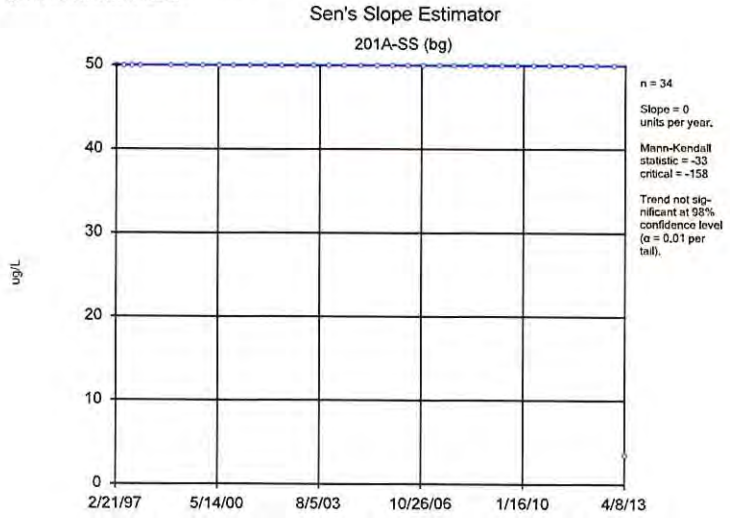
115-SS (bg)



Constituent: Boron Total Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

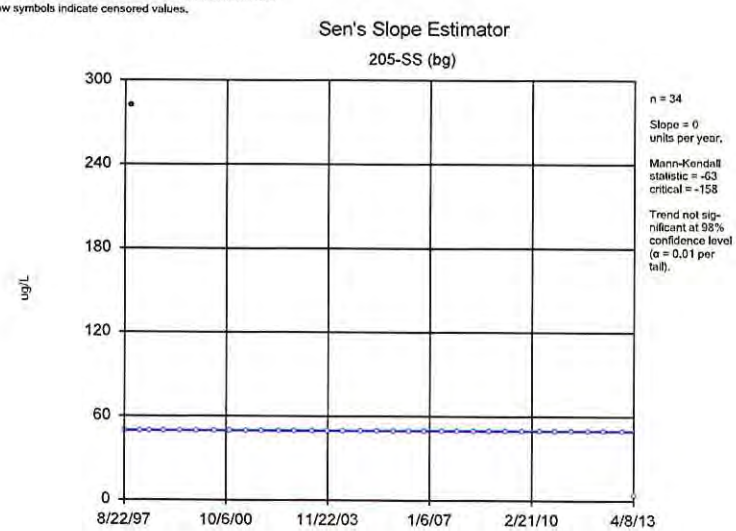
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Hollow symbols indicate censored values.



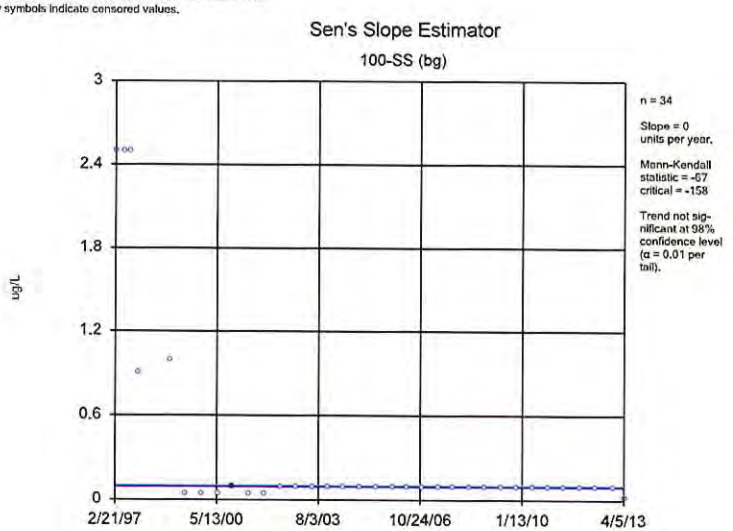
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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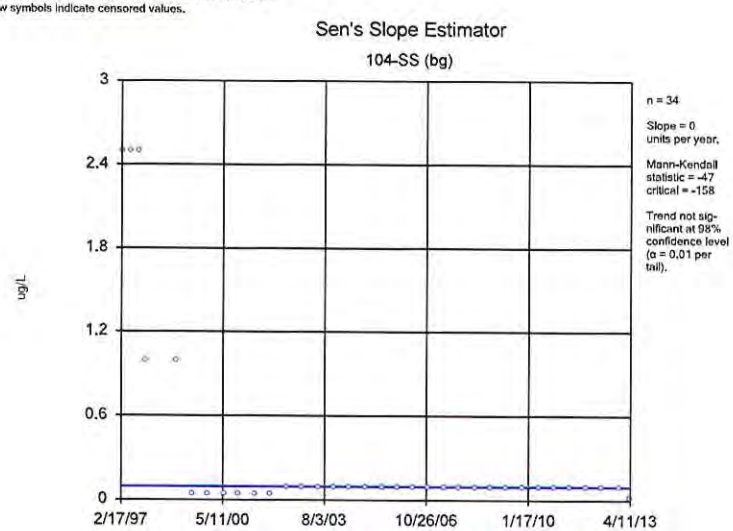
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Constituent: Cadmium Total Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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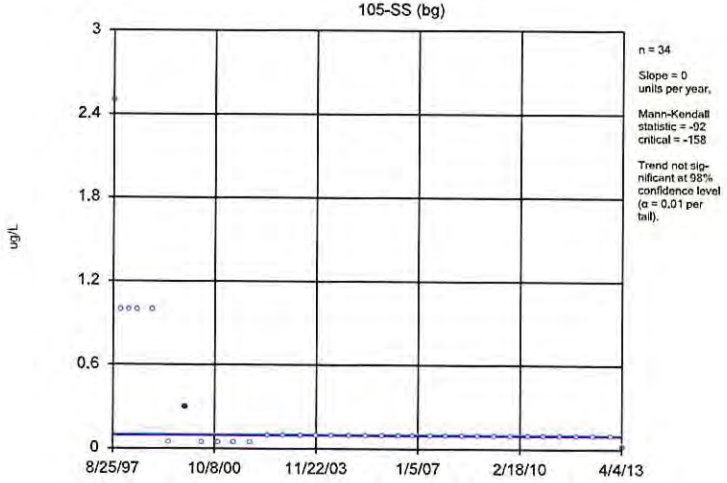


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS (bg)

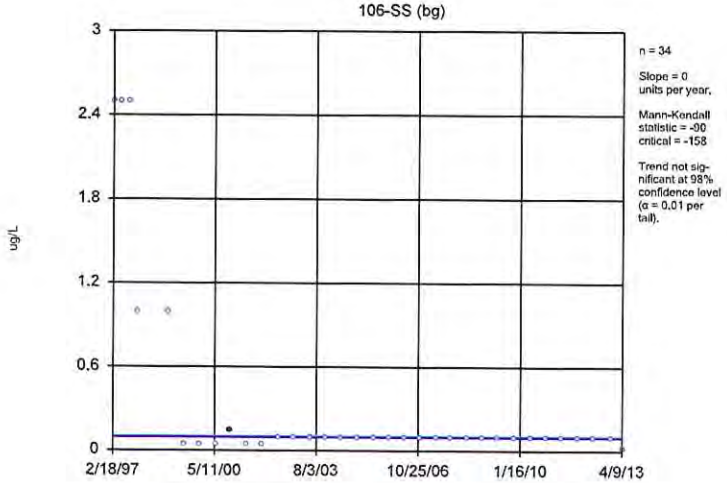


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

106-SS (bg)

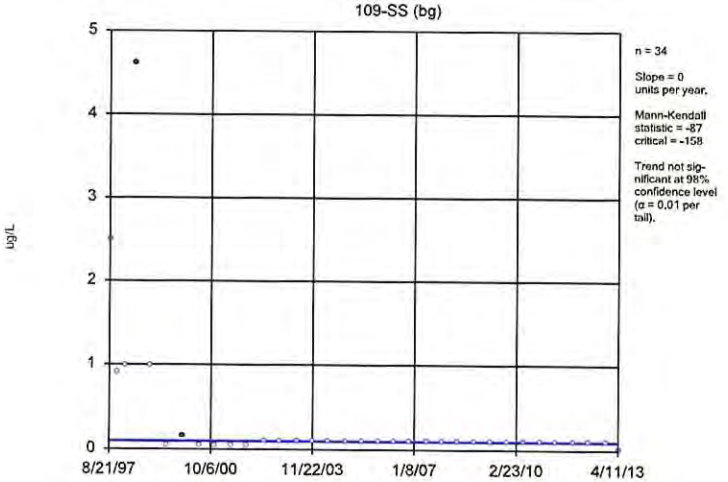


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Sen's Slope Estimator

109-SS (bg)

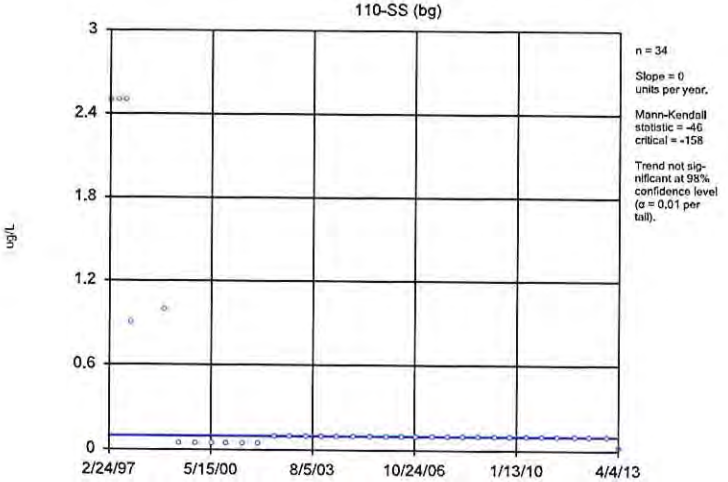


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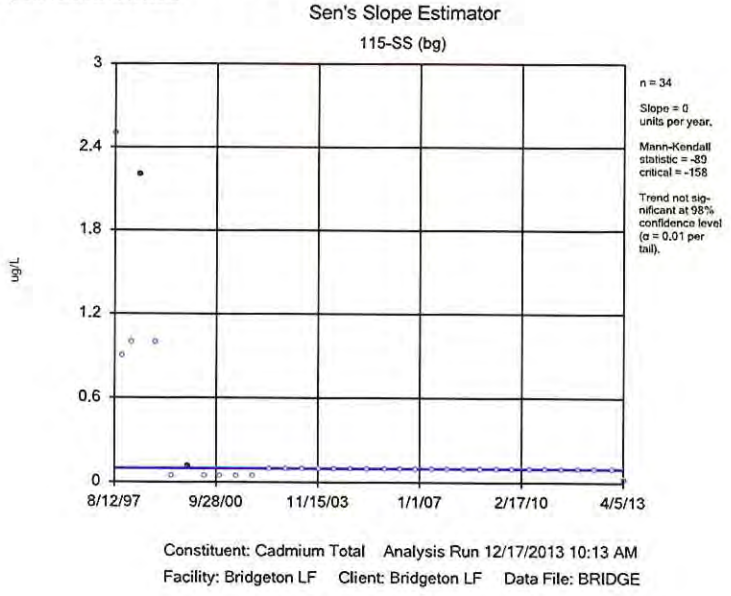
Sen's Slope Estimator

110-SS (bg)



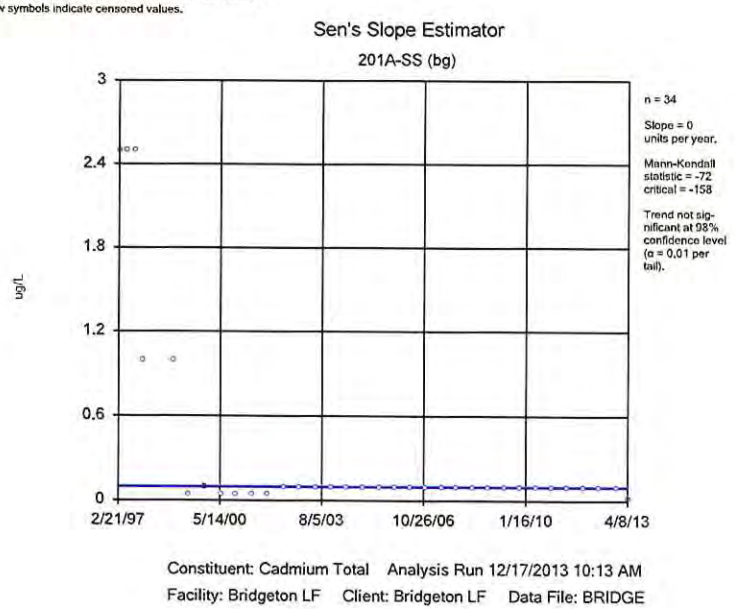
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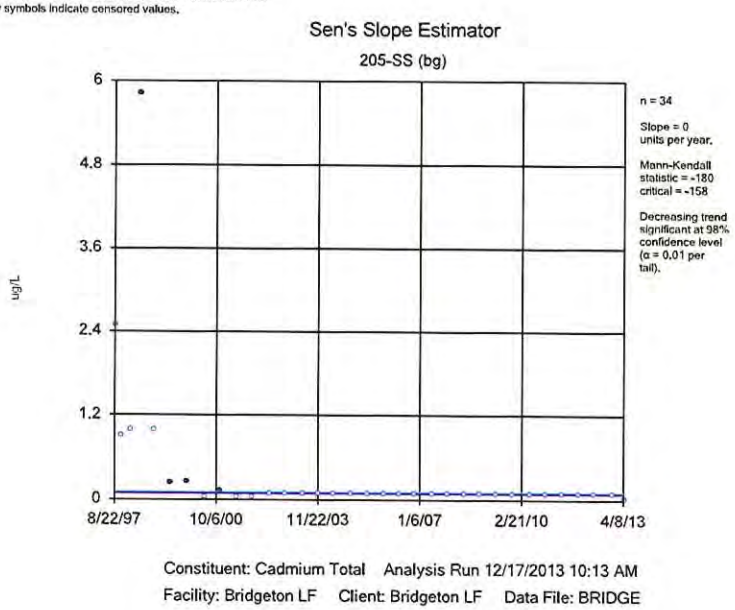
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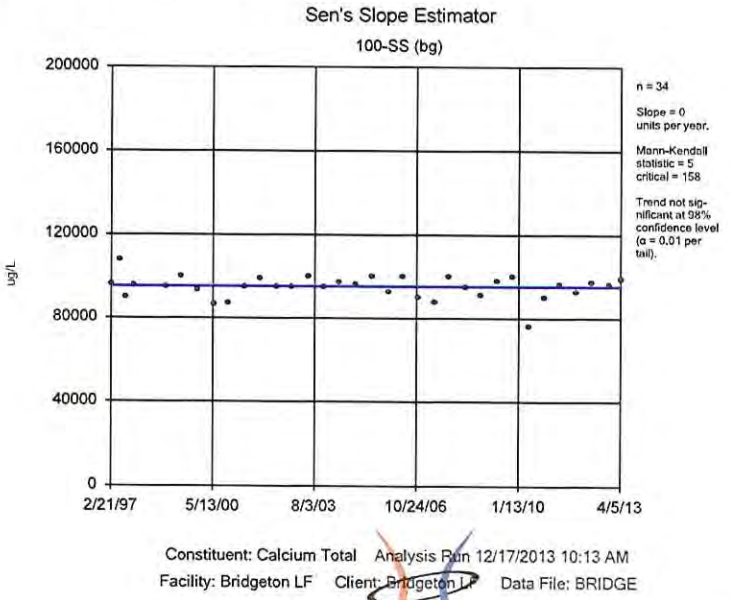
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Constituent: Cadmium Total Analysis Run 12/17/2013 10:13 AM
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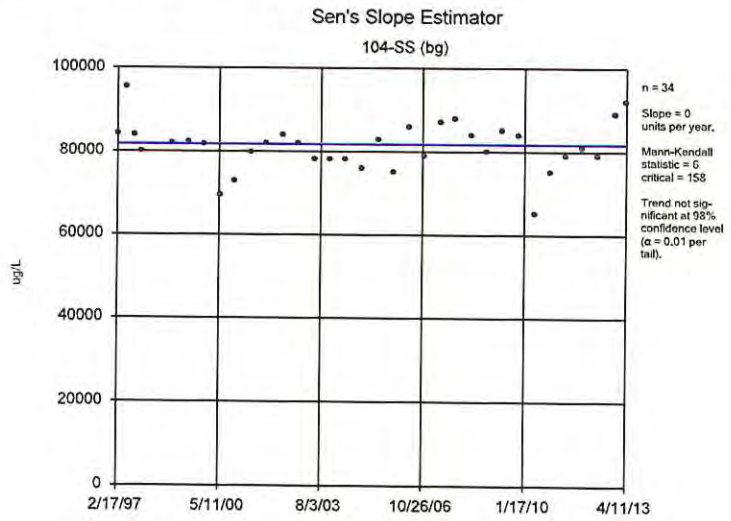
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Constituent: Calcium Total Analysis Run 12/17/2013 10:13 AM
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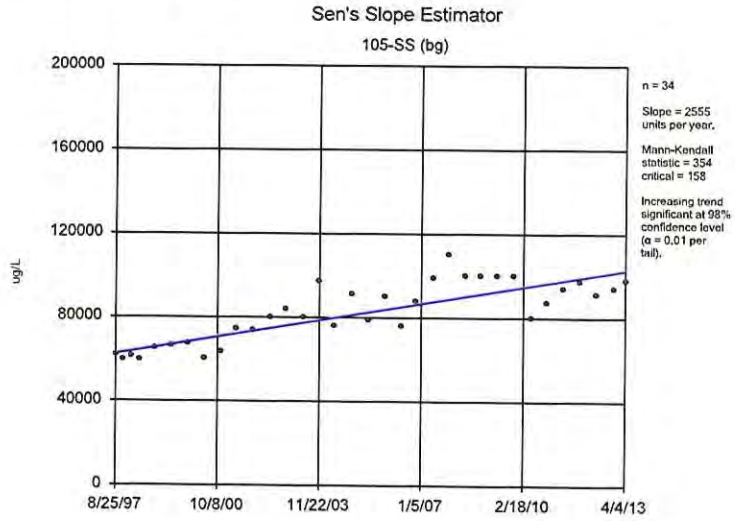
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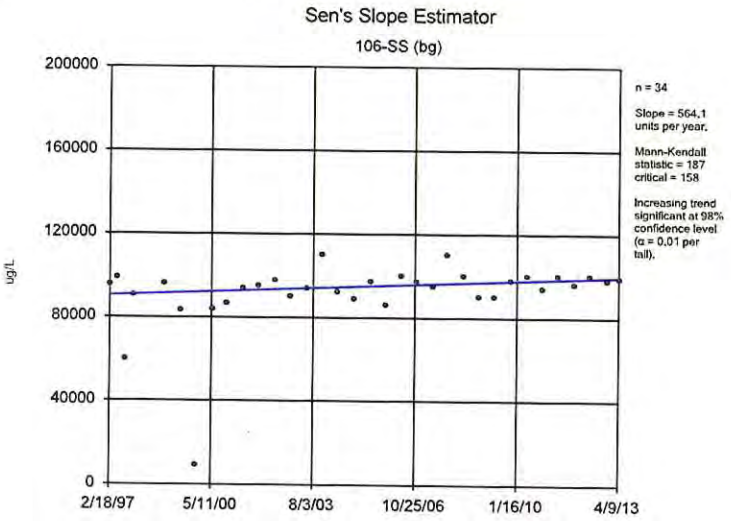
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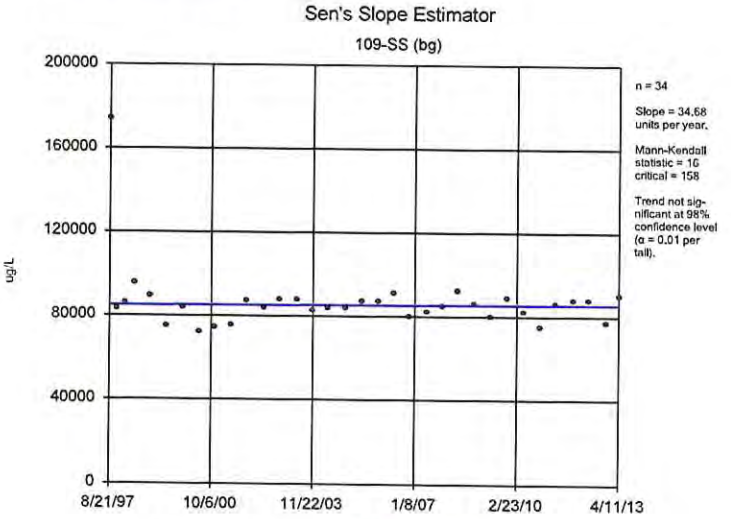
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Constituent: Calcium Total Analysis Run 12/17/2013 10:13 AM
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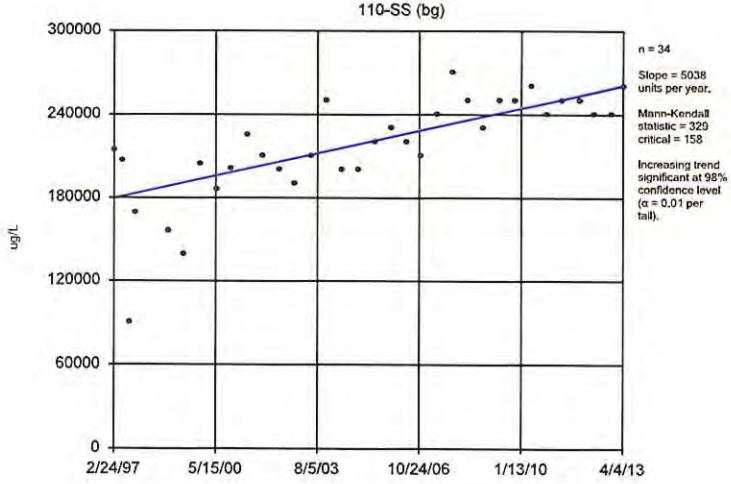
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Sen's Slope Estimator

110-SS (bg)



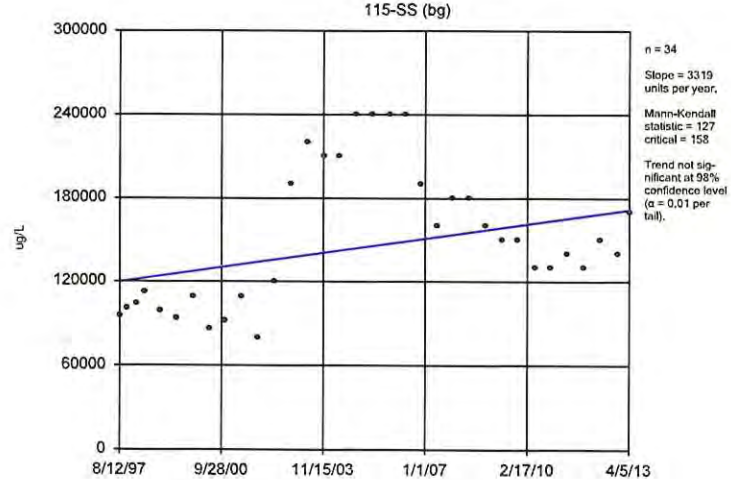
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

115-SS (bg)



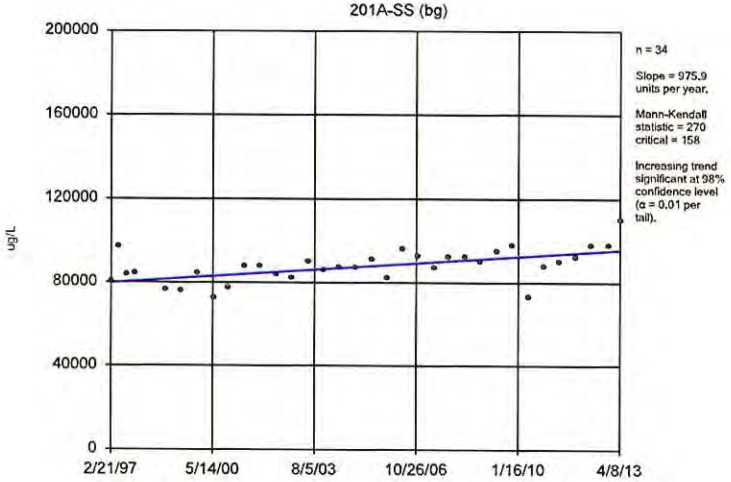
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

201A-SS (bg)



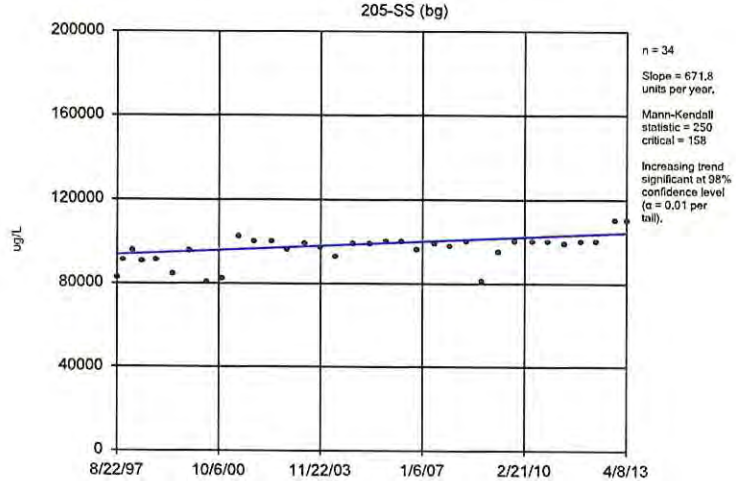
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

205-SS (bg)



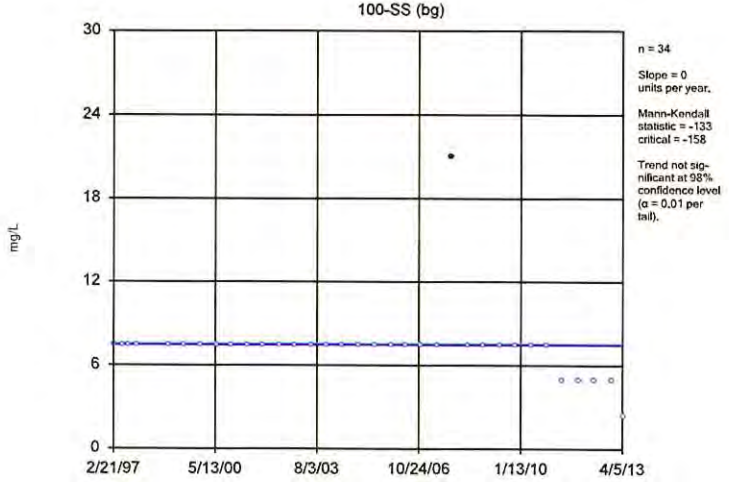
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

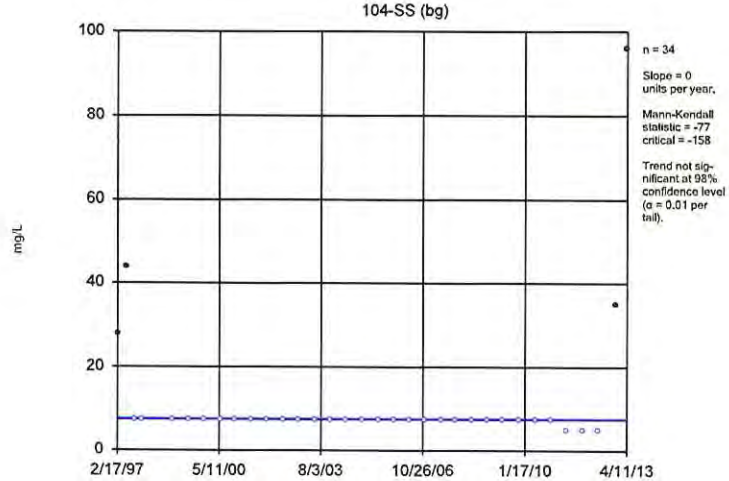


Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

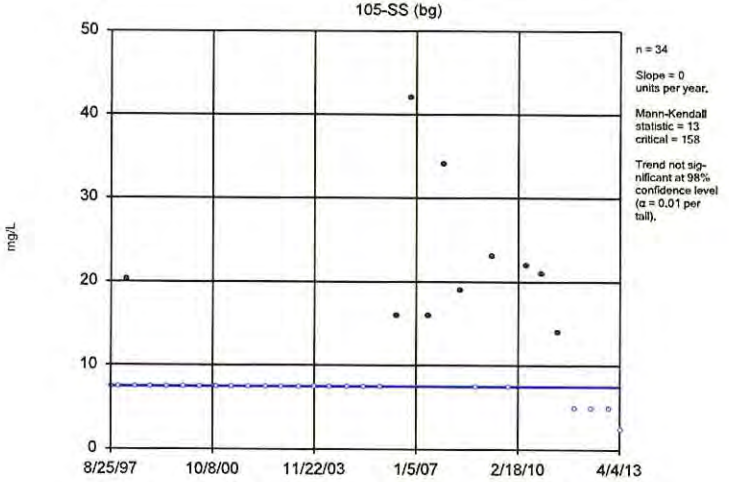


Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:13 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS (bg)

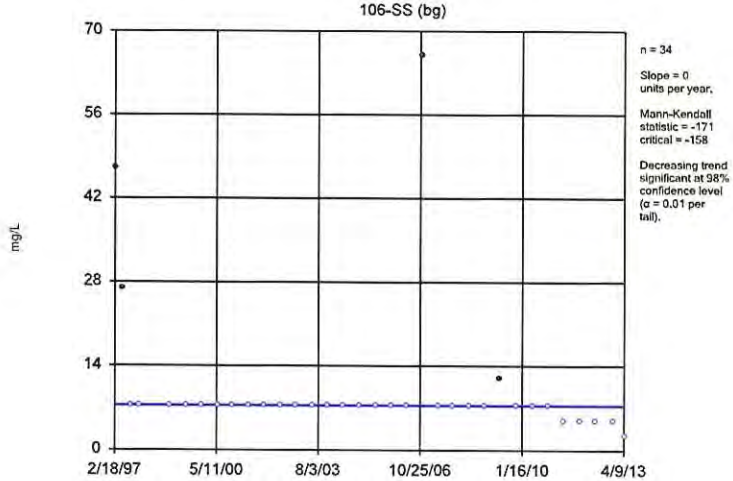


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Sen's Slope Estimator

106-SS (bg)

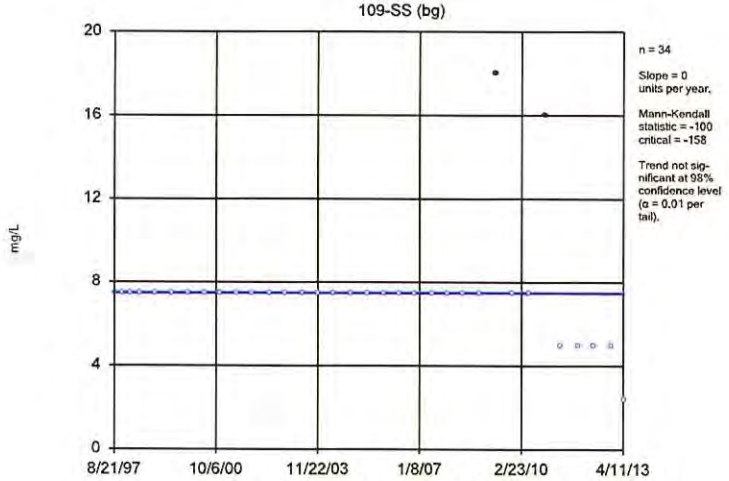


Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

109-SS (bg)

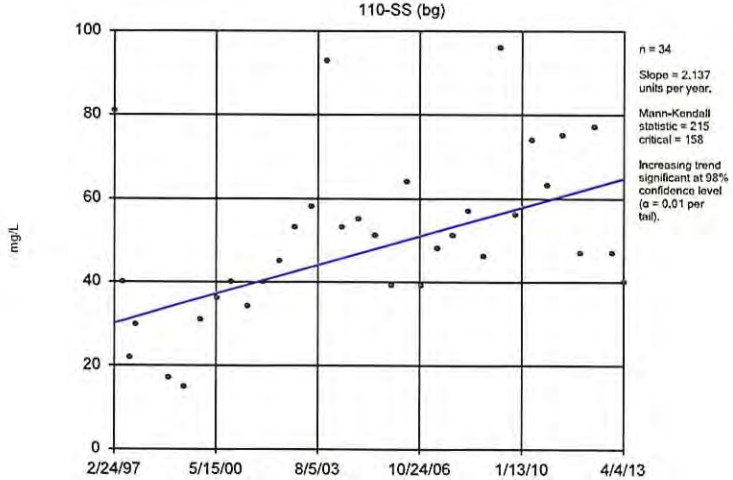


Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

110-SS (bg)

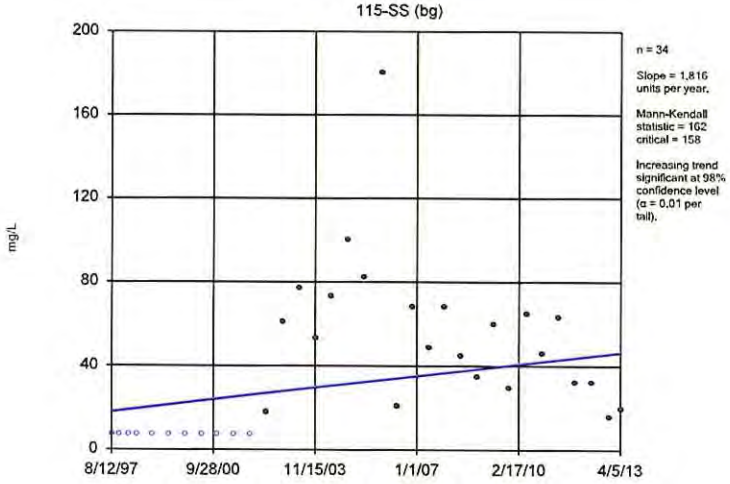


Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:14 AM
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Sen's Slope Estimator

115-SS (bg)

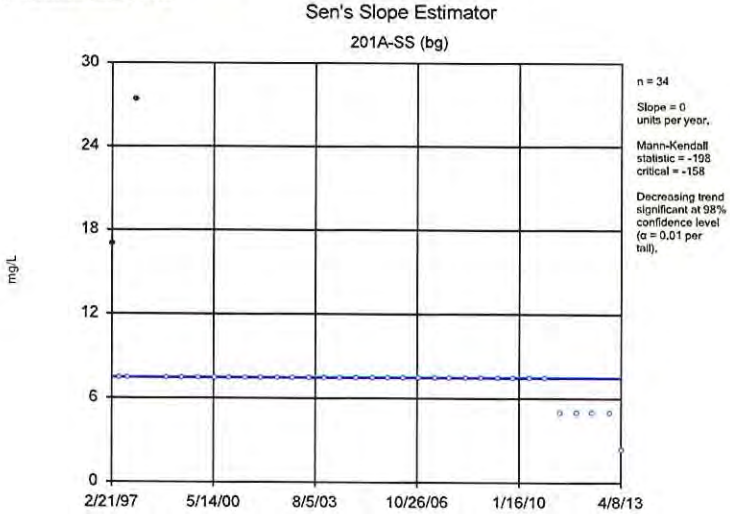


Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:14 AM
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Sen's Slope Estimator

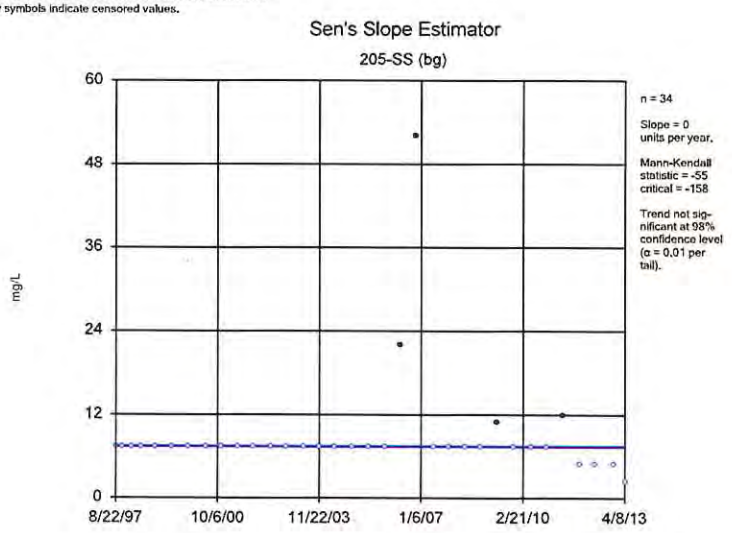
201A-SS (bg)



Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

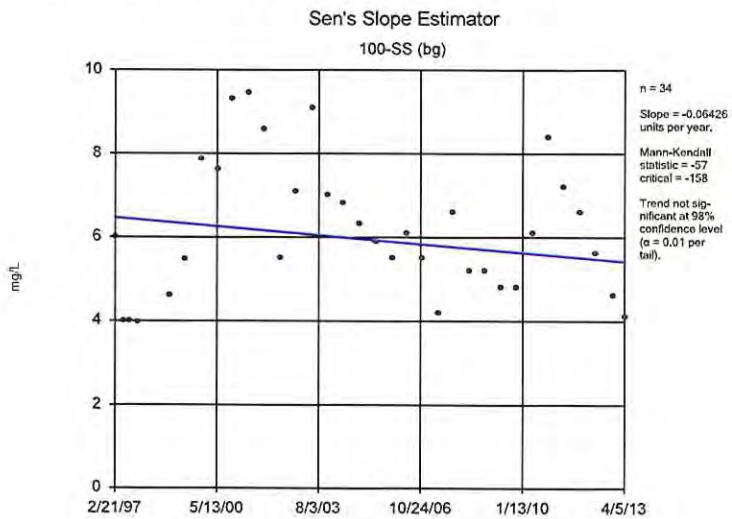
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Hollow symbols indicate censored values.



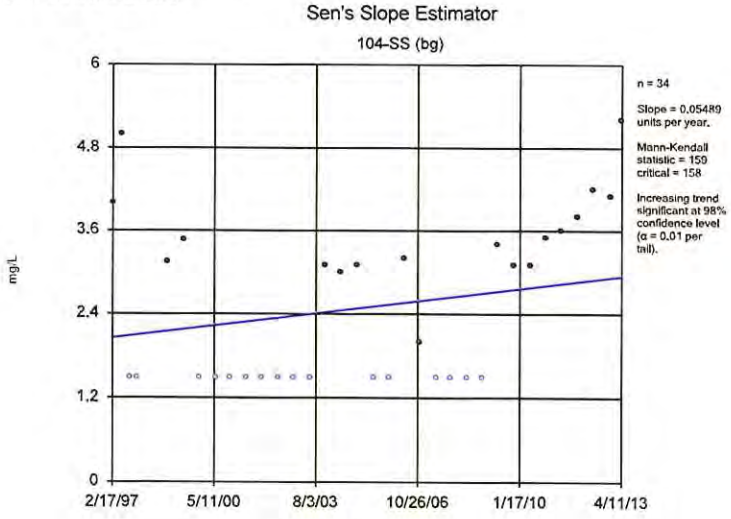
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



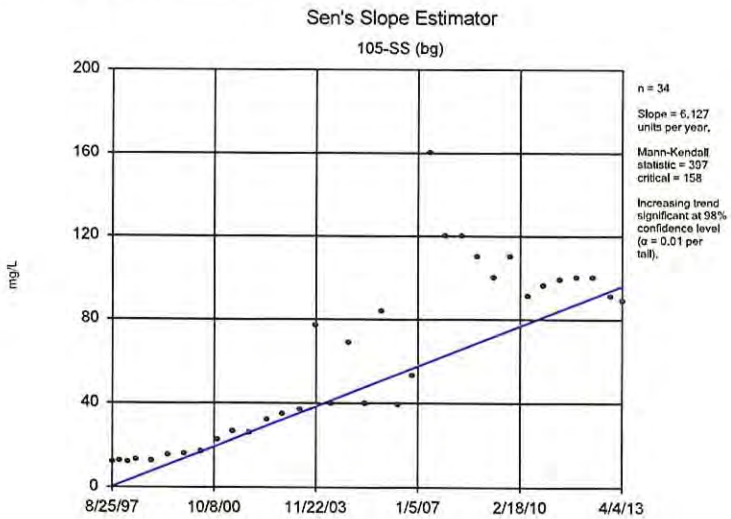
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.



Constituent: Chloride Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



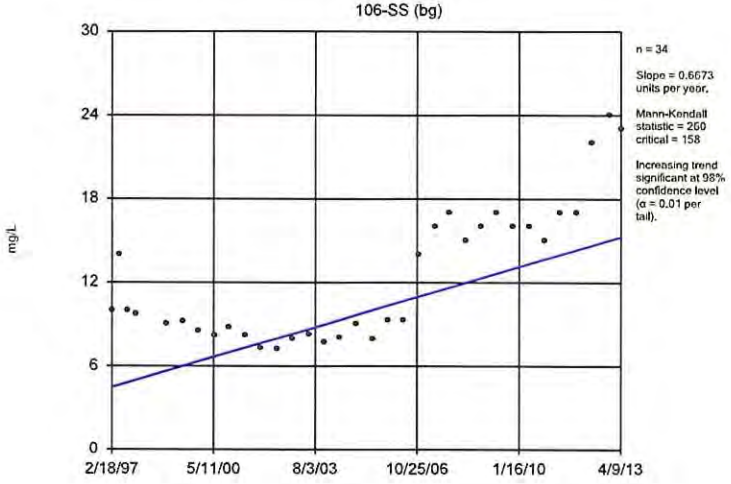
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SS (bg)



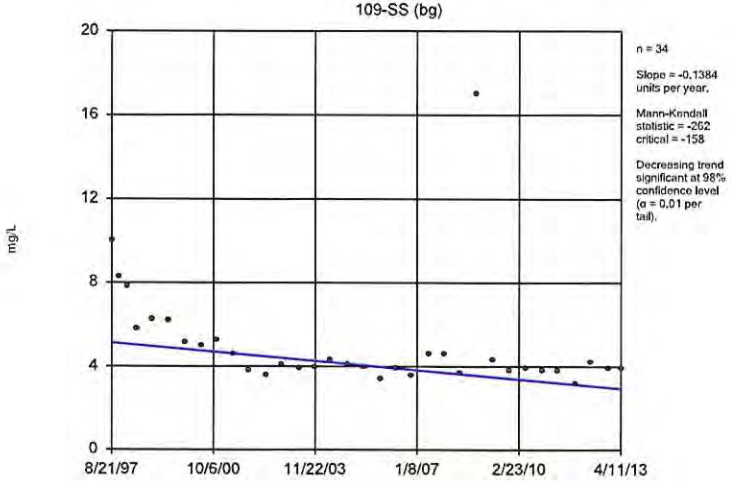
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

109-SS (bg)



Constituent: Chloride Analysis Run 12/17/2013 10:14 AM

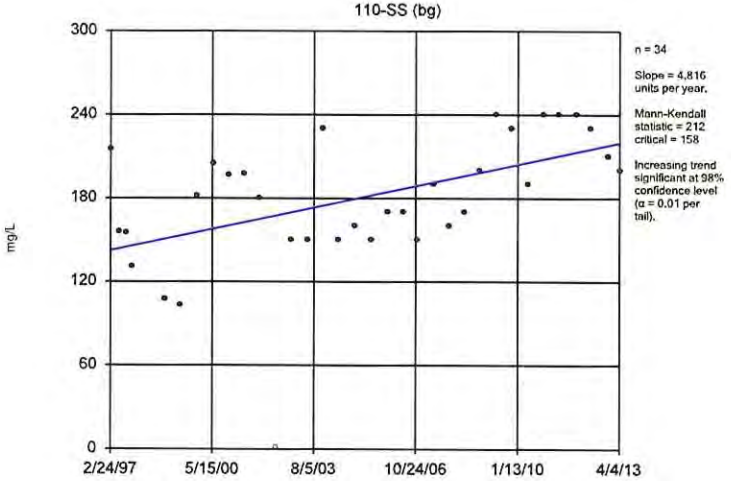
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

110-SS (bg)



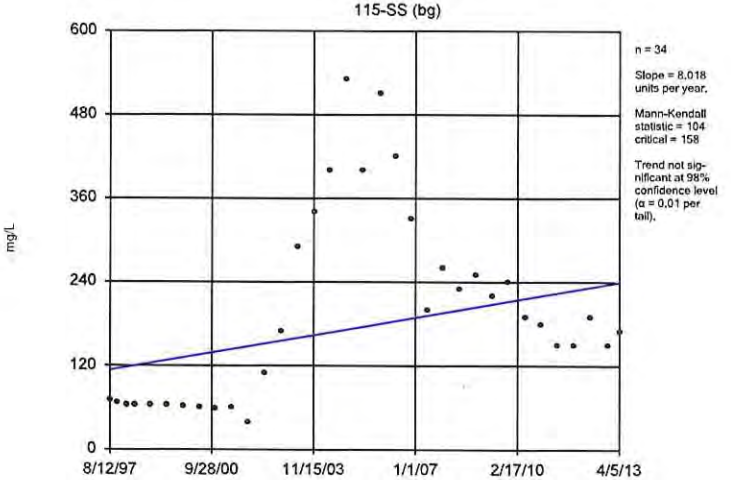
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

115-SS (bg)



Constituent: Chloride Analysis Run 12/17/2013 10:14 AM

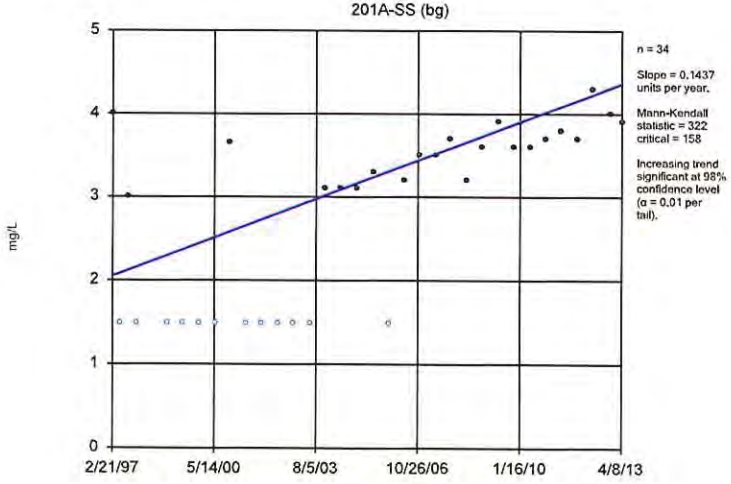
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Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)

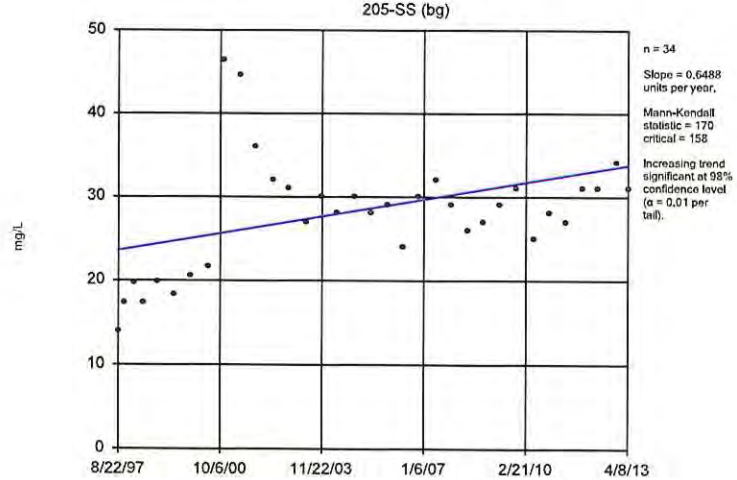


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

205-SS (bg)

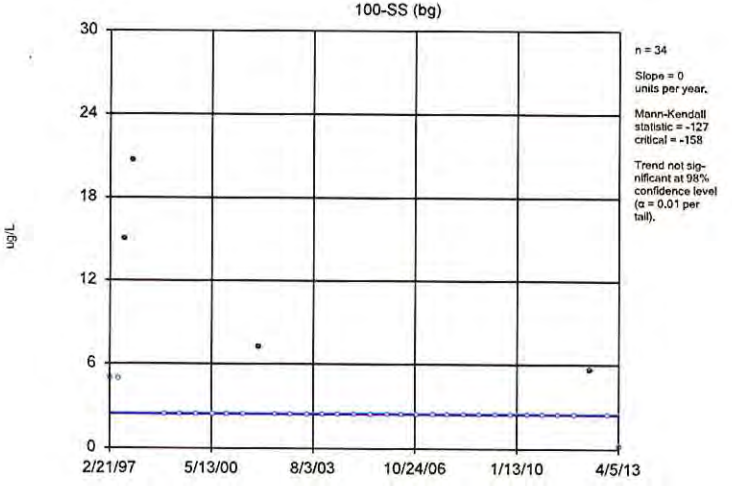


Constituent: Chloride Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

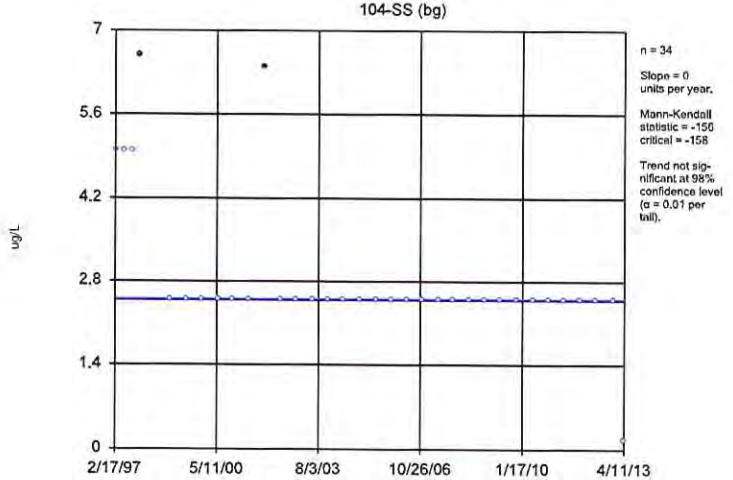


Constituent: Chromium Total Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

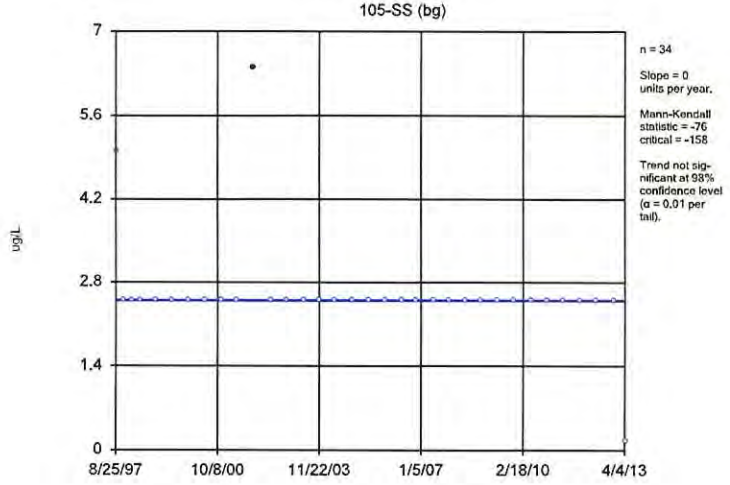


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

105-SS (bg)

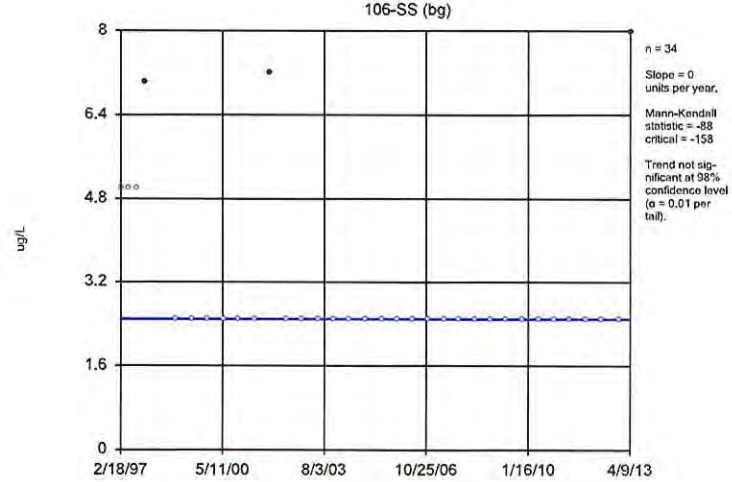


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Sen's Slope Estimator

106-SS (bg)

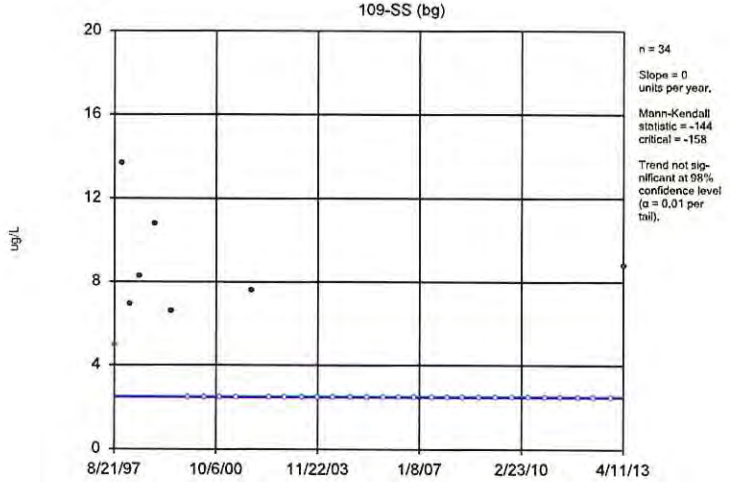


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Sen's Slope Estimator

109-SS (bg)

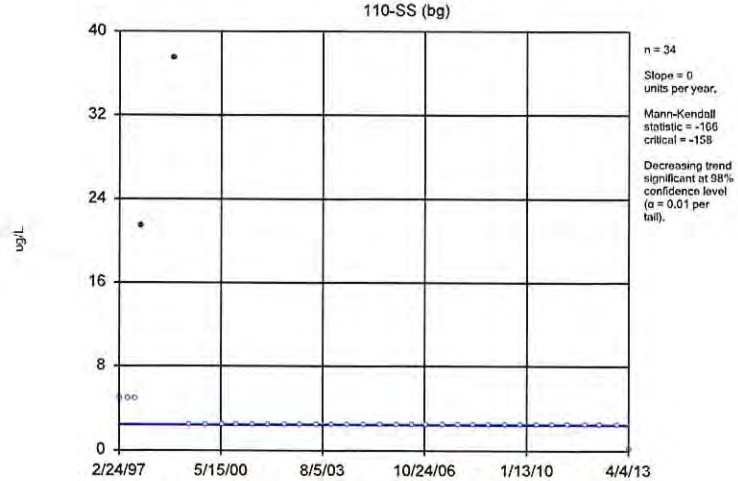


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Sen's Slope Estimator

110-SS (bg)

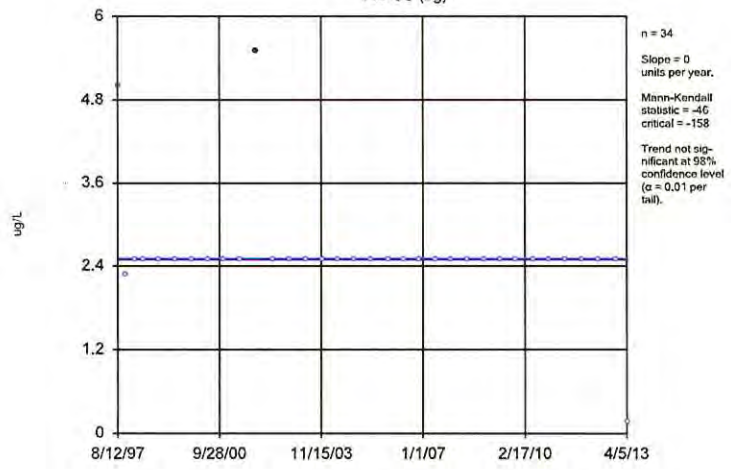


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Sen's Slope Estimator

115-SS (bg)

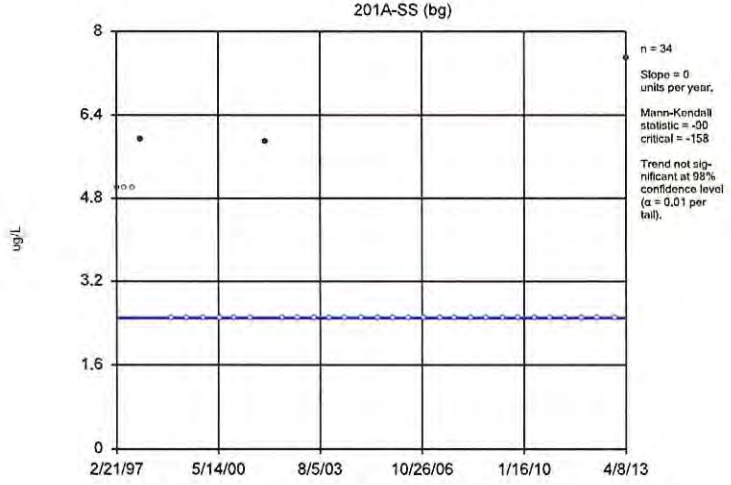


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Sen's Slope Estimator

201A-SS (bg)

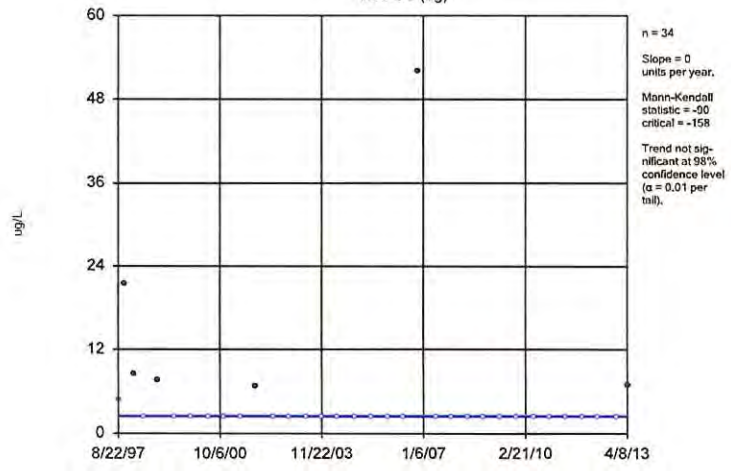


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

205-SS (bg)

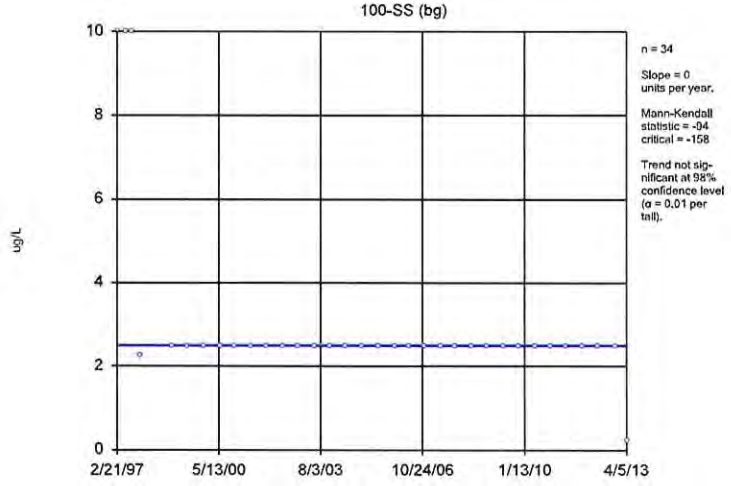


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Sen's Slope Estimator

100-SS (bg)

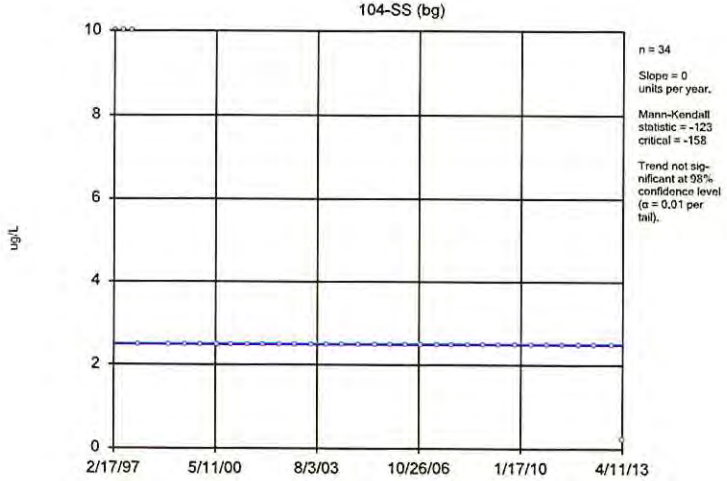


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Sen's Slope Estimator

104-SS (bg)

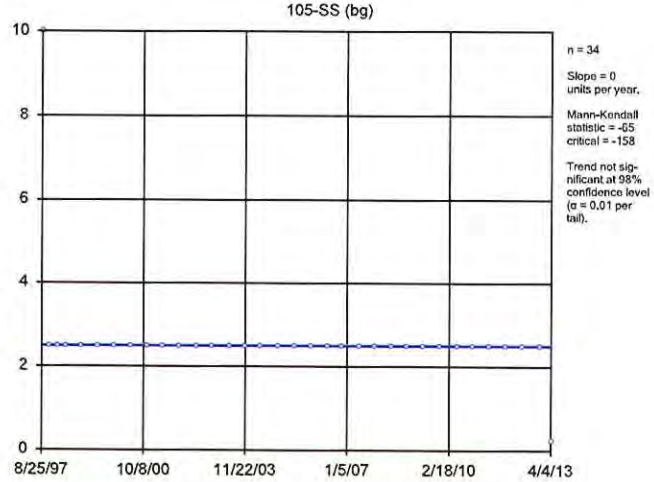


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Sen's Slope Estimator

105-SS (bg)

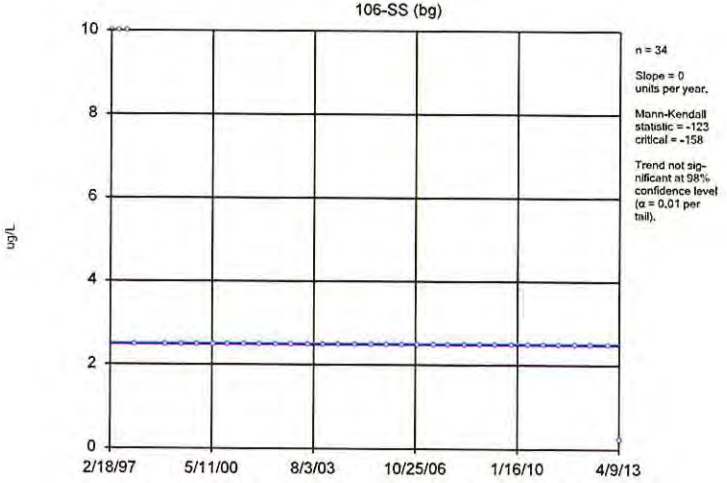


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Sen's Slope Estimator

106-SS (bg)

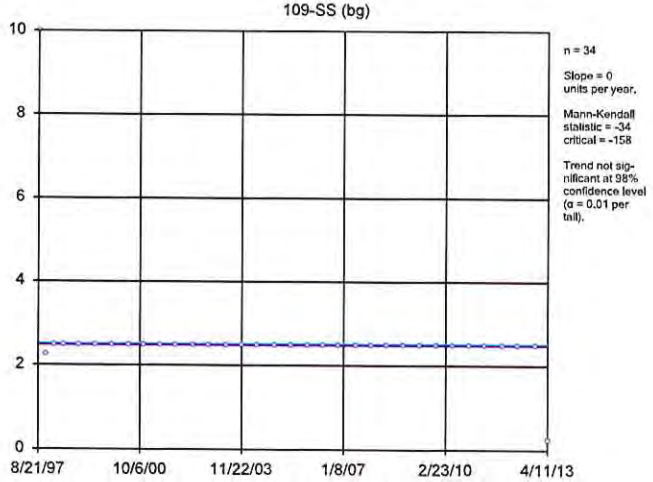


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Sen's Slope Estimator

109-SS (bg)

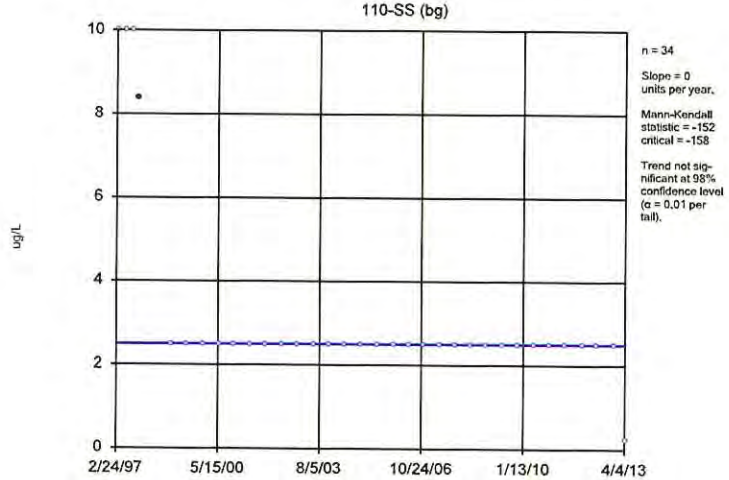


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Sen's Slope Estimator

110-SS (bg)

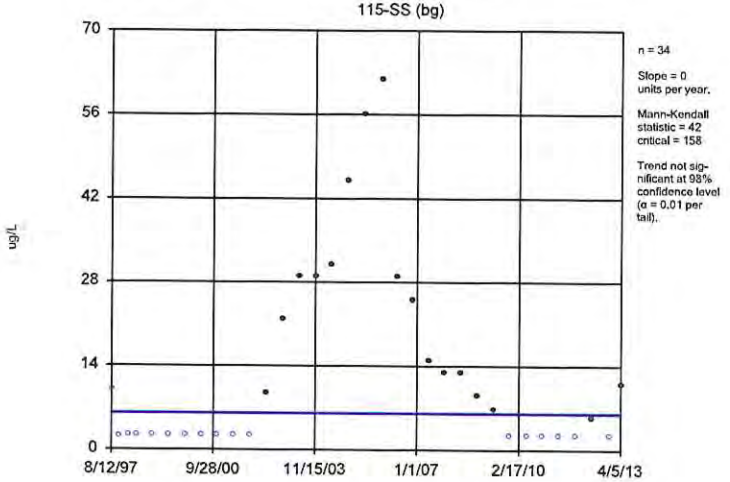


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Sen's Slope Estimator

115-SS (bg)

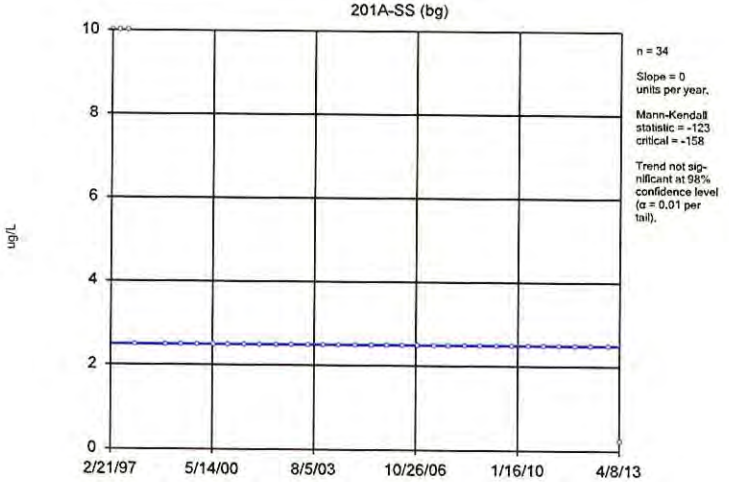


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Sen's Slope Estimator

201A-SS (bg)

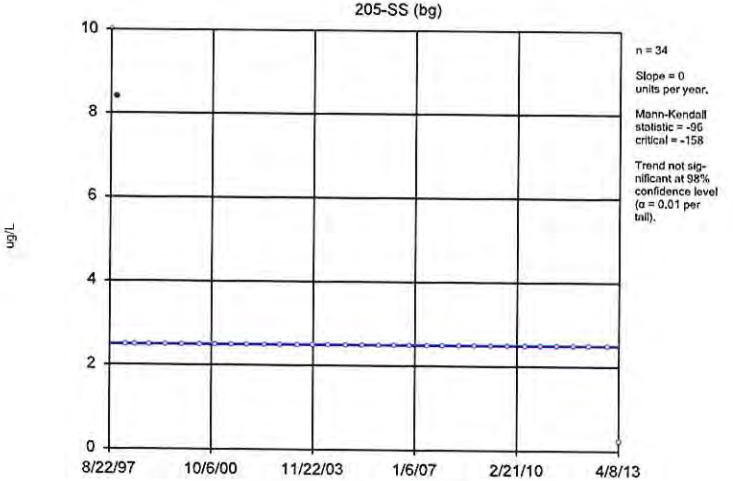


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Sen's Slope Estimator

205-SS (bg)



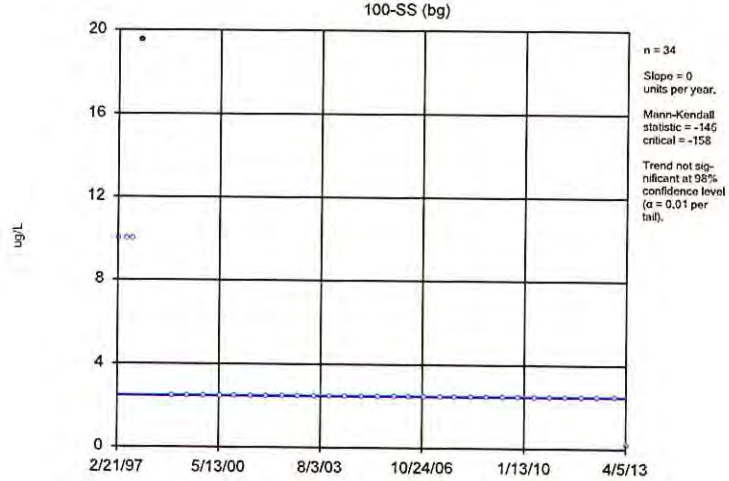
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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

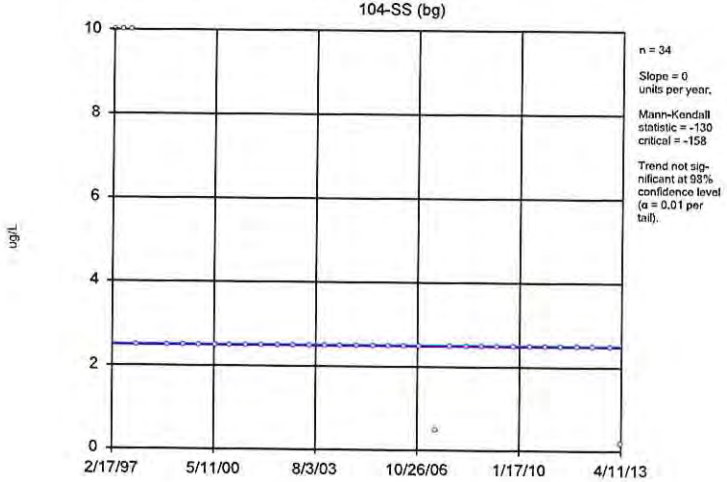


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

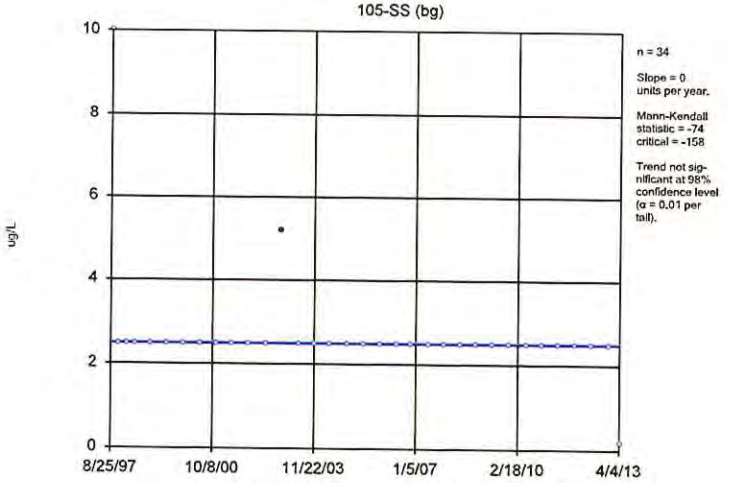


Constituent: Copper Total Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

105-SS (bg)

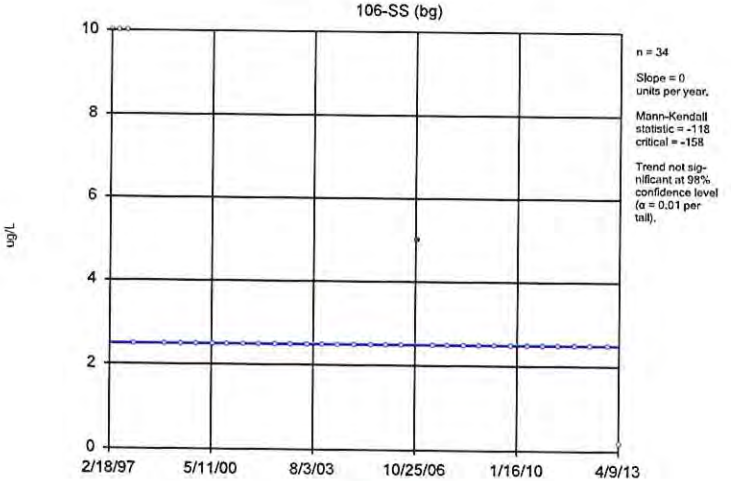


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Sen's Slope Estimator

106-SS (bg)



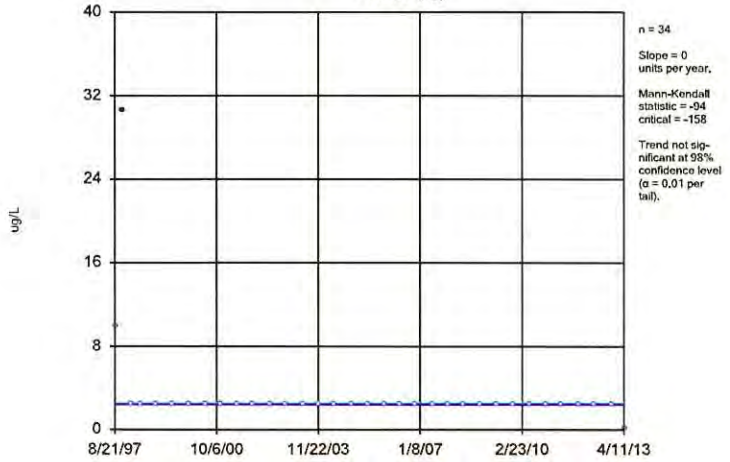
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Sen's Slope Estimator

109-SS (bg)

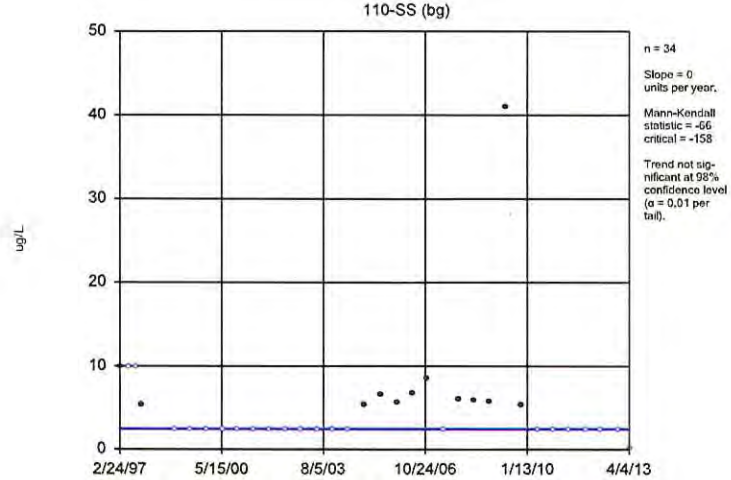


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Sen's Slope Estimator

110-SS (bg)

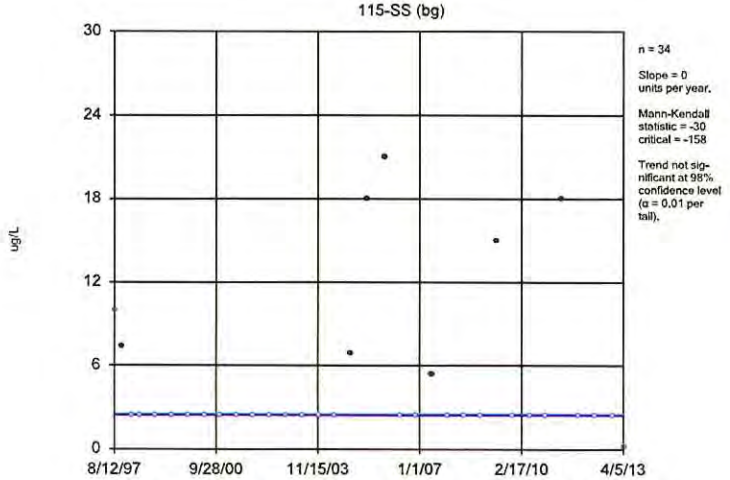


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Sen's Slope Estimator

115-SS (bg)

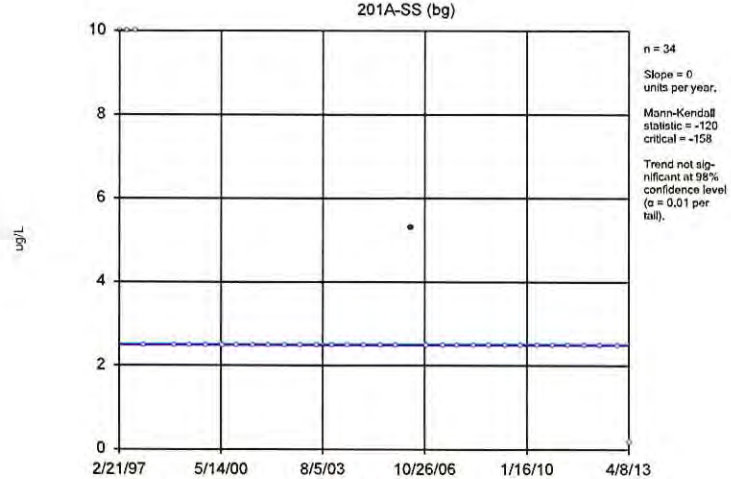


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Sen's Slope Estimator

201A-SS (bg)



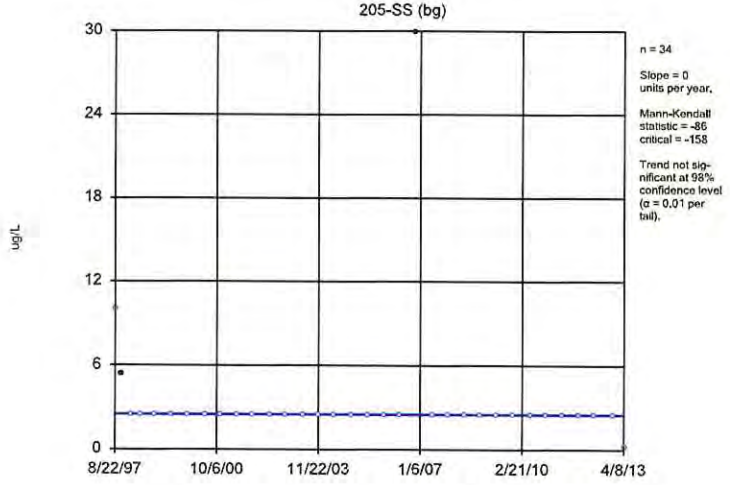
Constituent: Copper Total Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

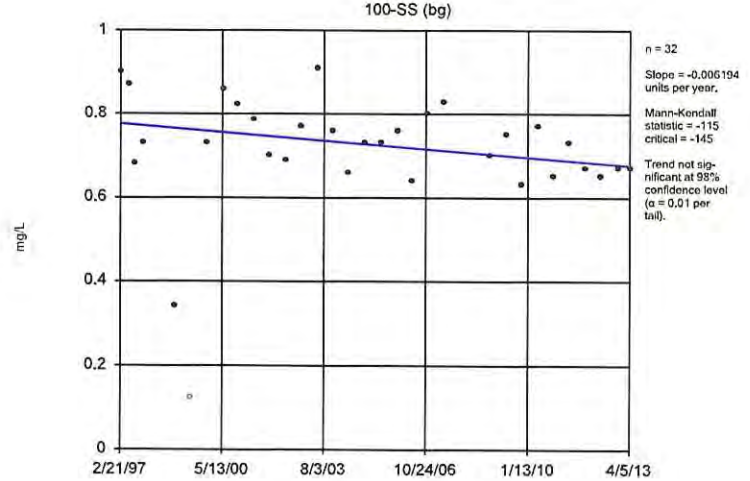


Constituent: Copper Total Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

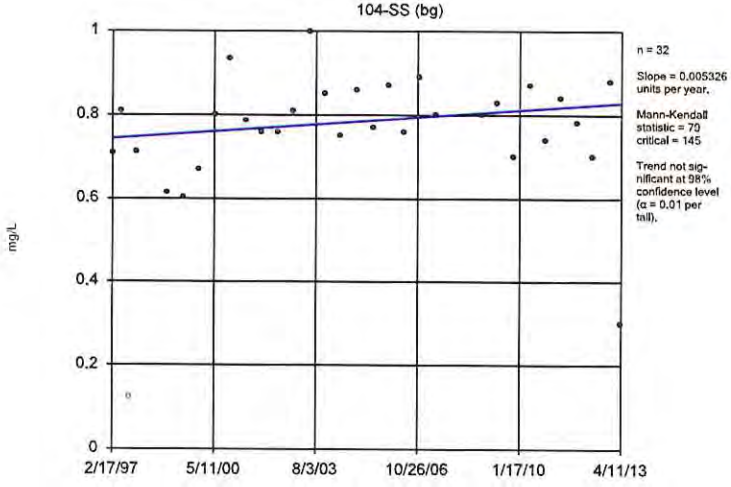


Constituent: Fluoride Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

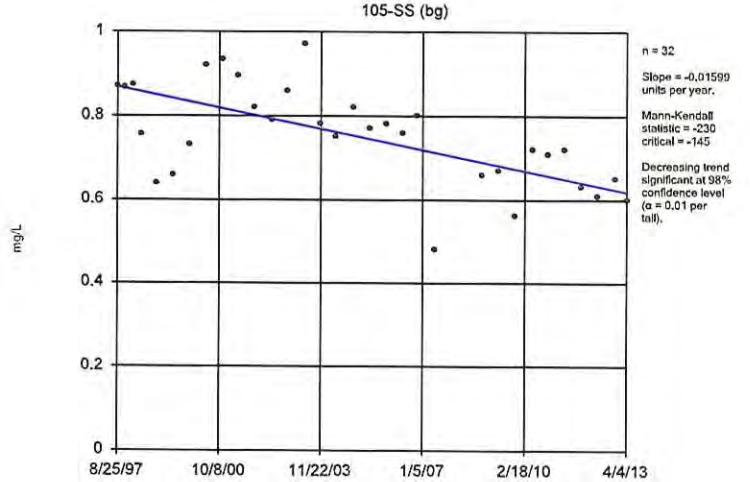


Constituent: Fluoride Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

105-SS (bg)

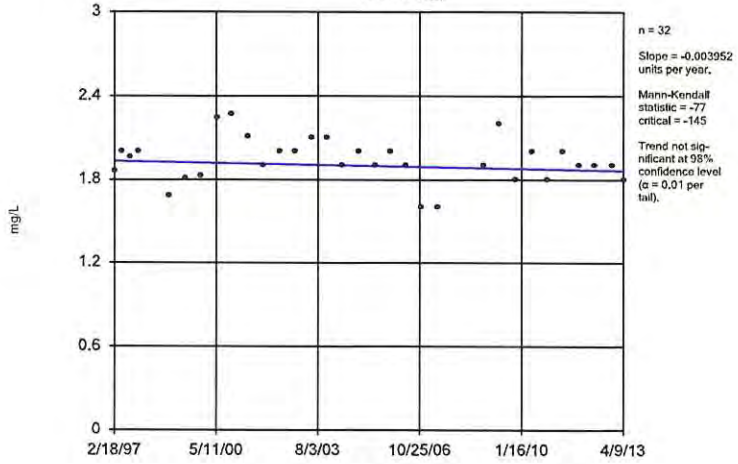


Constituent: Fluoride Analysis Run 12/17/2013 10:14 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SS (bg)



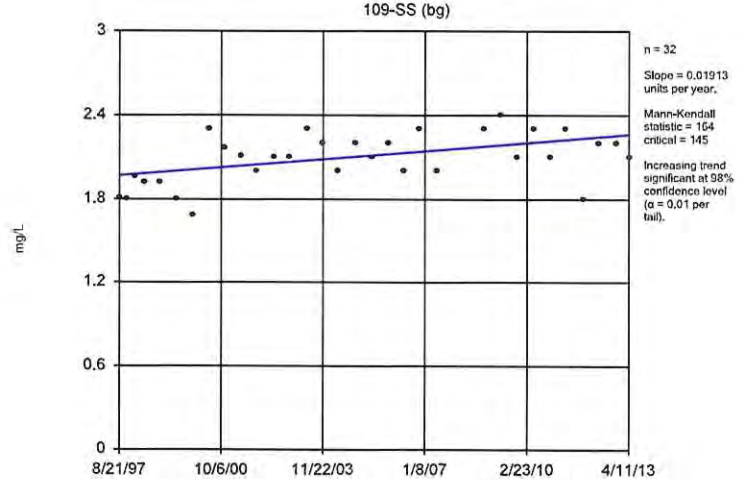
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

109-SS (bg)



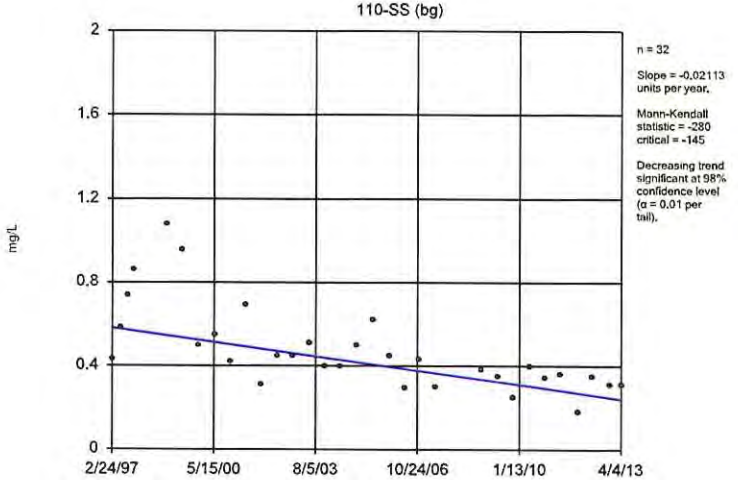
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

110-SS (bg)



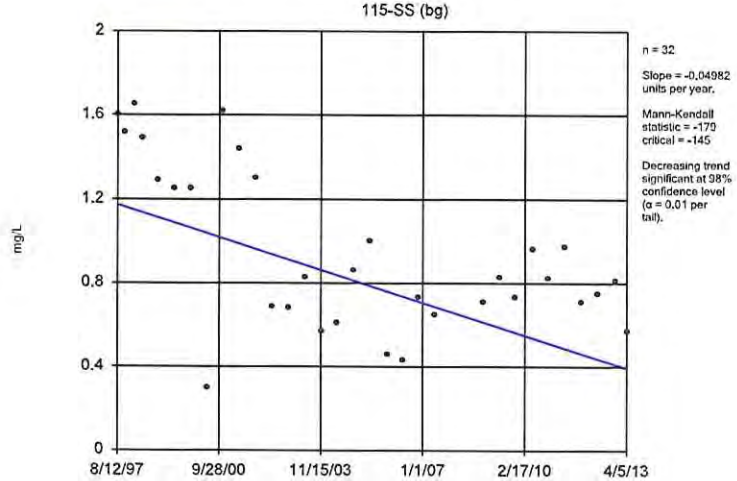
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

115-SS (bg)



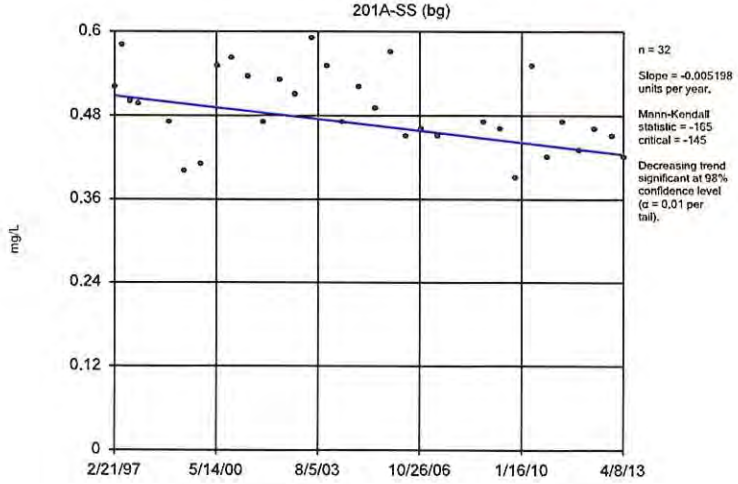
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

201A-SS (bg)



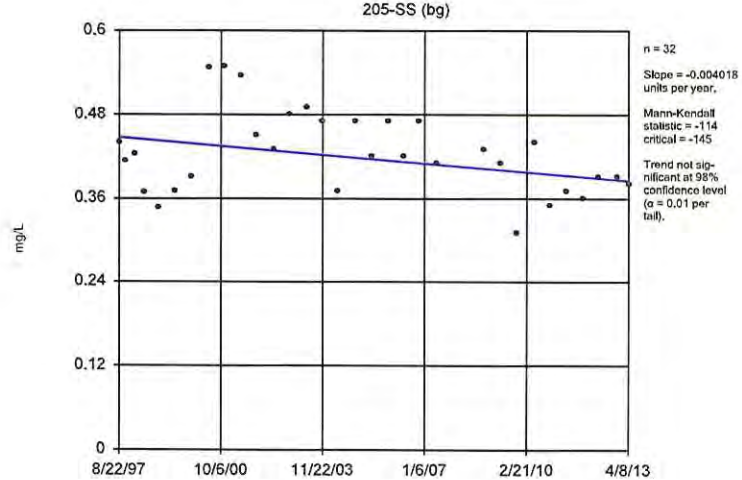
Constituent: Fluoride Analysis Run 12/17/2013 10:14 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

205-SS (bg)



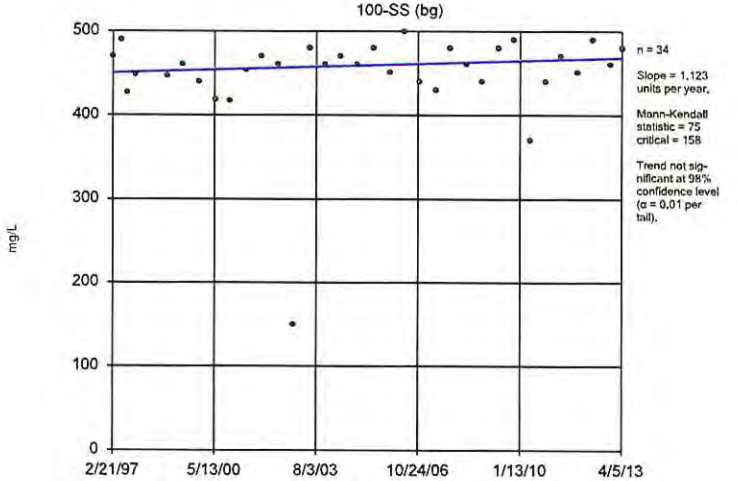
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

100-SS (bg)



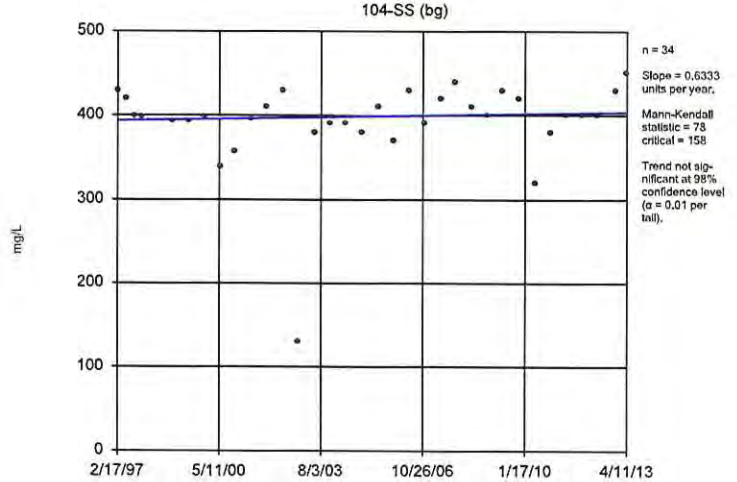
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

104-SS (bg)



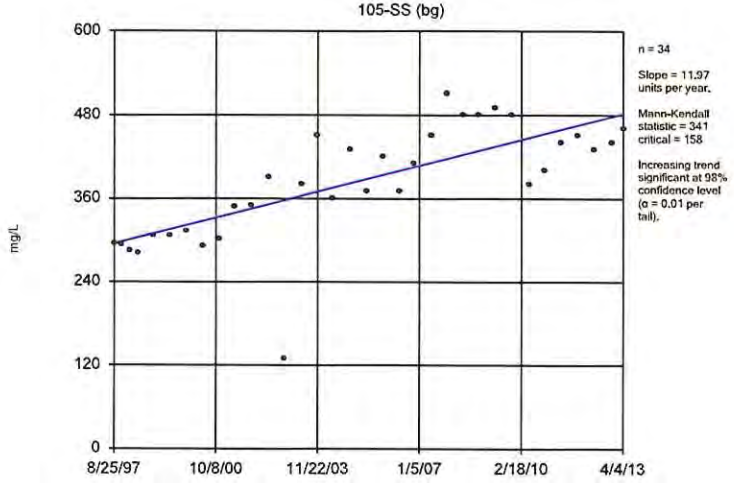
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

105-SS (bg)



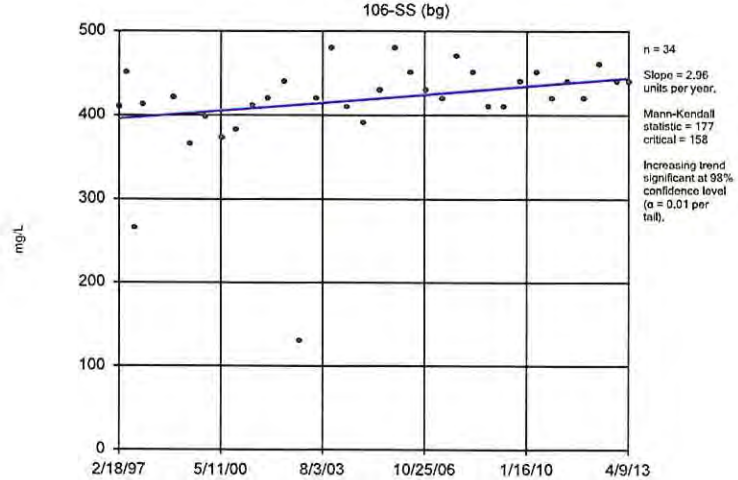
Constituent: Hardness Total Analysis Run 12/17/2013 10:14 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SS (bg)



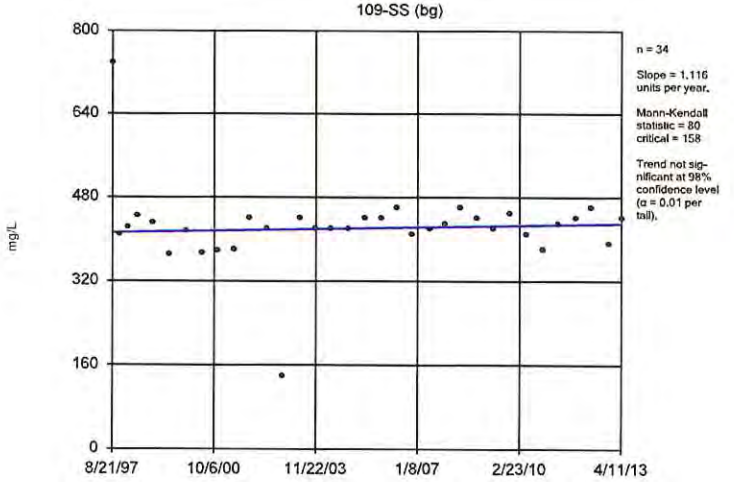
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

109-SS (bg)



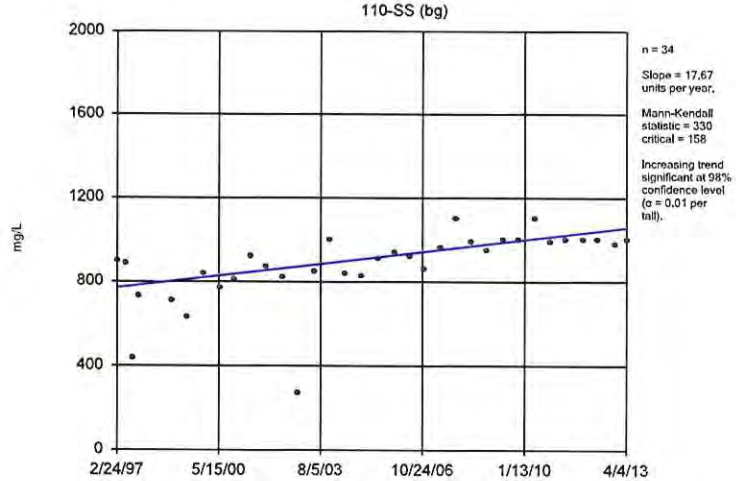
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

110-SS (bg)



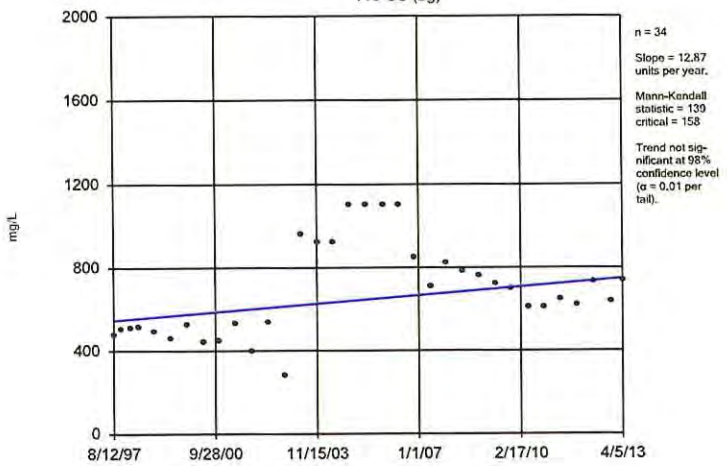
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Sen's Slope Estimator

115-SS (bg)



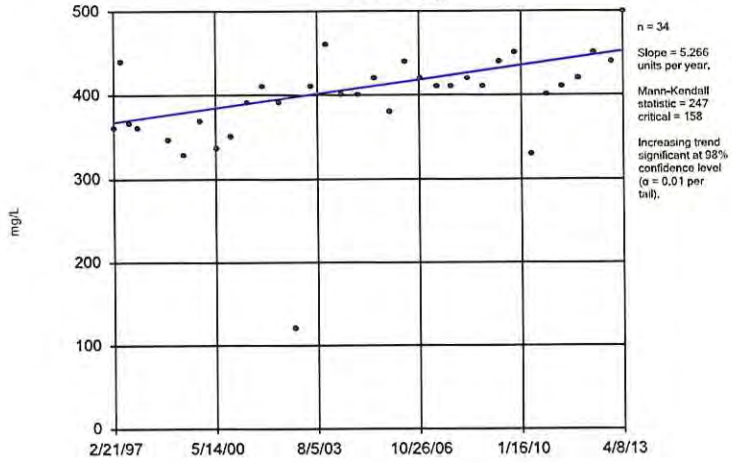
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Sen's Slope Estimator

201A-SS (bg)



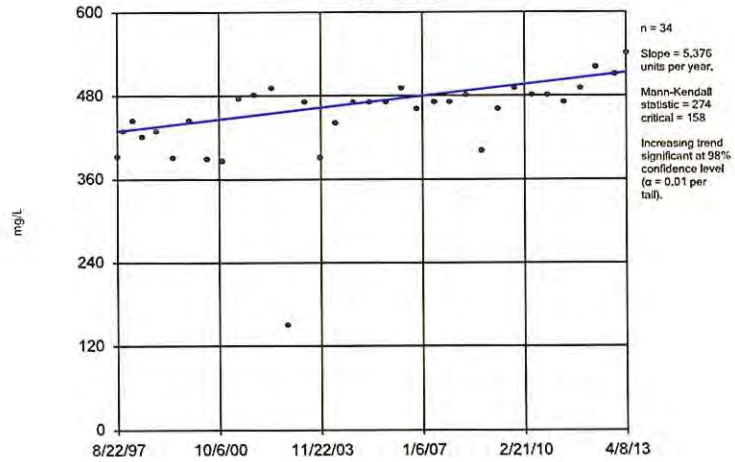
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Sen's Slope Estimator

205-SS (bg)



Constituent: Hardness Total Analysis Run 12/17/2013 10:14 AM

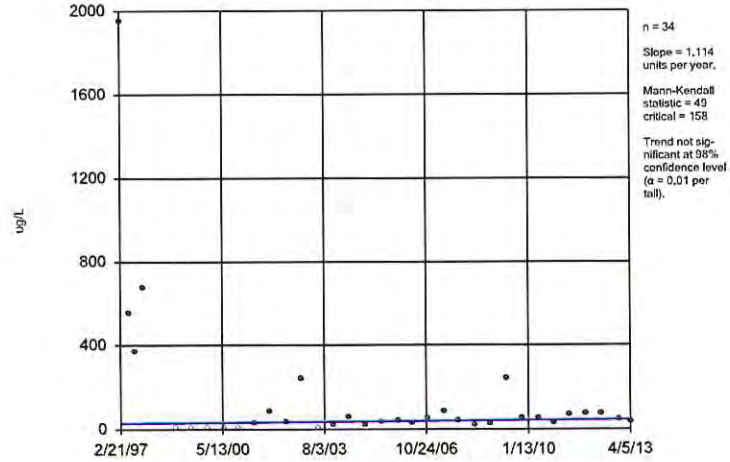
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)



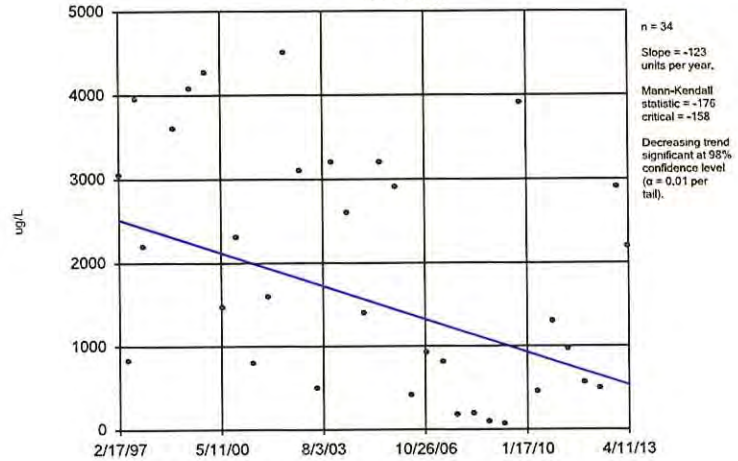
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

104-SS (bg)



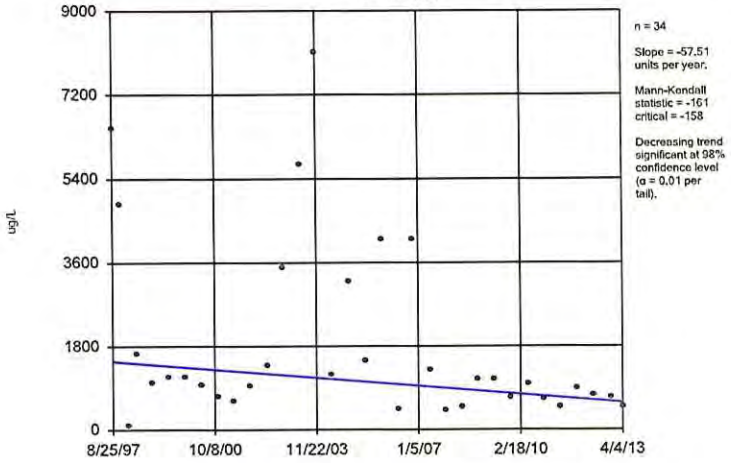
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

105-SS (bg)



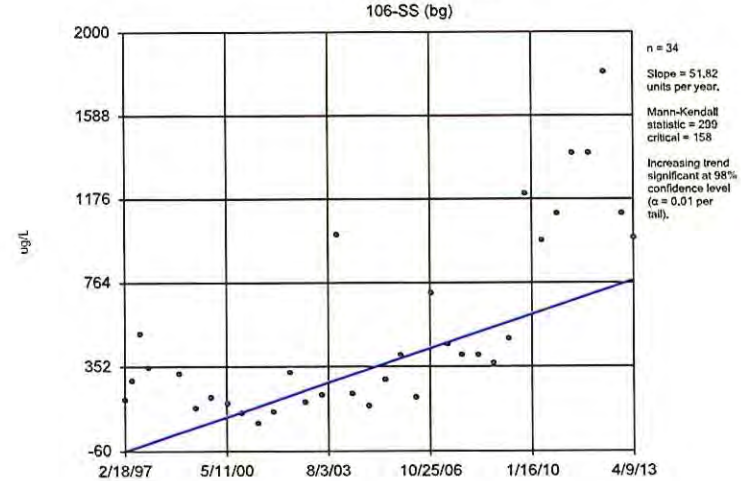
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SS (bg)



Constituent: Iron Total Analysis Run 12/17/2013 10:14 AM

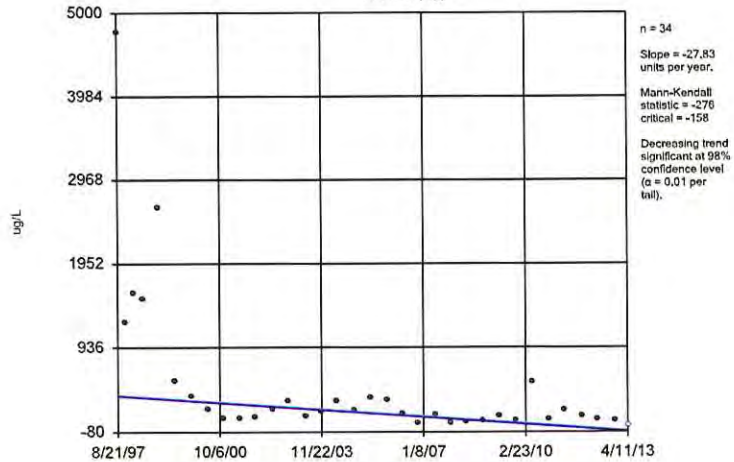
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Hollow symbols indicate censored values.

Sen's Slope Estimator

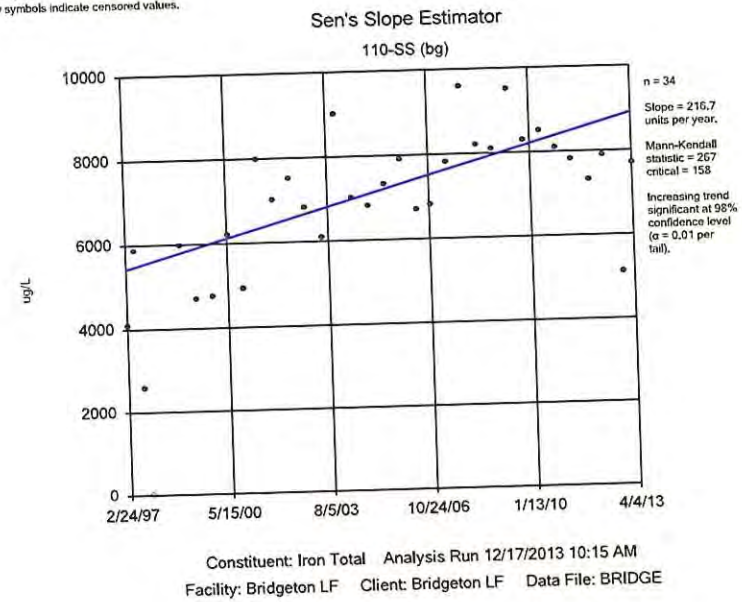
109-SS (bg)



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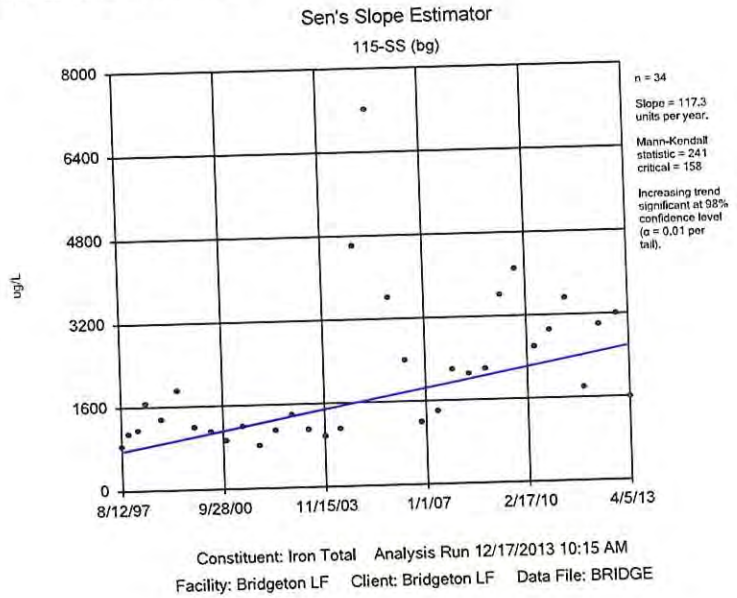
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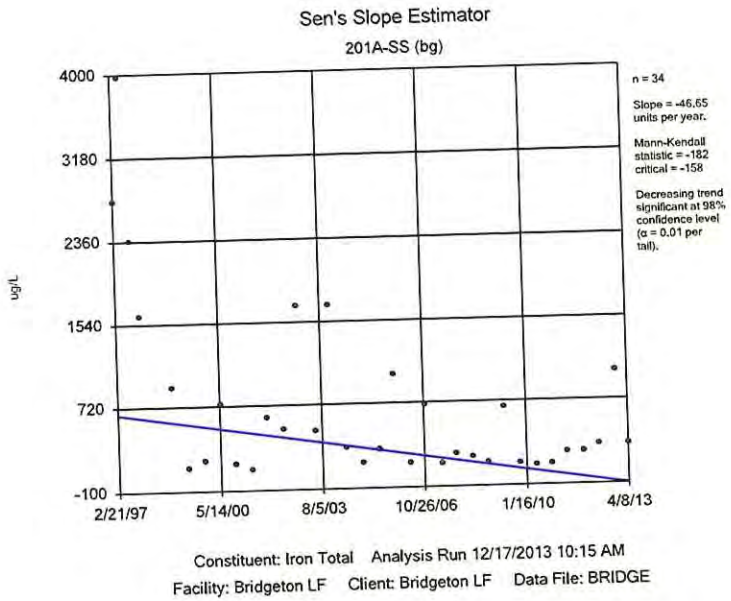
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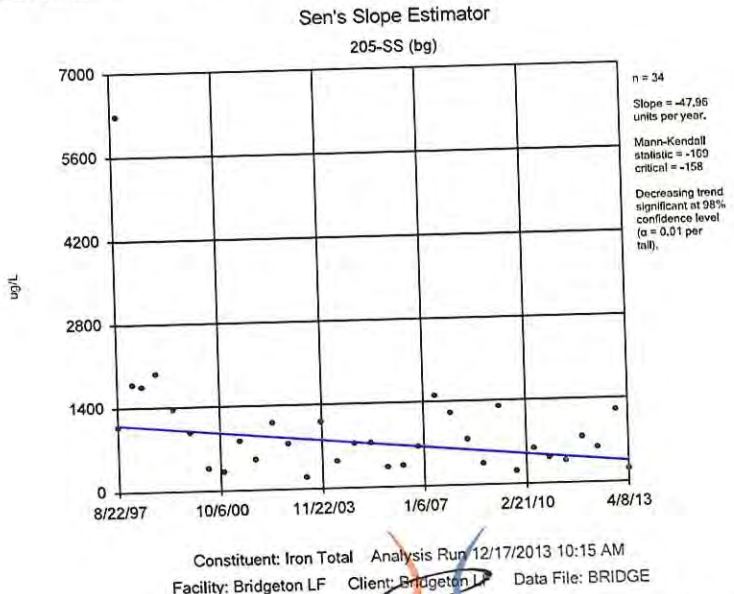
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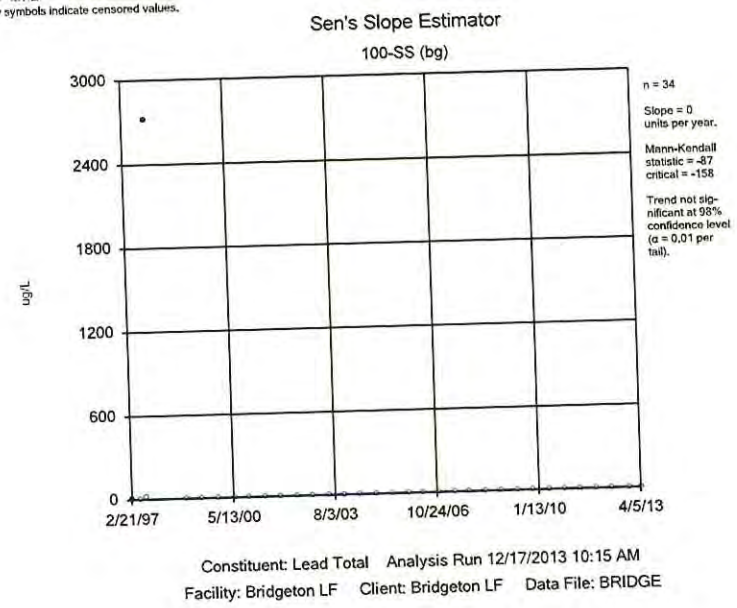
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Constituent: Iron Total Analysis Run 12/17/2013 10:15 AM
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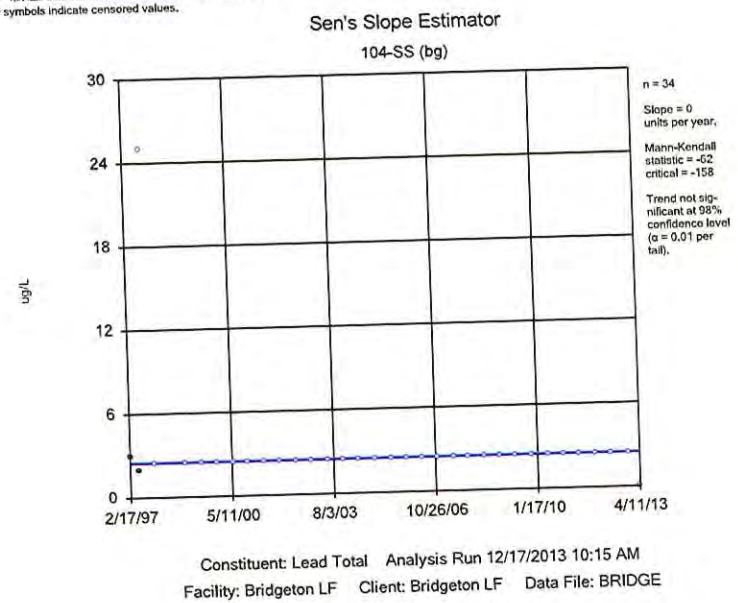
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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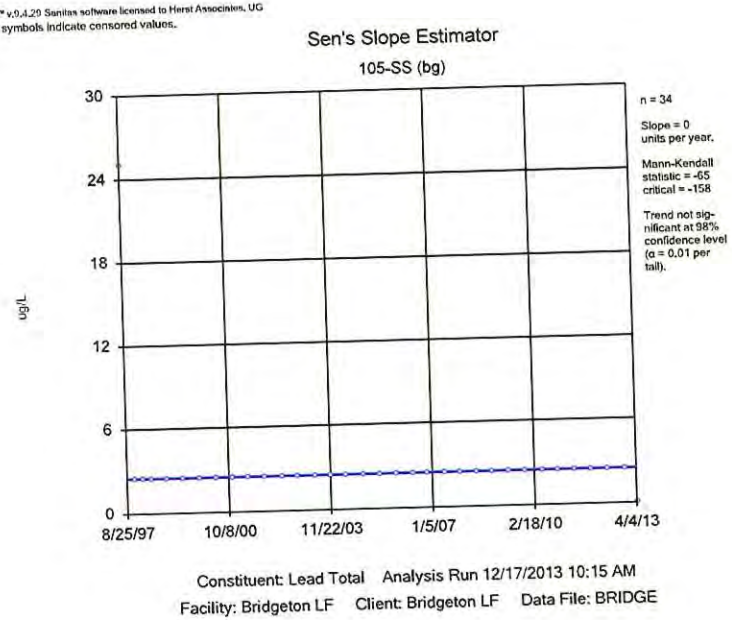
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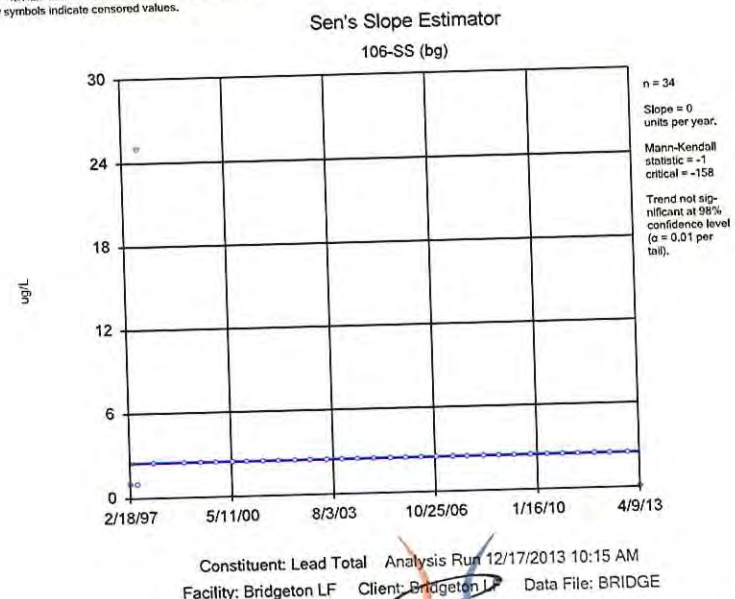
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Hollow symbols indicate censored values.



Constituent: Lead Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

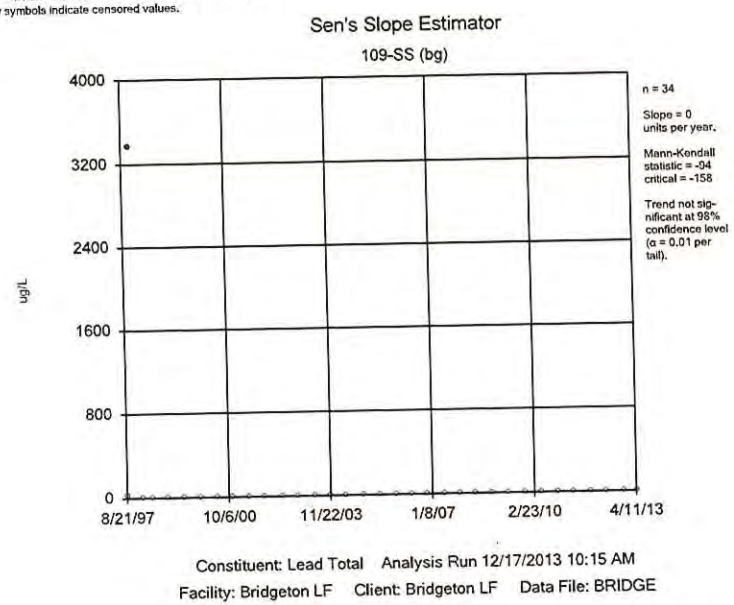
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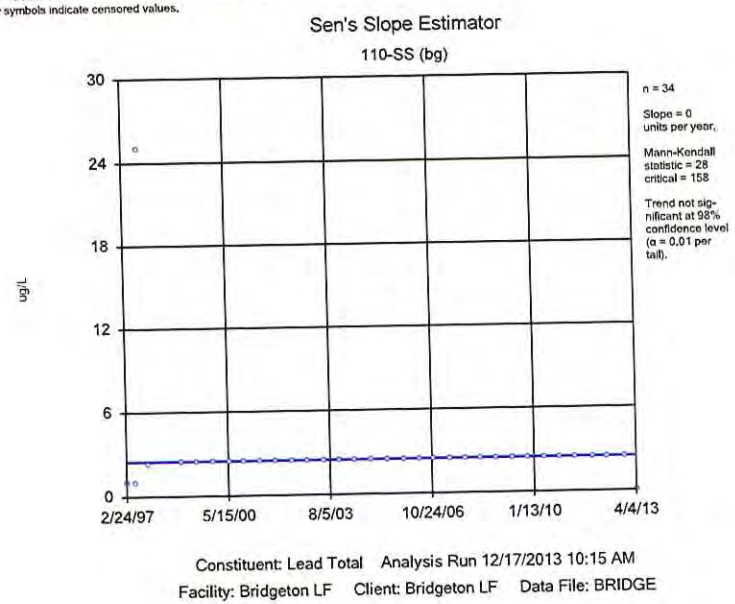
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Constituent: Lead Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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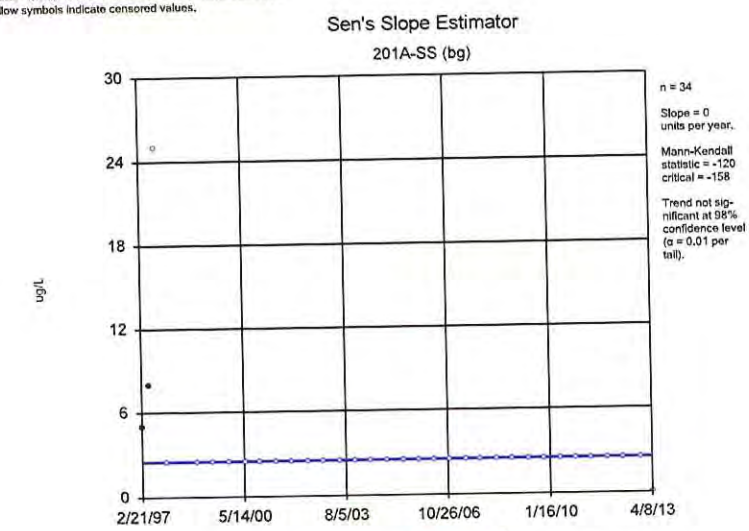
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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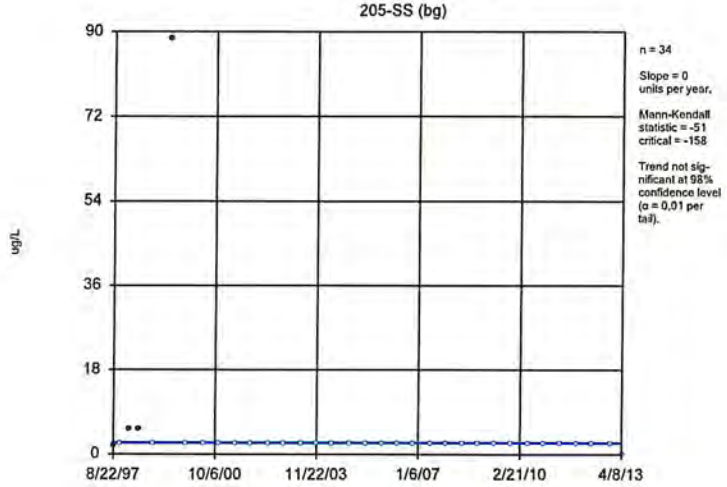


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

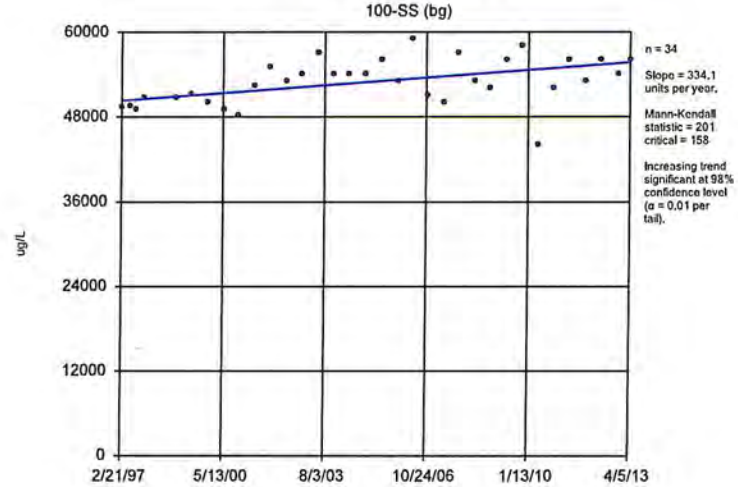


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

100-SS (bg)

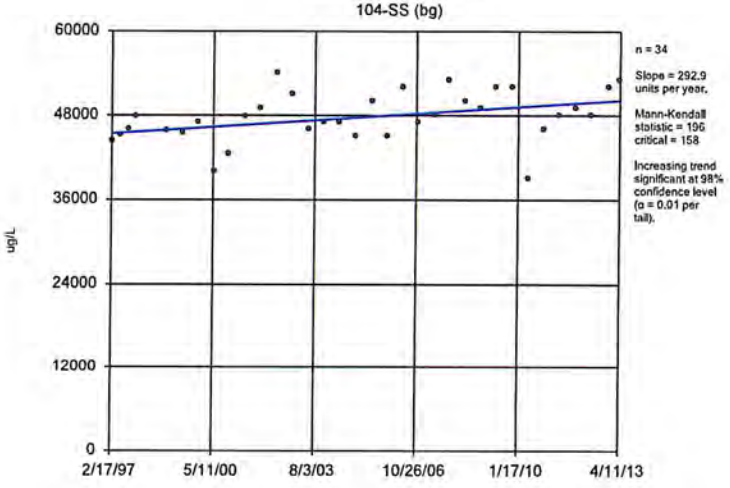


Constituent: Magnesium Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

104-SS (bg)

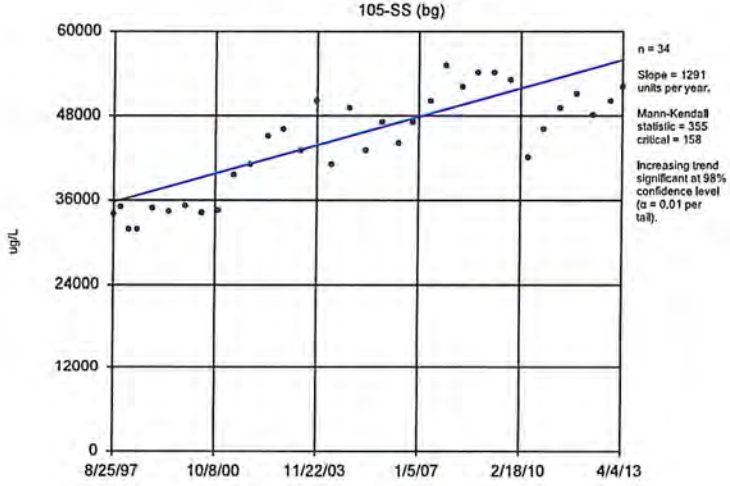


Constituent: Magnesium Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

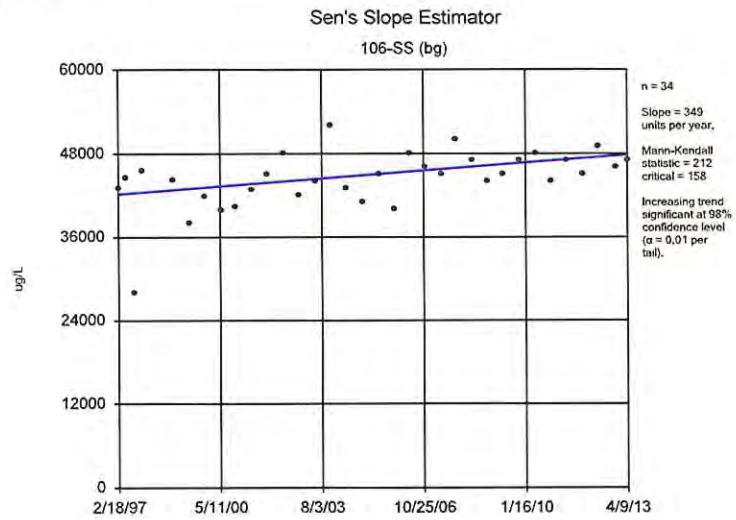
105-SS (bg)



Constituent: Magnesium Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

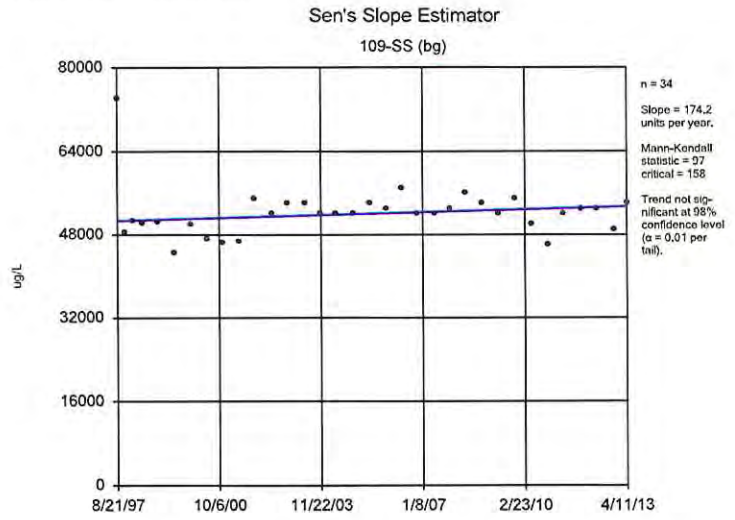
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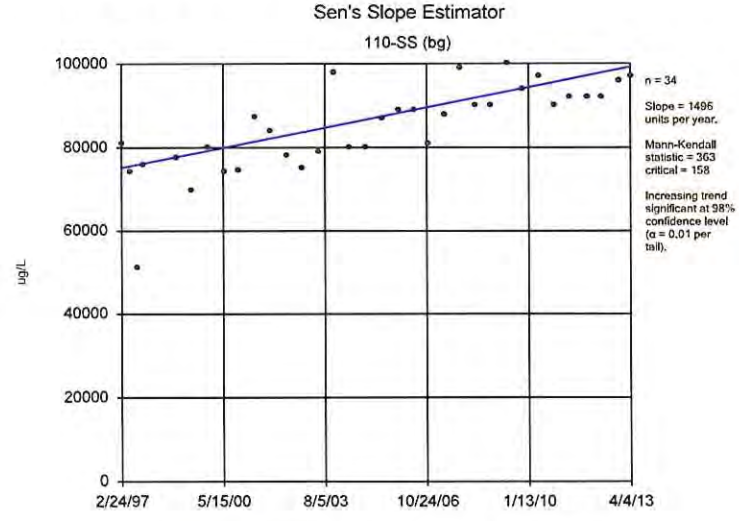
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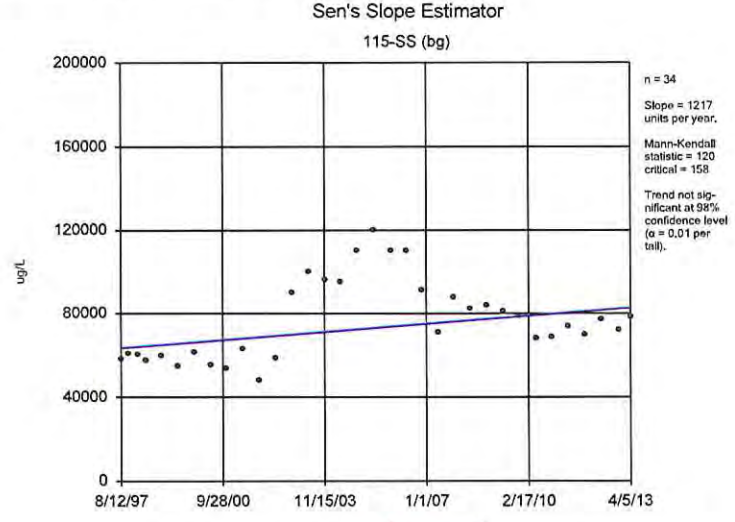
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Constituent: Magnesium Total Analysis Run 12/17/2013 10:15 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



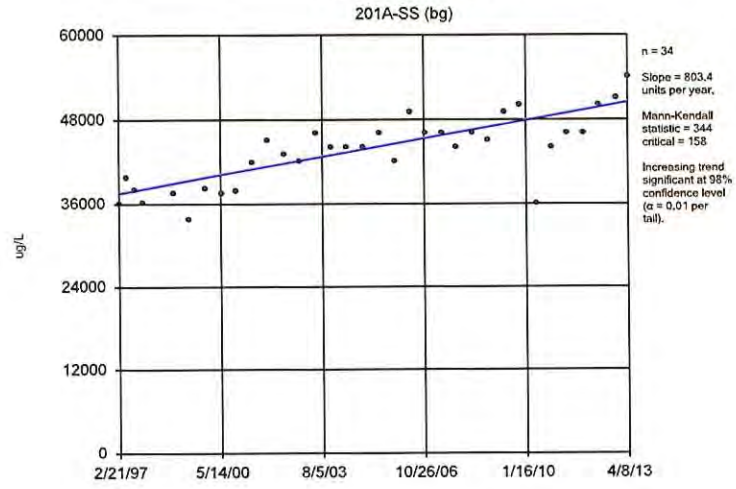
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Sen's Slope Estimator

201A-SS (bg)

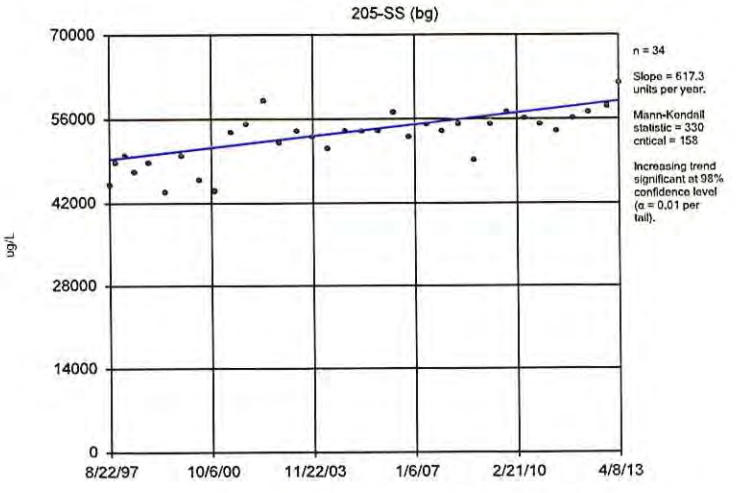


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

205-SS (bg)

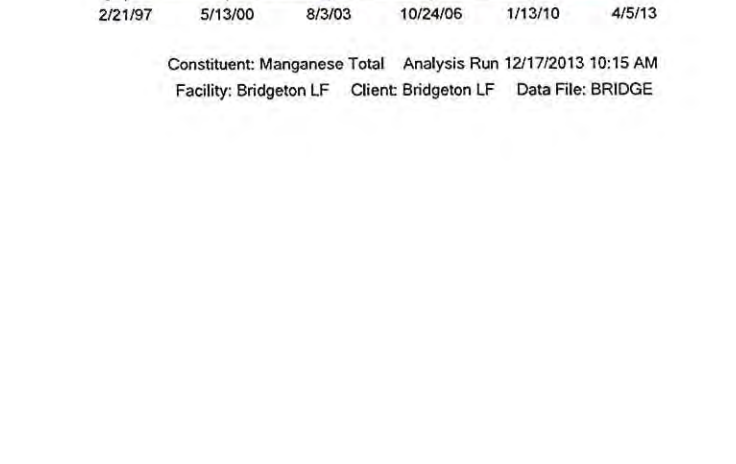


Constituent: Magnesium Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)



Constituent: Manganese Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)



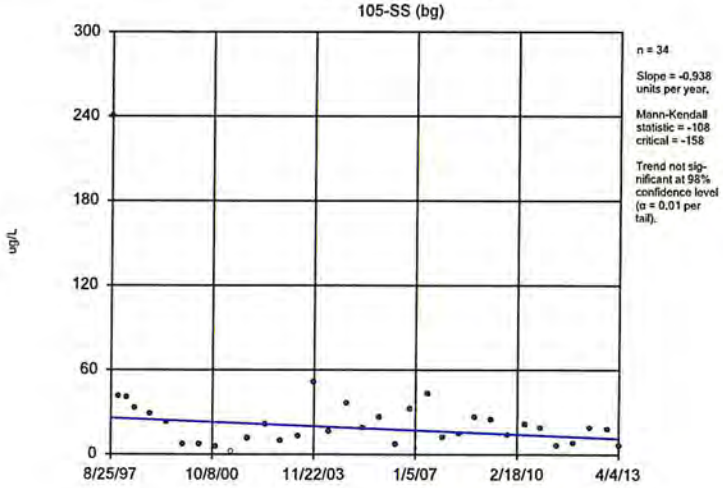
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS (bg)

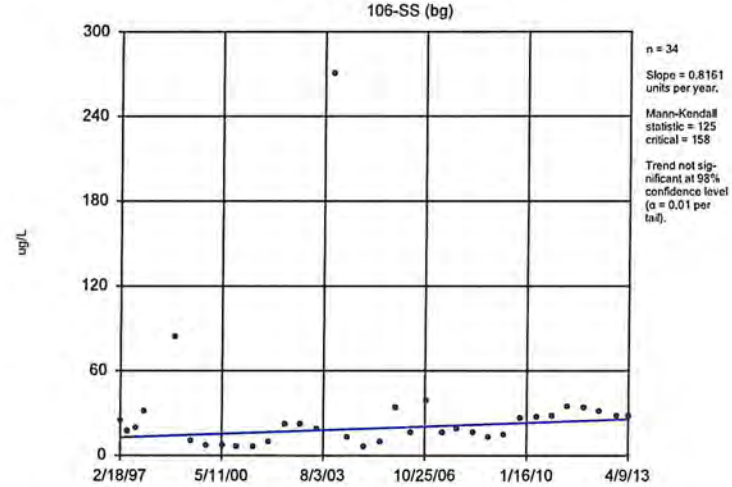


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SS (bg)

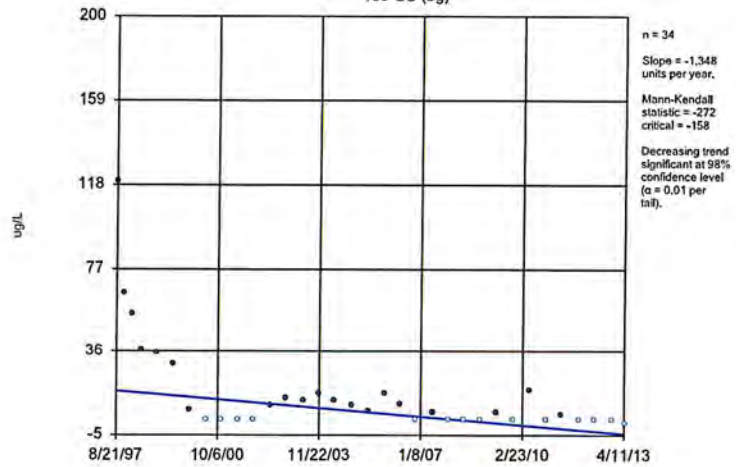


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)

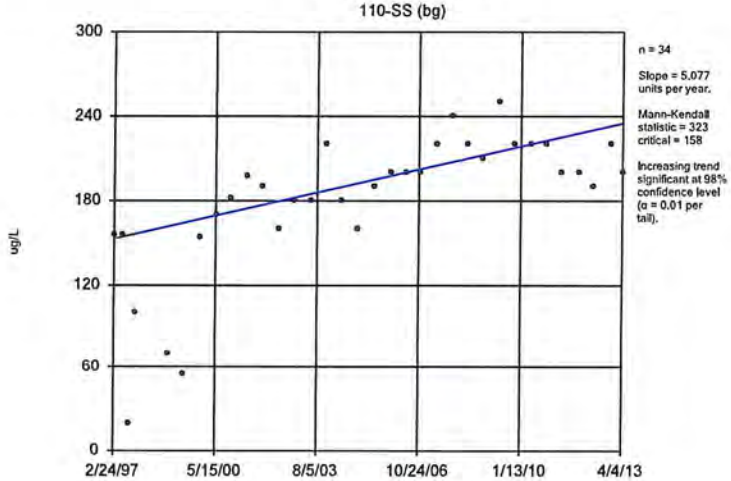


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

110-SS (bg)

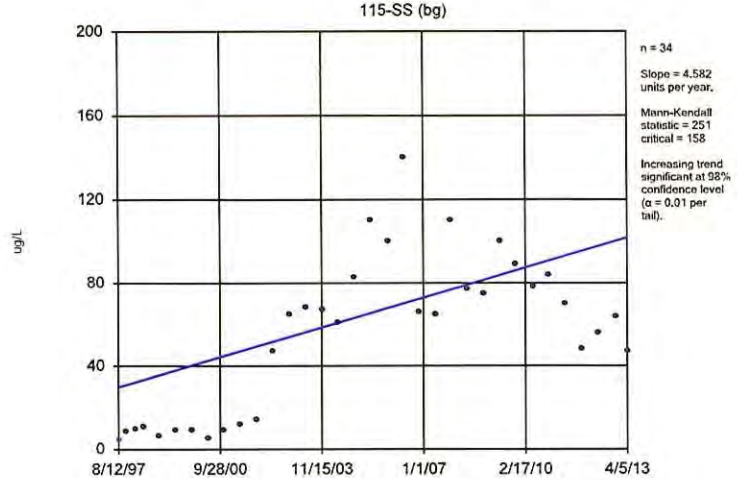


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)

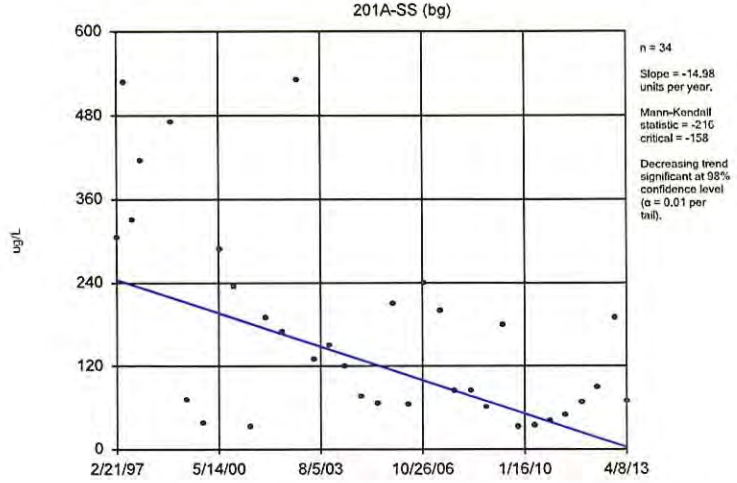


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

201A-SS (bg)

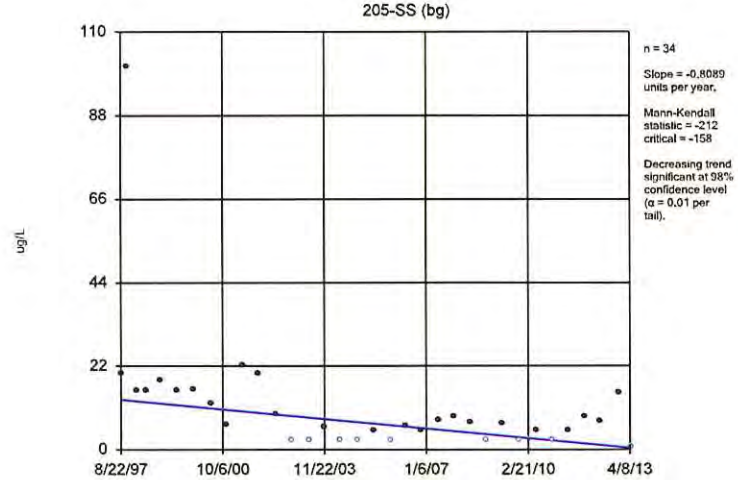


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Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

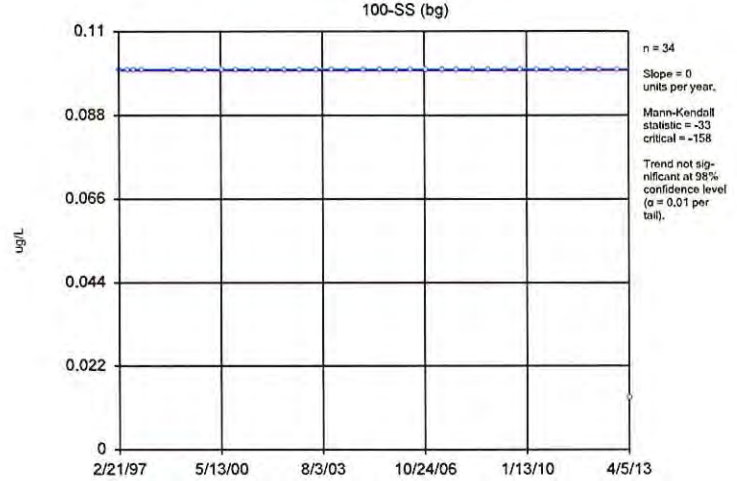


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)



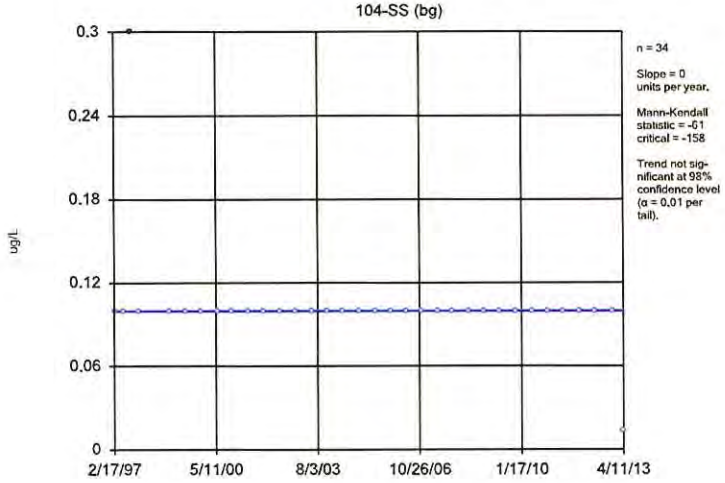
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Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

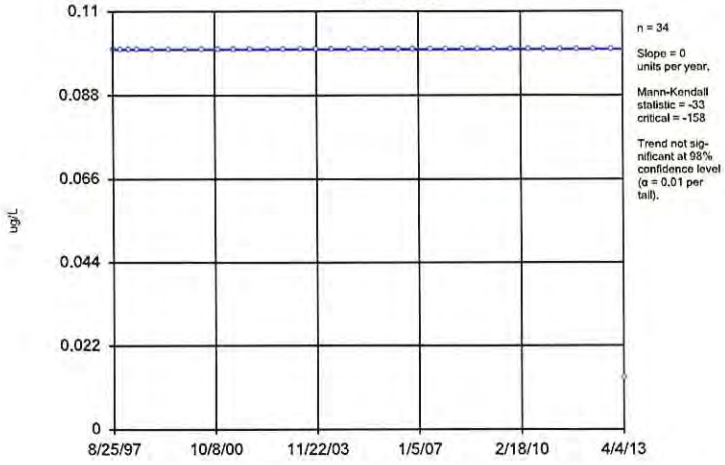


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

105-SS (bg)

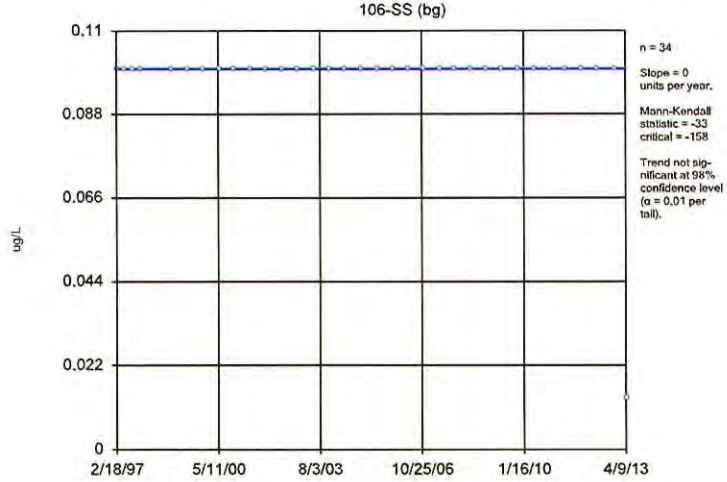


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Sen's Slope Estimator

106-SS (bg)

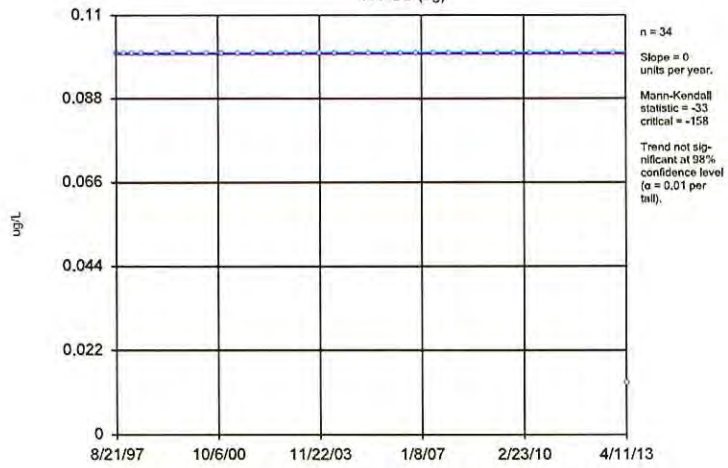


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Sen's Slope Estimator

109-SS (bg)



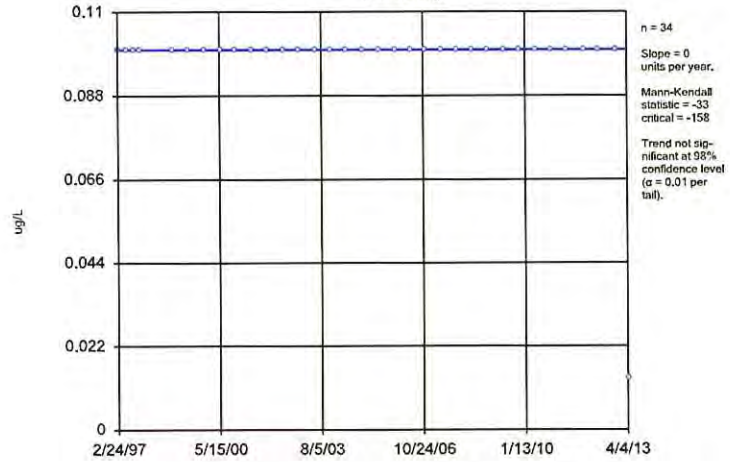
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Sen's Slope Estimator

110-SS (bg)

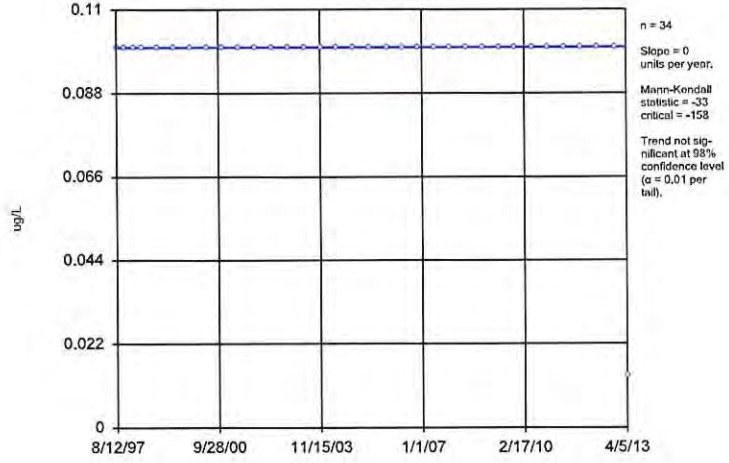


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Sen's Slope Estimator

115-SS (bg)

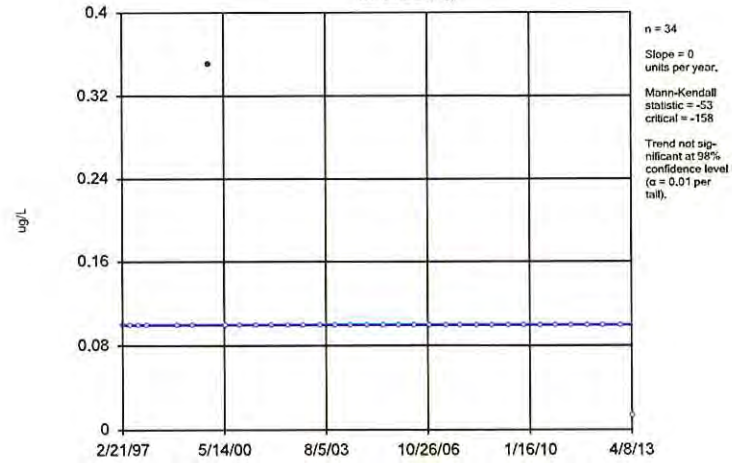


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

201A-SS (bg)

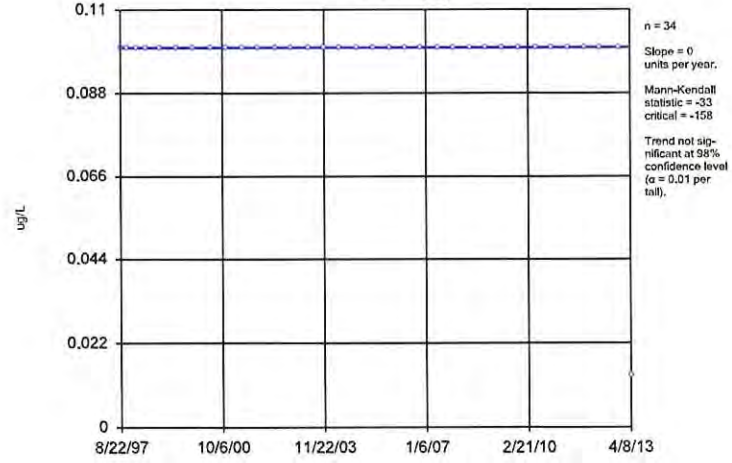


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Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

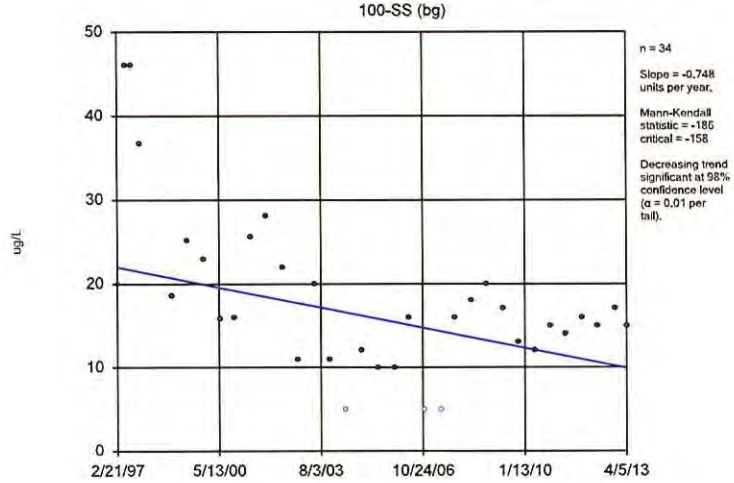


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

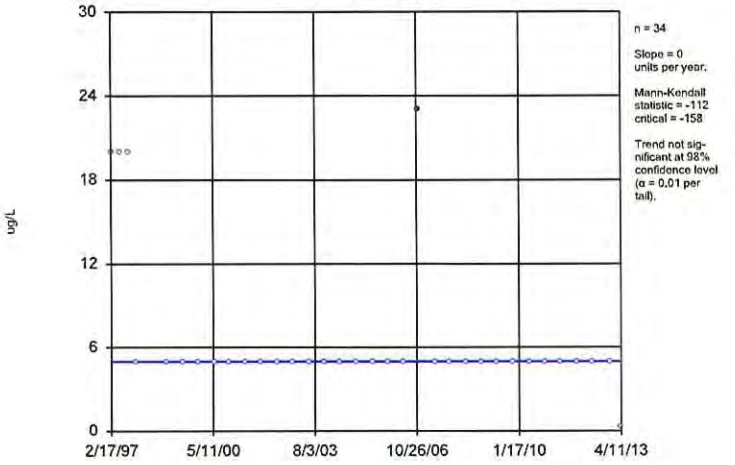


Constituent: Nickel Total Analysis Run 12/17/2013 10:15 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

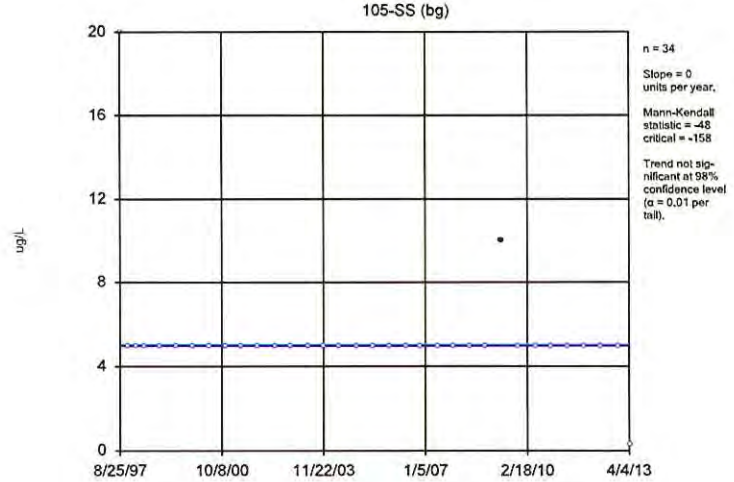


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Sen's Slope Estimator

105-SS (bg)

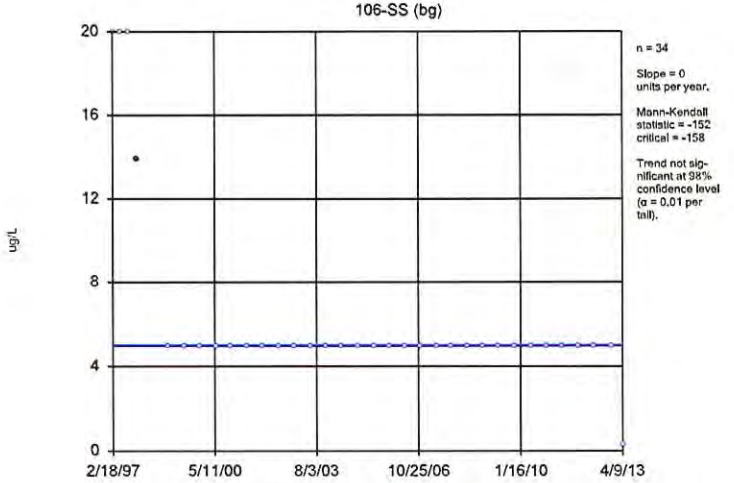


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Sen's Slope Estimator

106-SS (bg)



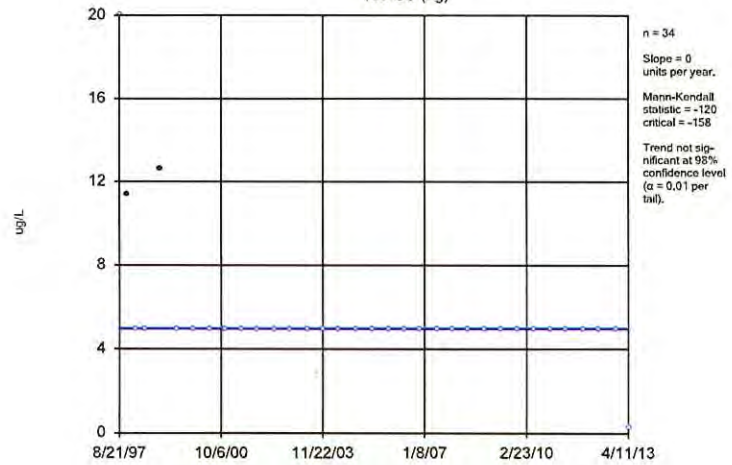
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Sen's Slope Estimator

109-SS (bg)

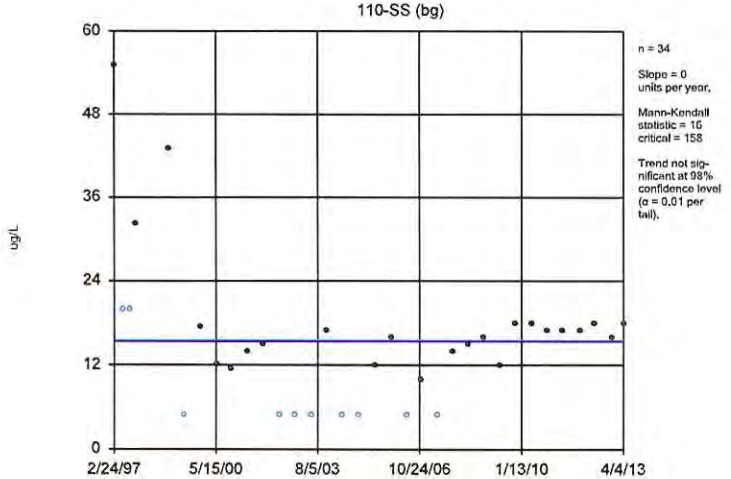


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Sen's Slope Estimator

110-SS (bg)

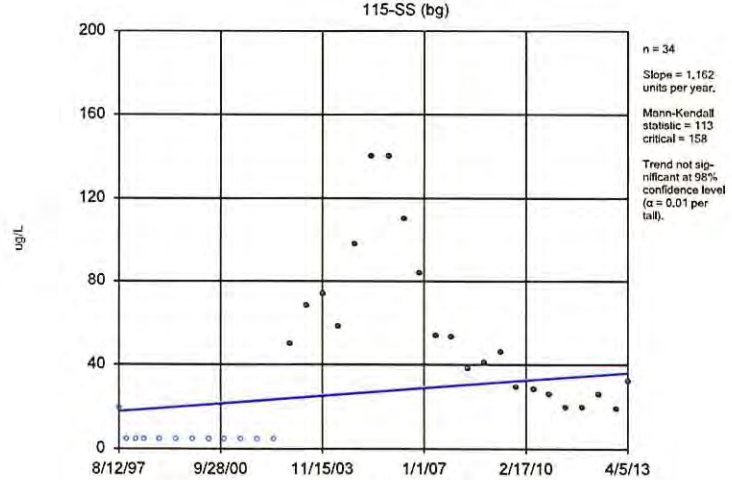


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Sen's Slope Estimator

115-SS (bg)

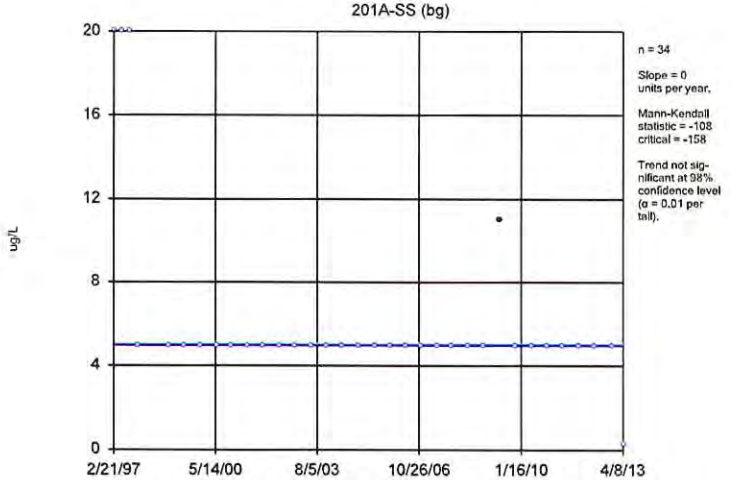


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Sen's Slope Estimator

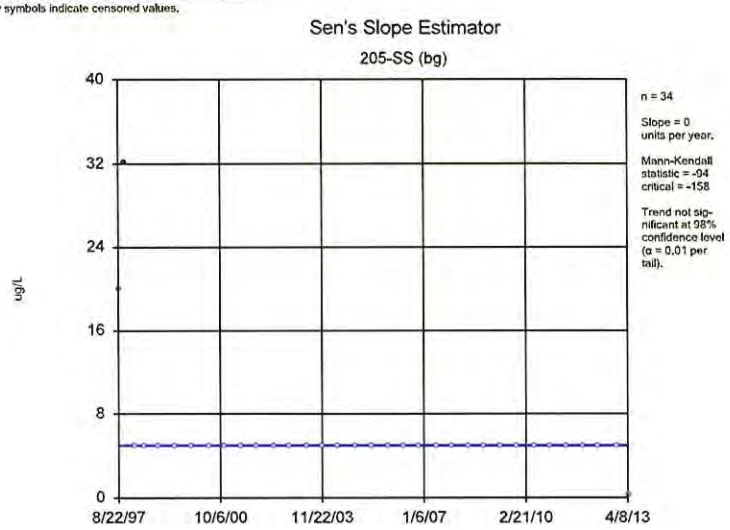
201A-SS (bg)



Constituent: Nickel Total Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

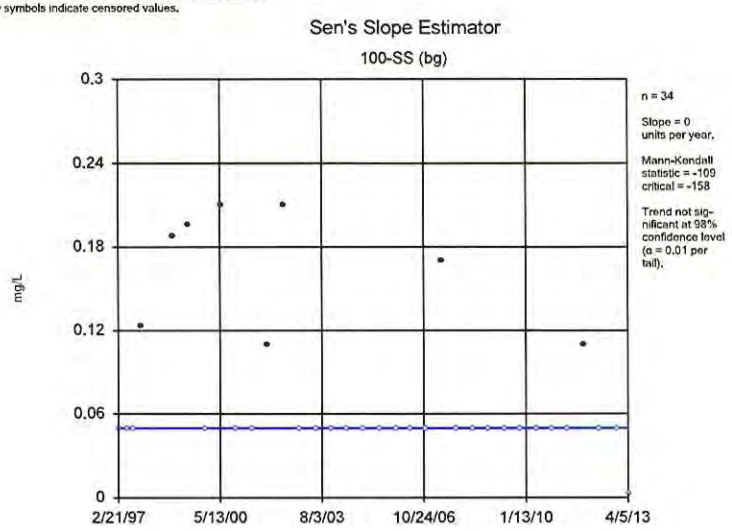
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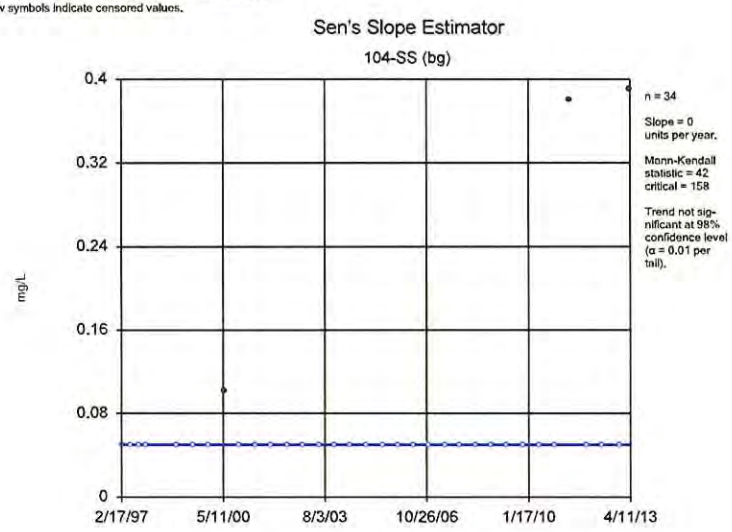
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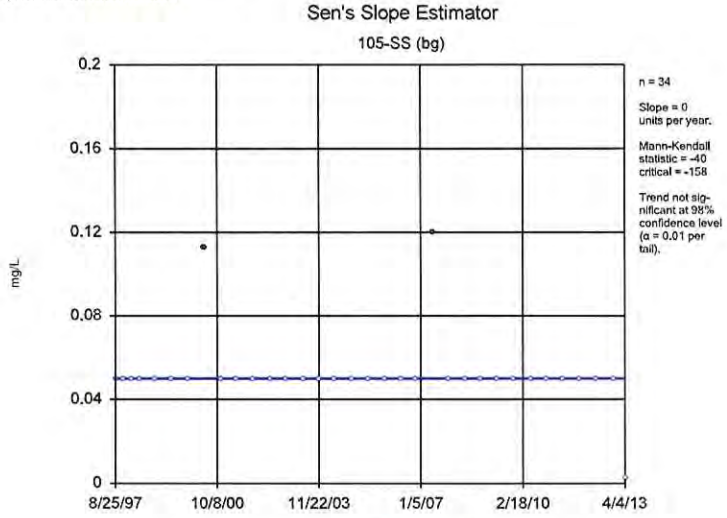
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:15 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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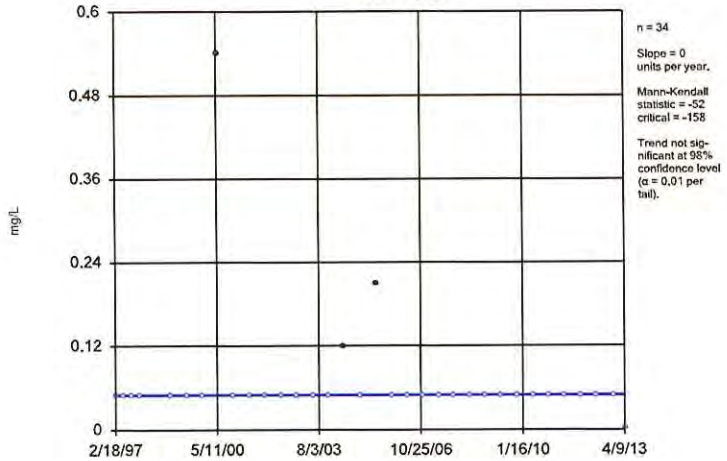
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)

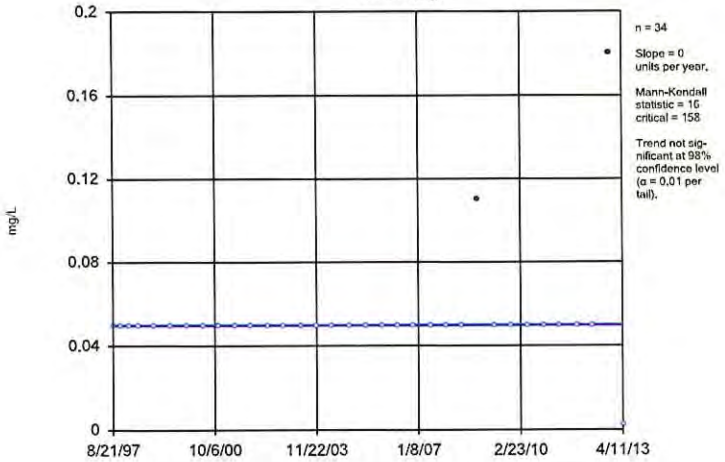


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)

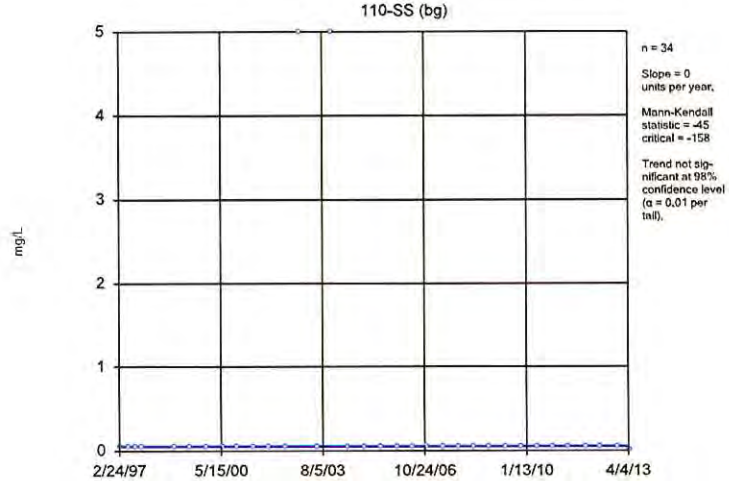


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

110-SS (bg)

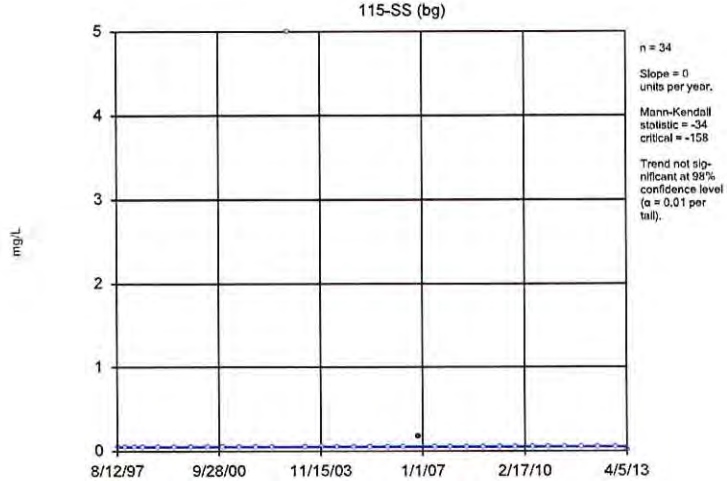


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Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)

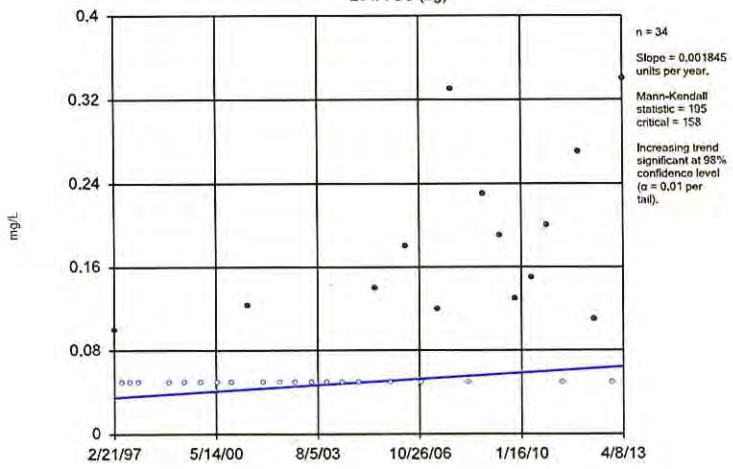


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Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)

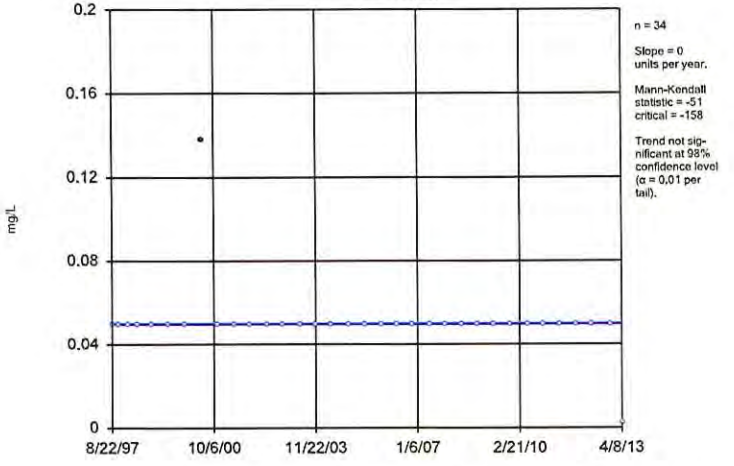


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Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

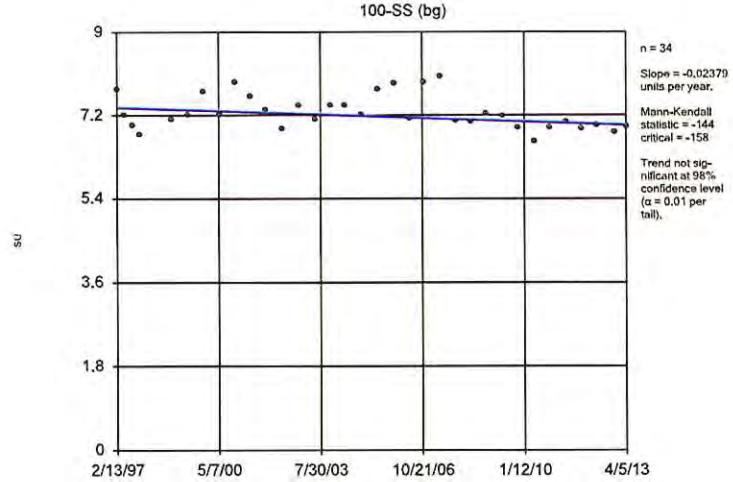


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Sen's Slope Estimator

100-SS (bg)

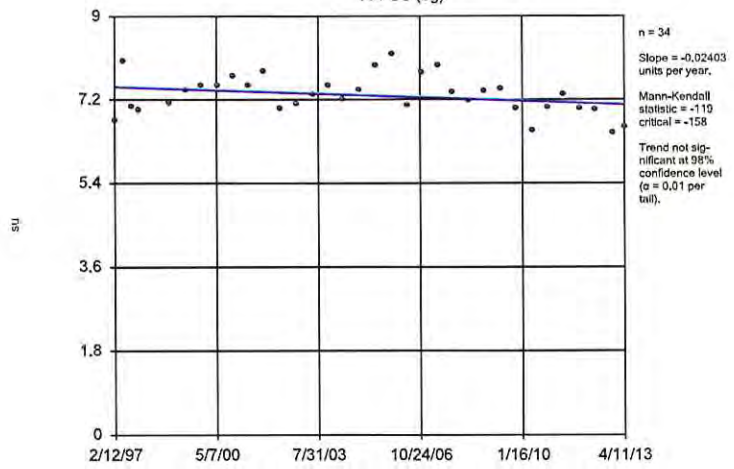


Constituent: pH [Field] Analysis Run 12/17/2013 10:15 AM
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Sen's Slope Estimator

104-SS (bg)

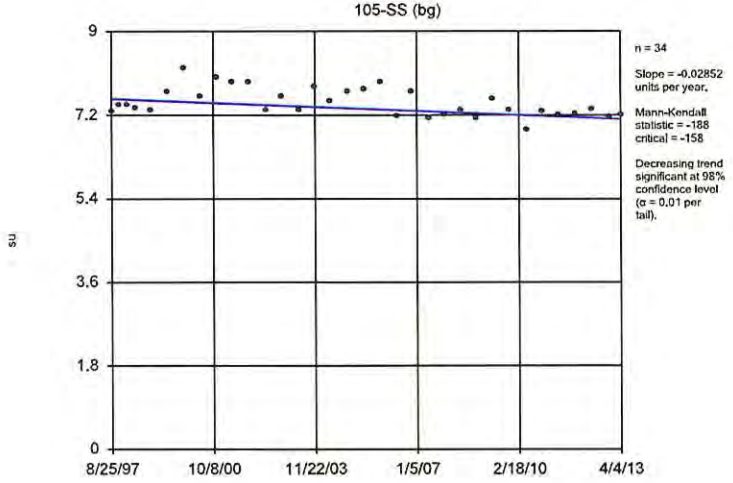


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

105-SS (bg)



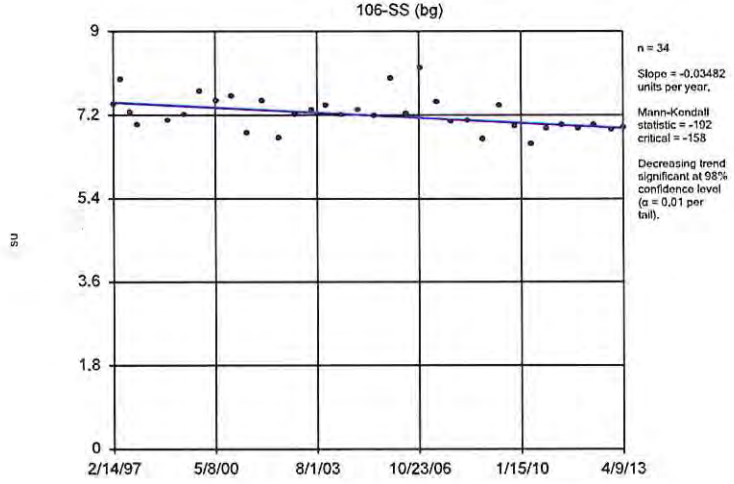
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SS (bg)



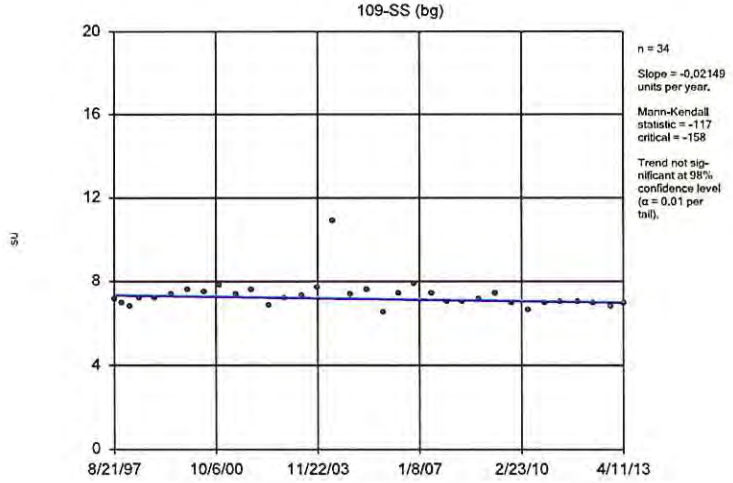
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

109-SS (bg)



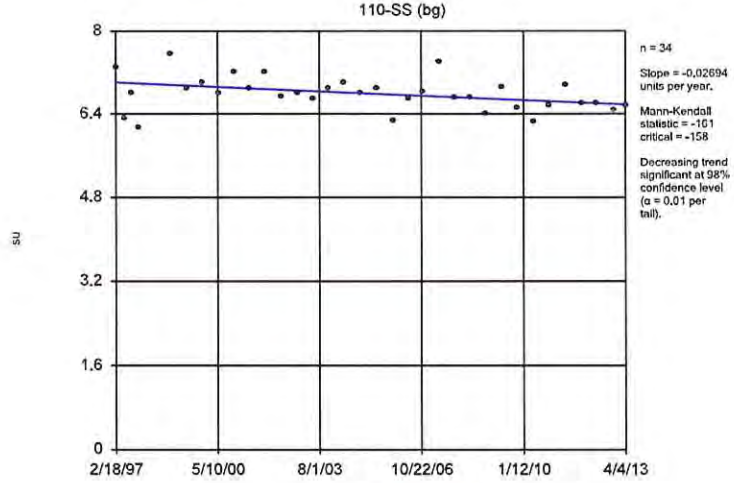
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

110-SS (bg)



Constituent: pH [Field] Analysis Run 12/17/2013 10:15 AM

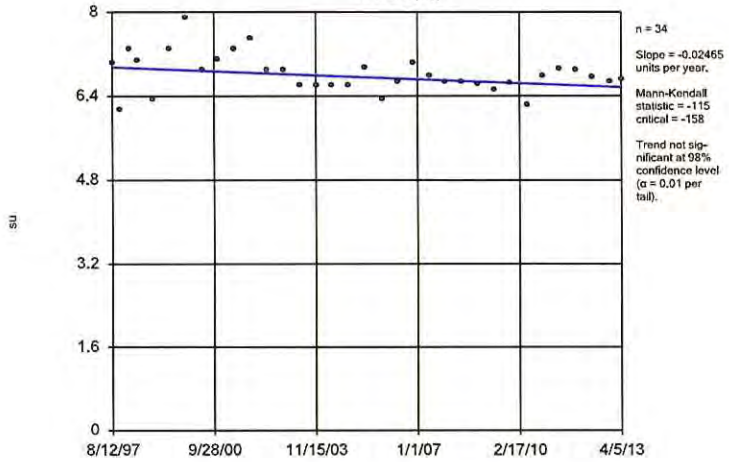
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Sen's Slope Estimator

115-SS (bg)



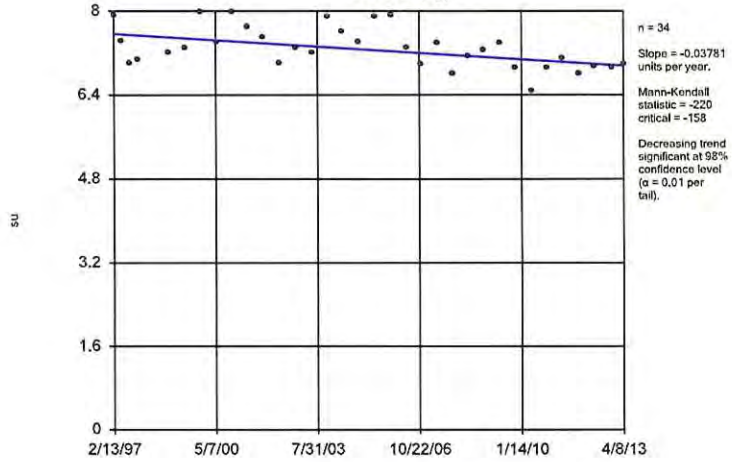
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

201A-SS (bg)



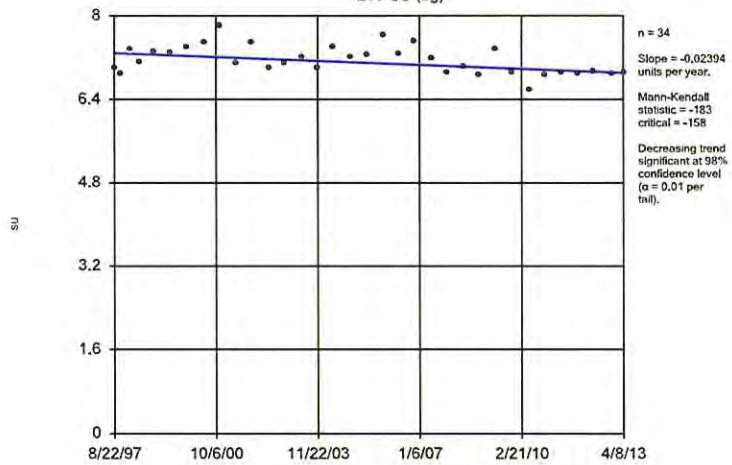
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

205-SS (bg)



Constituent: pH [Field] Analysis Run 12/17/2013 10:16 AM

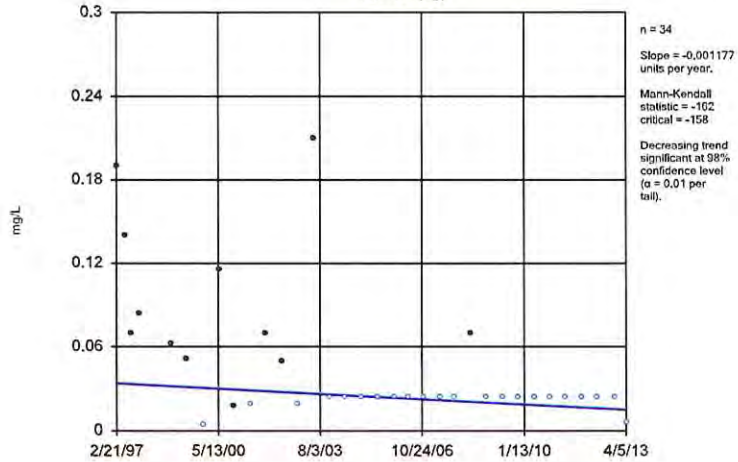
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

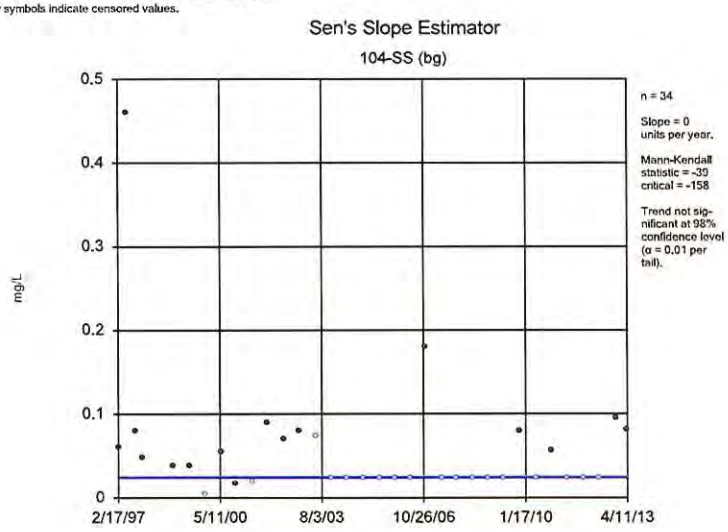


Constituent: Phosphorus Total Analysis Run 12/17/2013 10:16 AM

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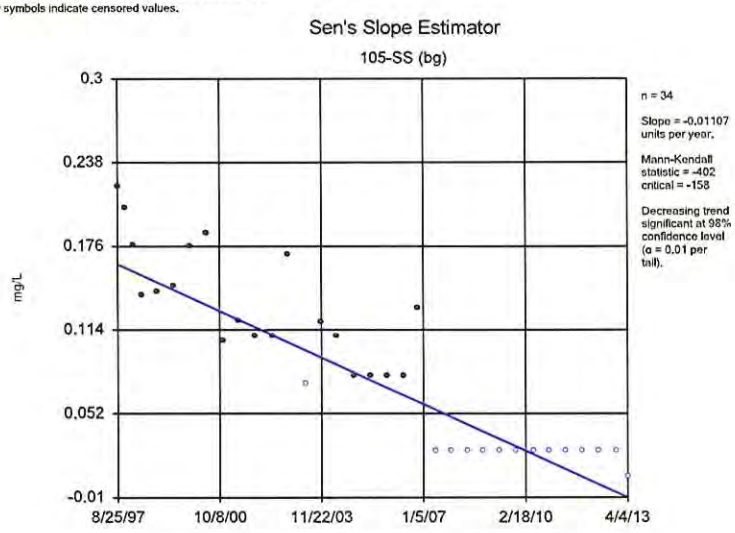
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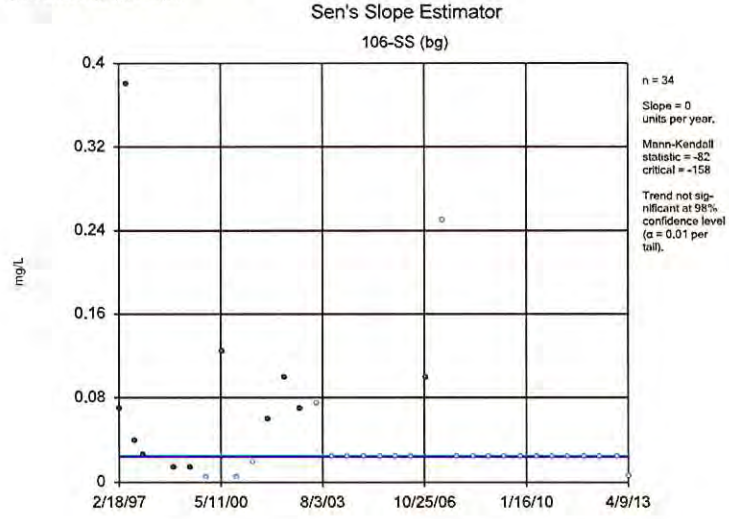
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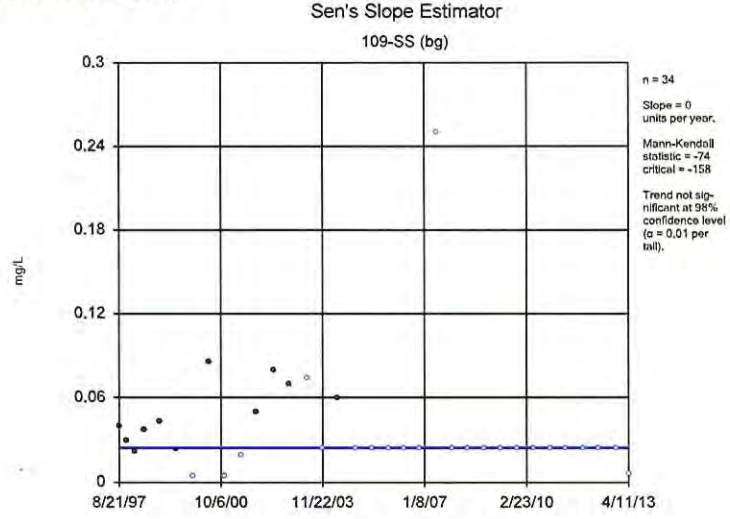
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Constituent: Phosphorus Total Analysis Run 12/17/2013 10:16 AM
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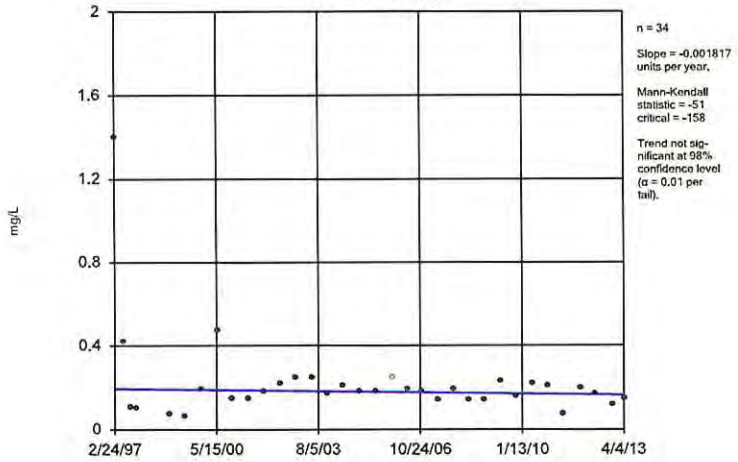
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

110-SS (bg)

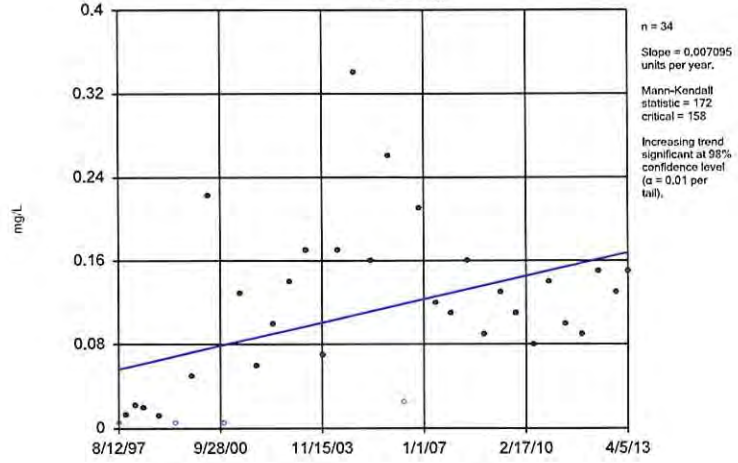


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)

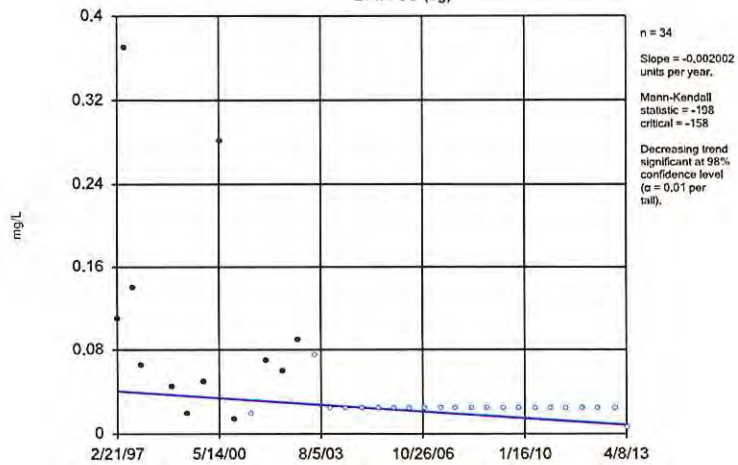


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)

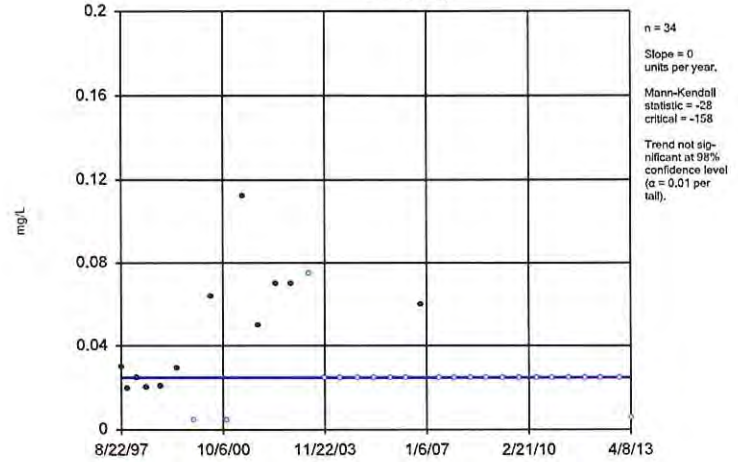


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Sen's Slope Estimator

205-SS (bg)

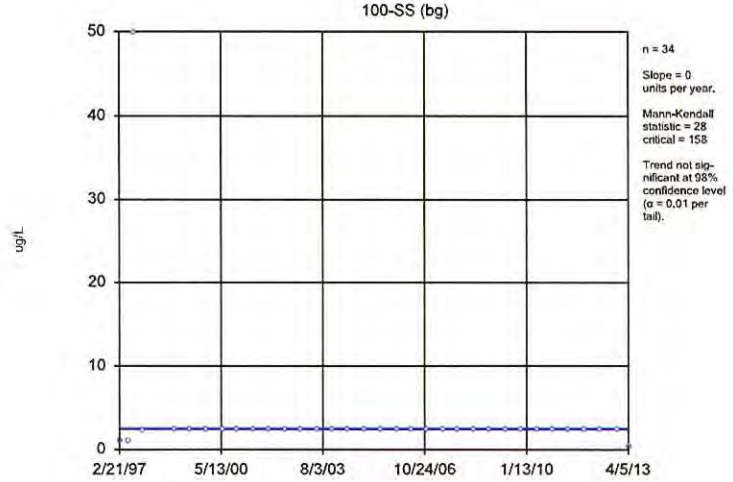


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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

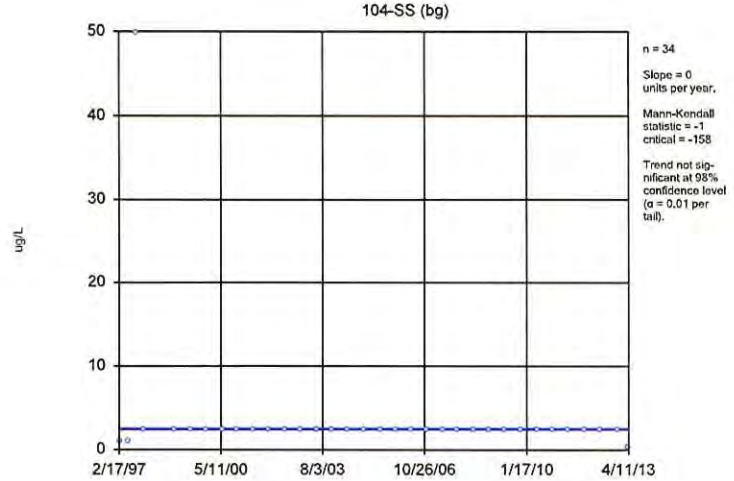


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Sen's Slope Estimator

104-SS (bg)

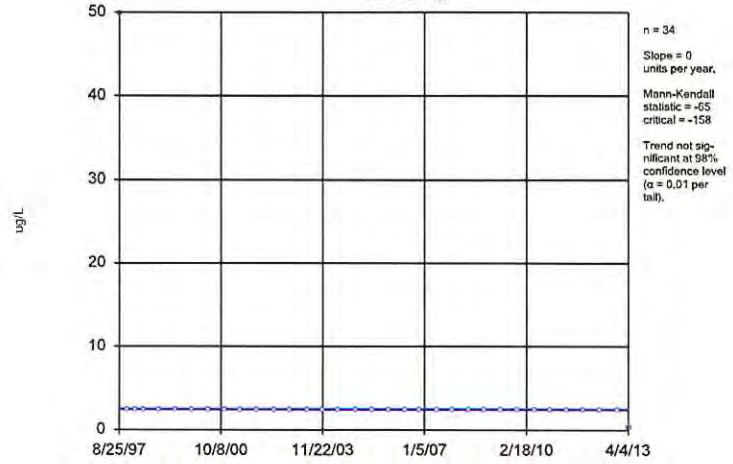


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Sen's Slope Estimator

105-SS (bg)

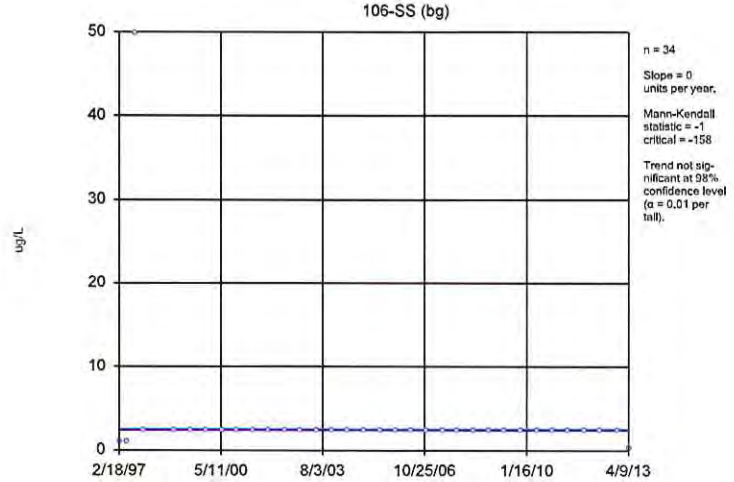


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Sen's Slope Estimator

106-SS (bg)

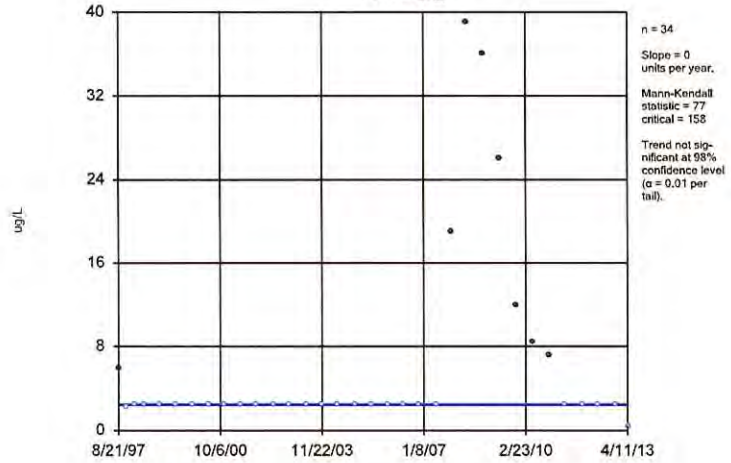


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Sen's Slope Estimator

109-SS (bg)

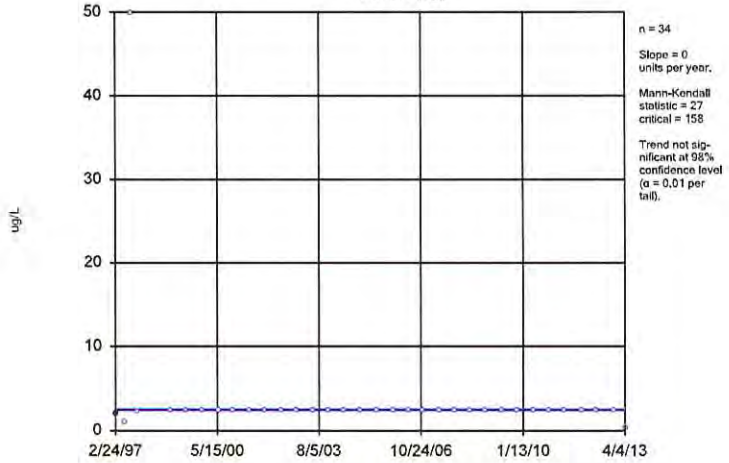


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Sen's Slope Estimator

110-SS (bg)

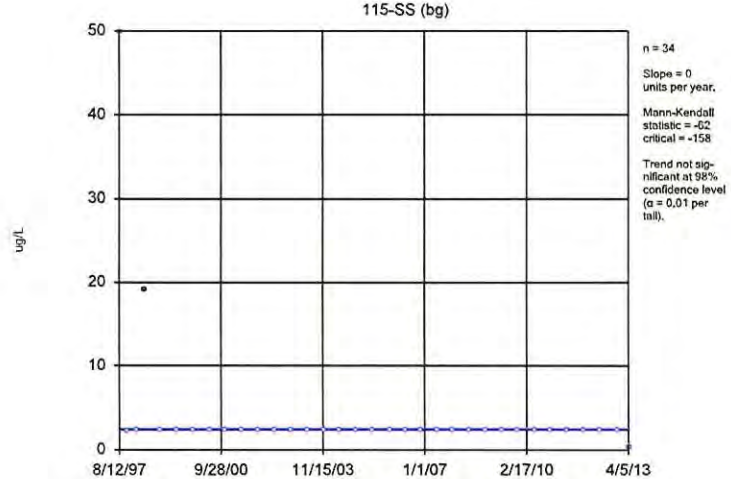


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Sen's Slope Estimator

115-SS (bg)

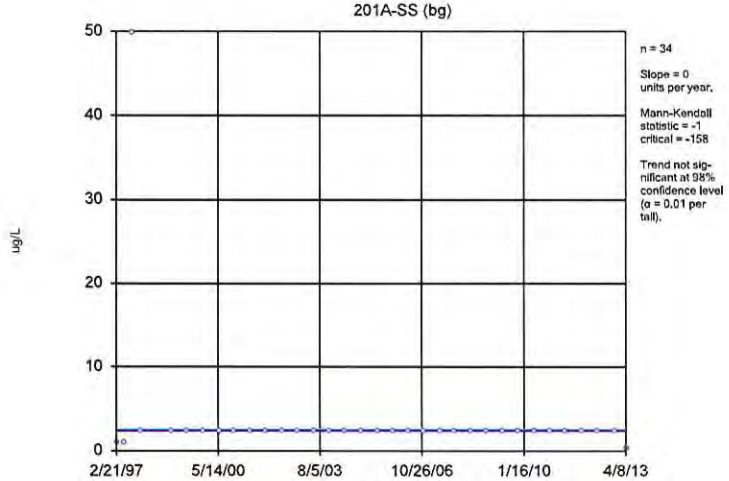


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)

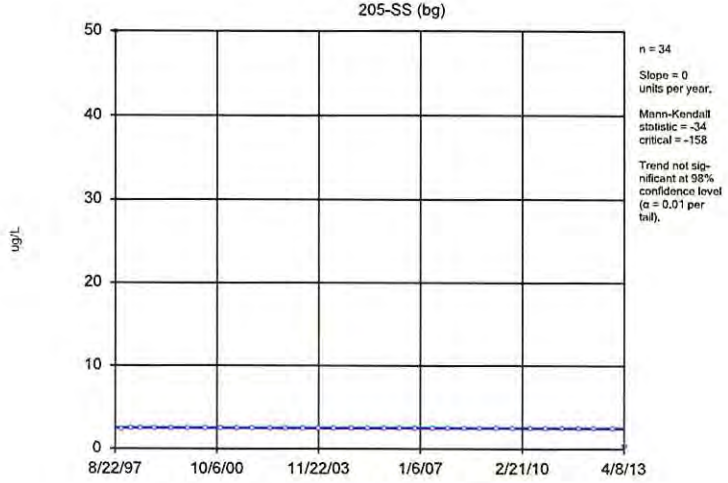


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

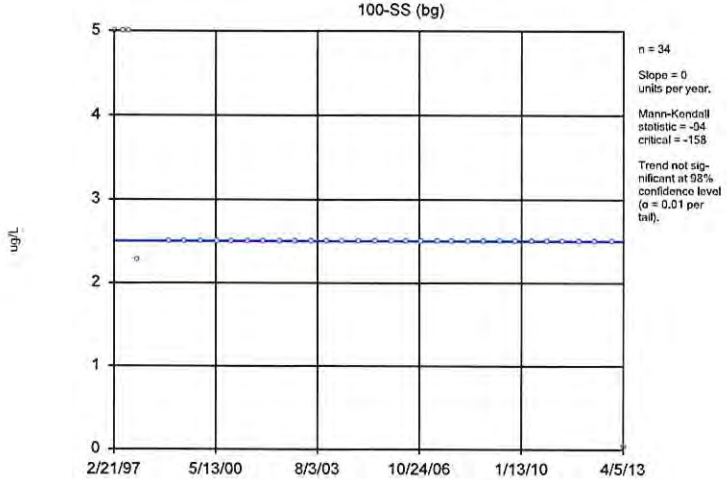


Constituent: Selenium Total Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

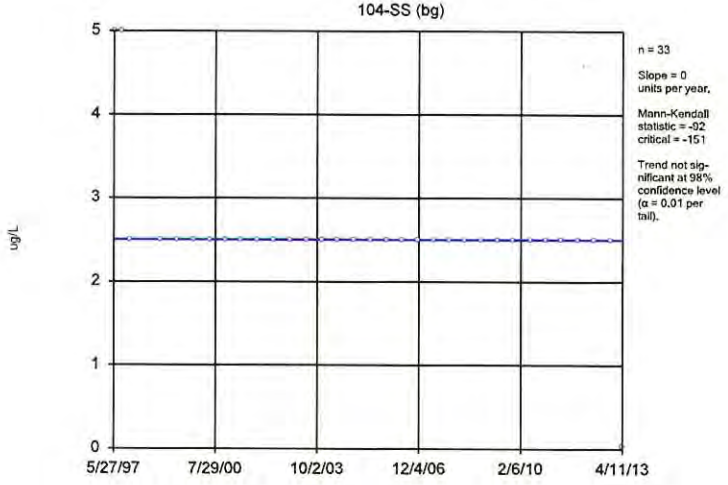


Constituent: Silver Total Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

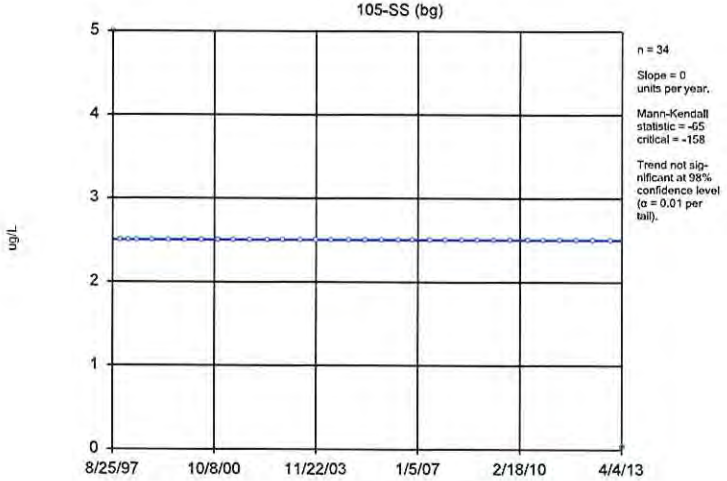


Constituent: Silver Total Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS (bg)



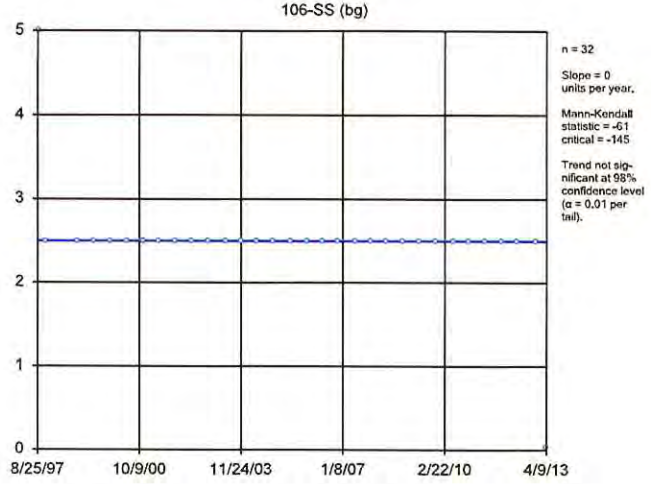
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)

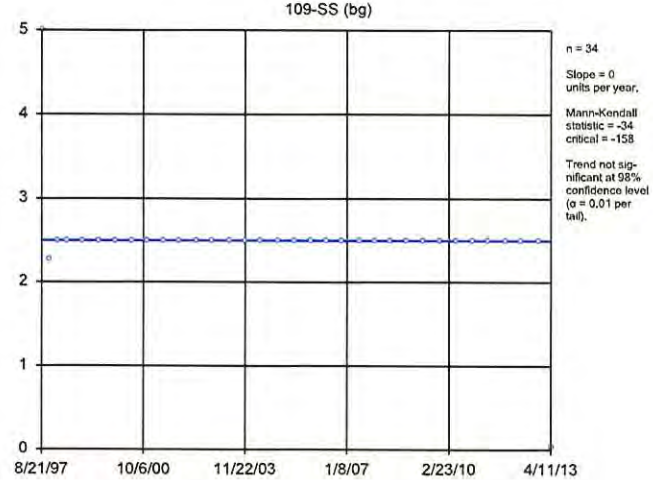


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)

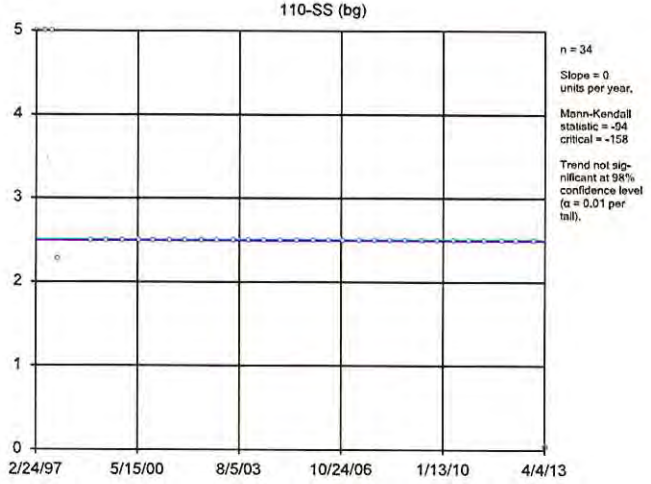


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Hollow symbols indicate censored values.

Sen's Slope Estimator

110-SS (bg)

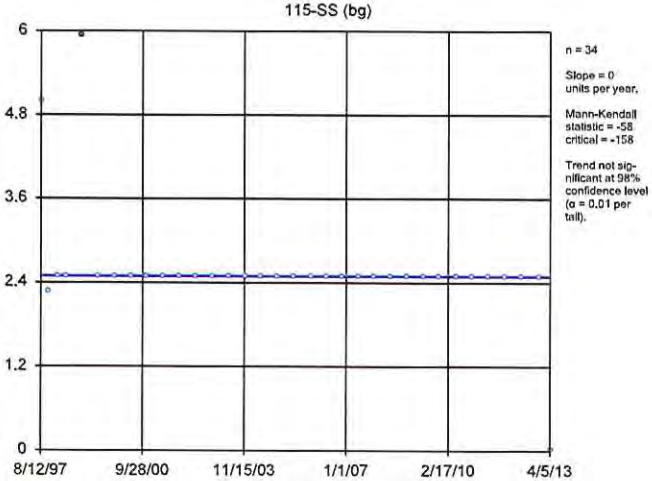


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

115-SS (bg)

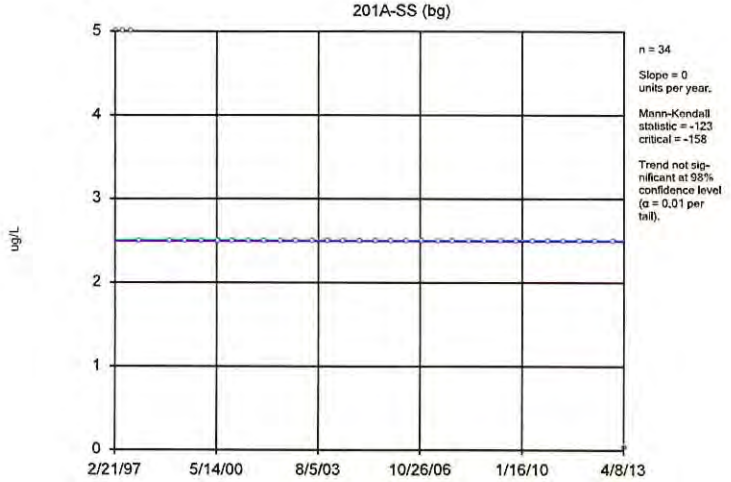


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Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)

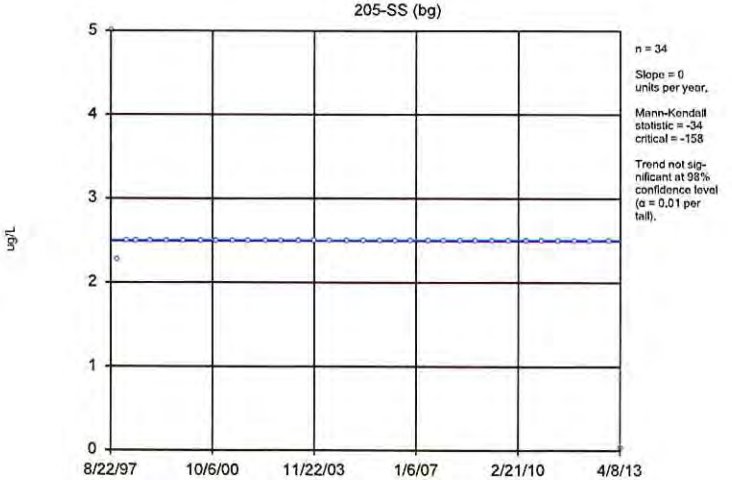


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

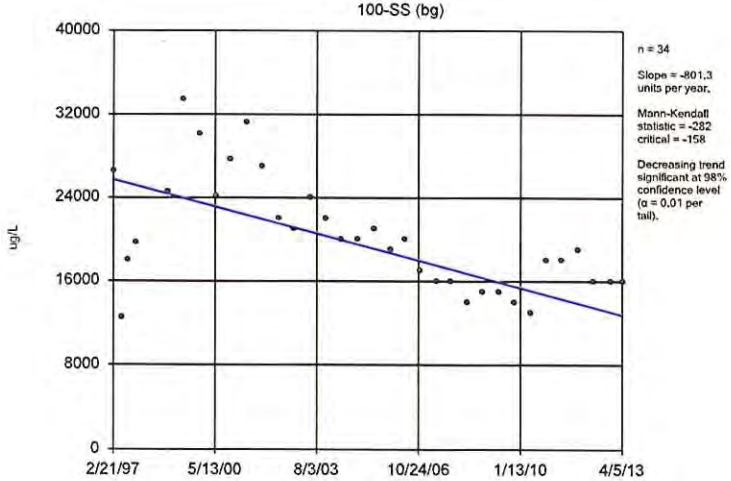


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

100-SS (bg)

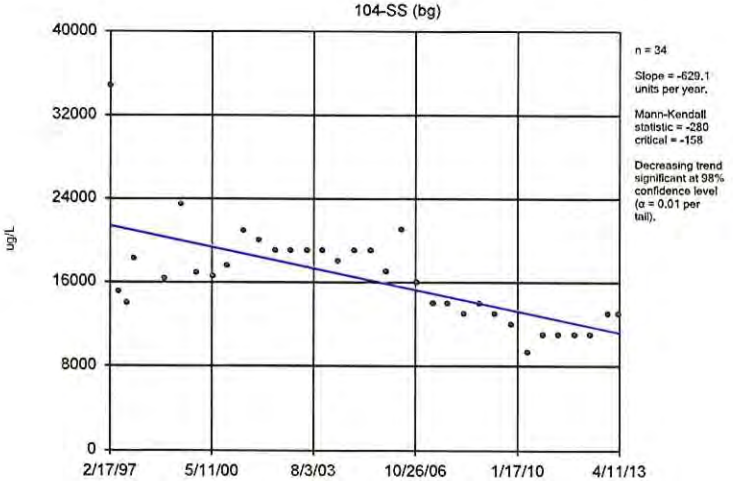


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Sen's Slope Estimator

104-SS (bg)



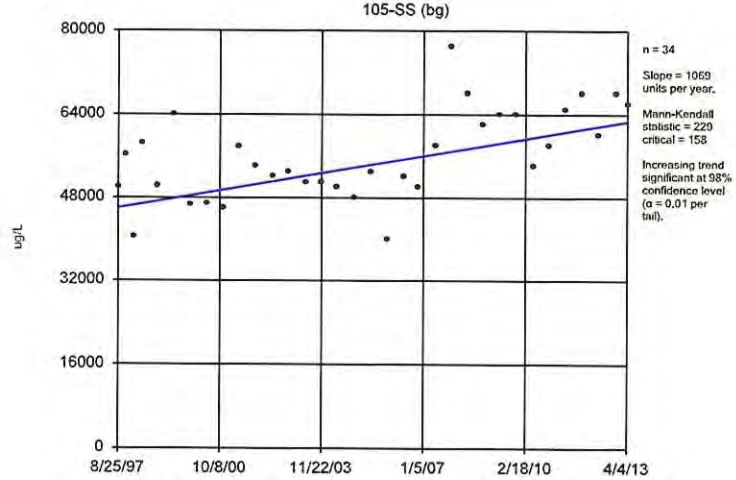
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Sen's Slope Estimator

105-SS (bg)

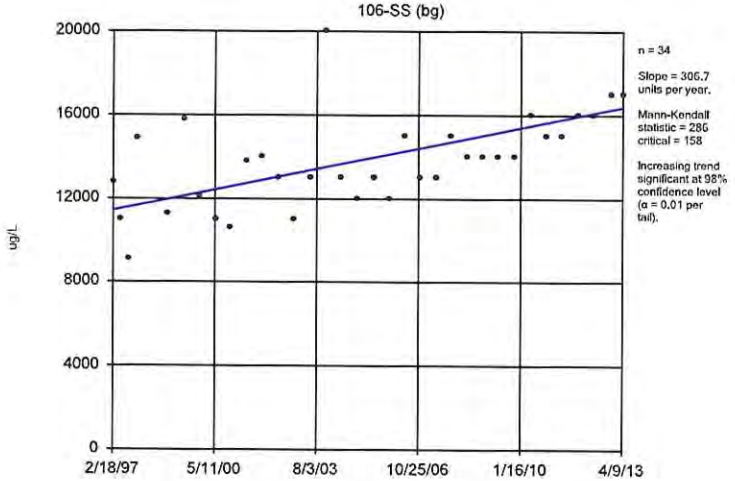


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Sen's Slope Estimator

106-SS (bg)

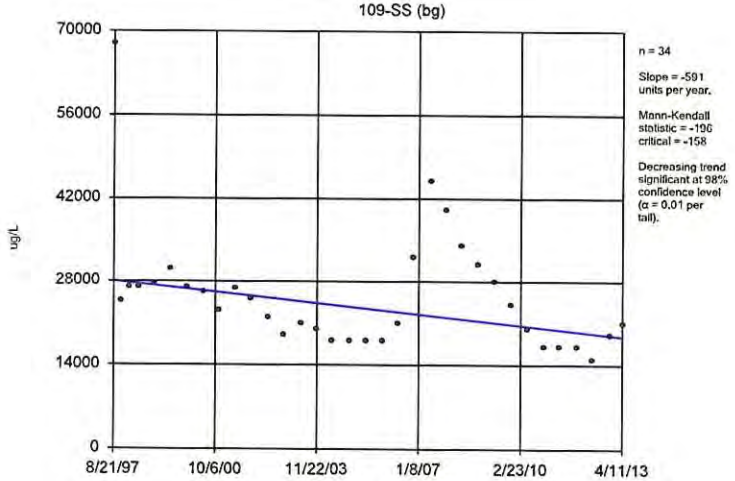


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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

109-SS (bg)

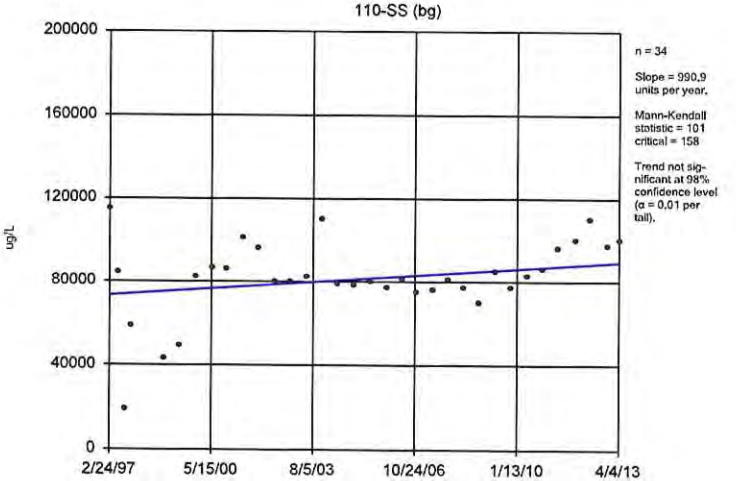


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Sen's Slope Estimator

110-SS (bg)



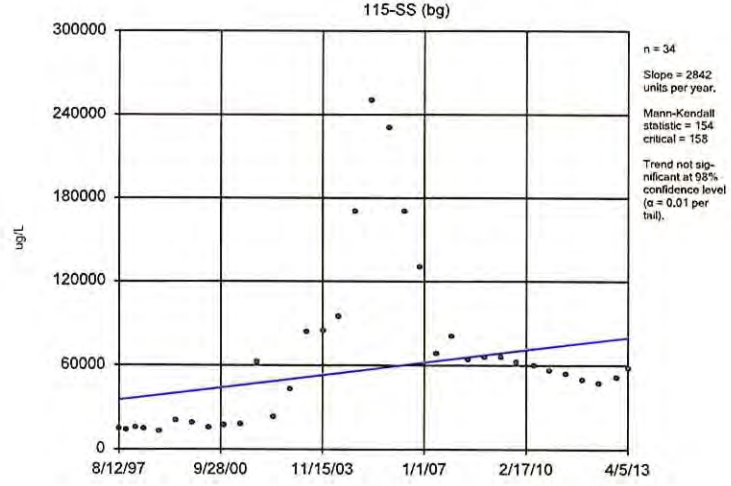
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Sen's Slope Estimator

115-SS (bg)

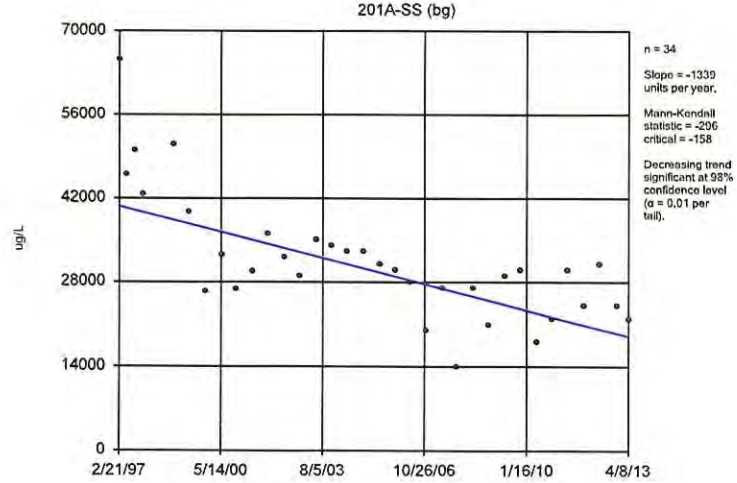


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Sen's Slope Estimator

201A-SS (bg)

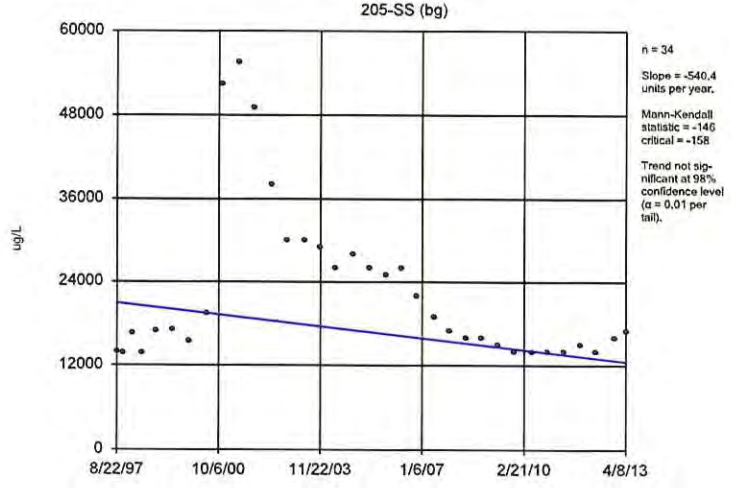


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Sen's Slope Estimator

205-SS (bg)

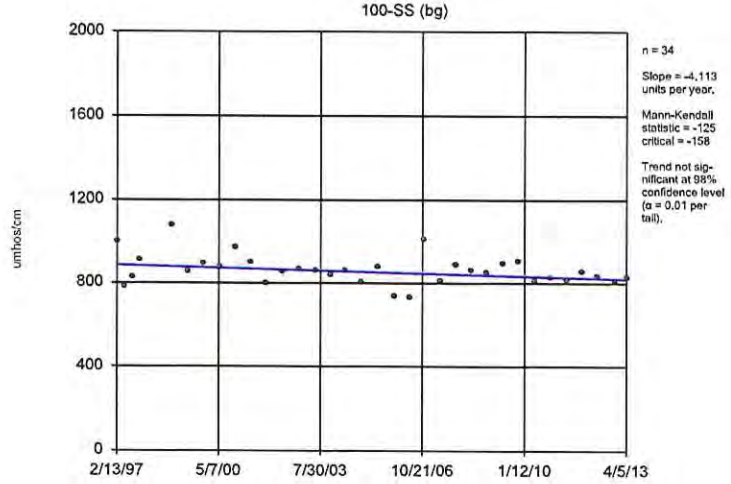


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Sen's Slope Estimator

100-SS (bg)



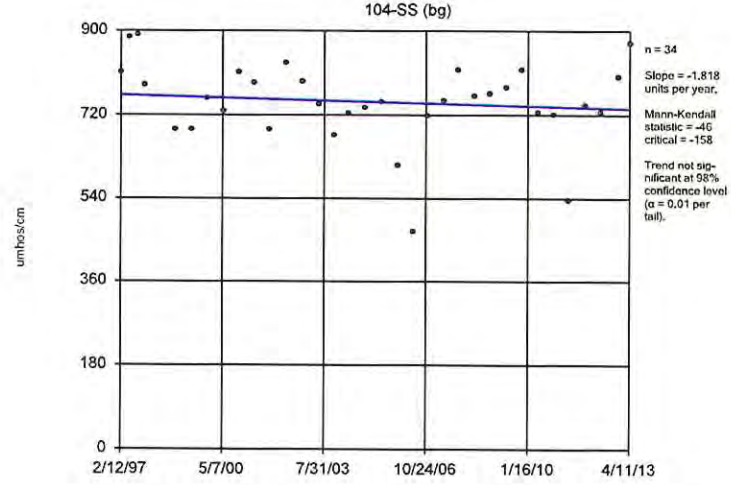
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Sen's Slope Estimator

104-SS (bg)

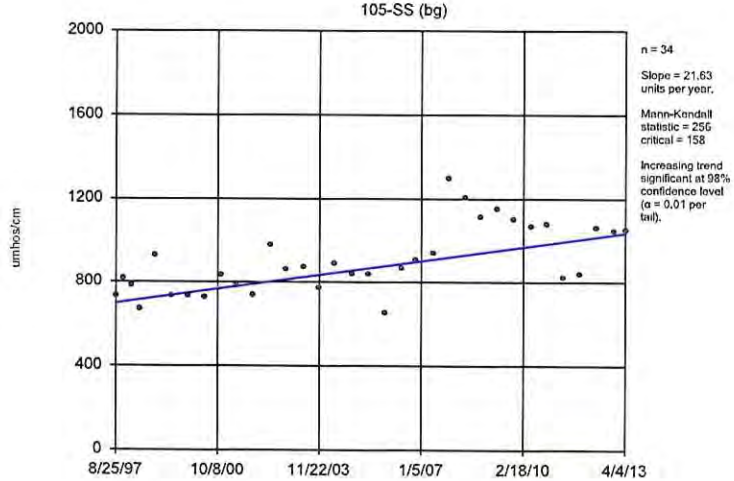


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Sen's Slope Estimator

105-SS (bg)

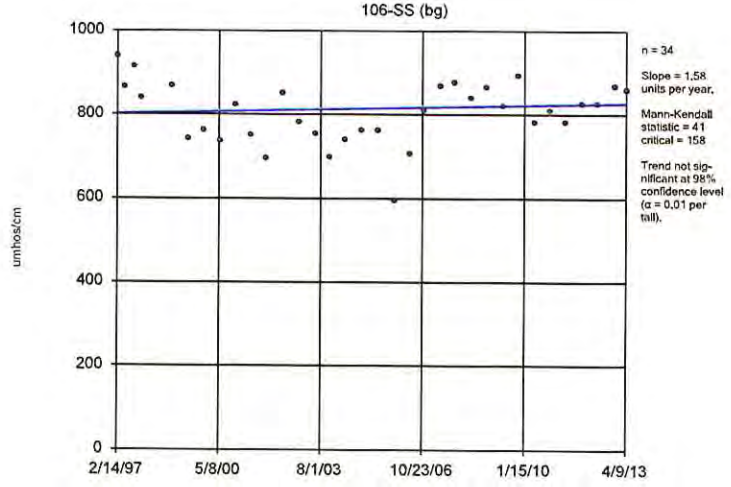


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Sen's Slope Estimator

106-SS (bg)

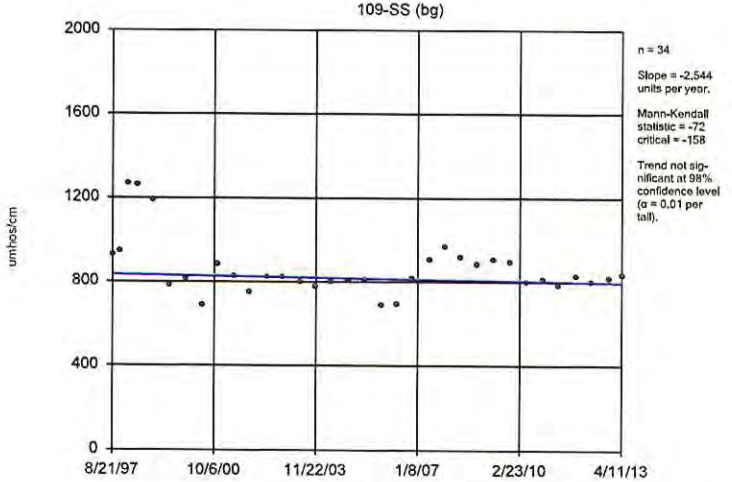


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Sen's Slope Estimator

109-SS (bg)

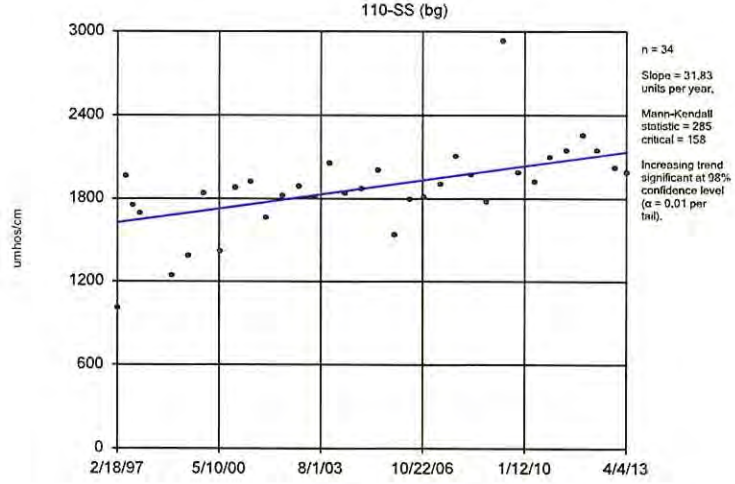


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Sen's Slope Estimator

110-SS (bg)

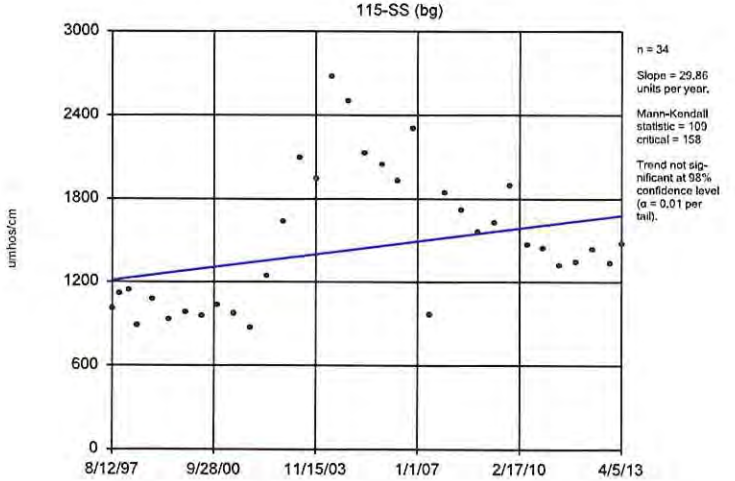


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Sen's Slope Estimator

115-SS (bg)

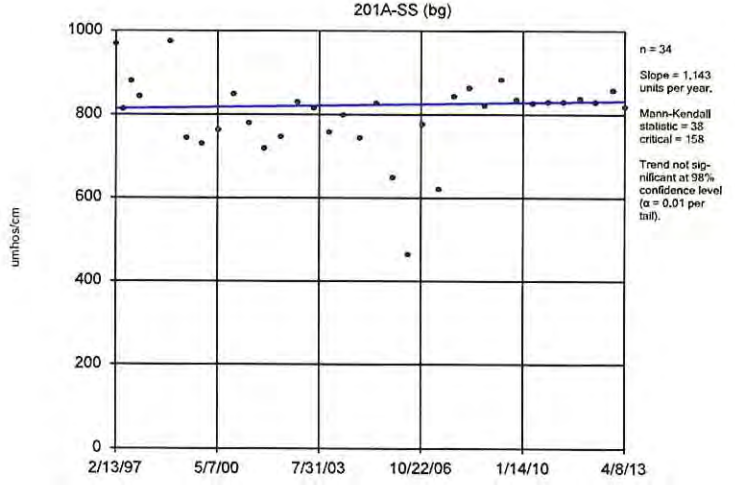


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Sen's Slope Estimator

201A-SS (bg)

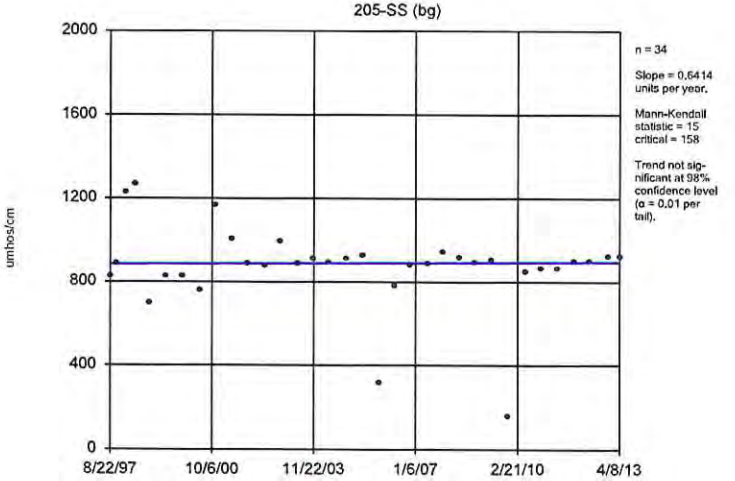


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Sen's Slope Estimator

205-SS (bg)



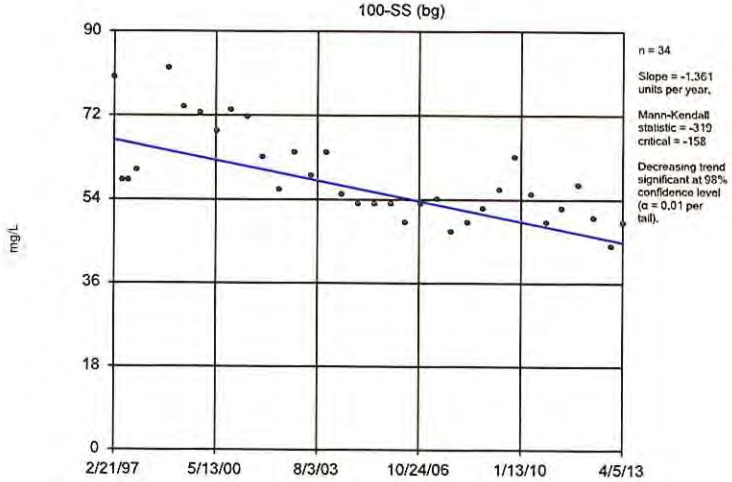
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Sen's Slope Estimator

100-SS (bg)

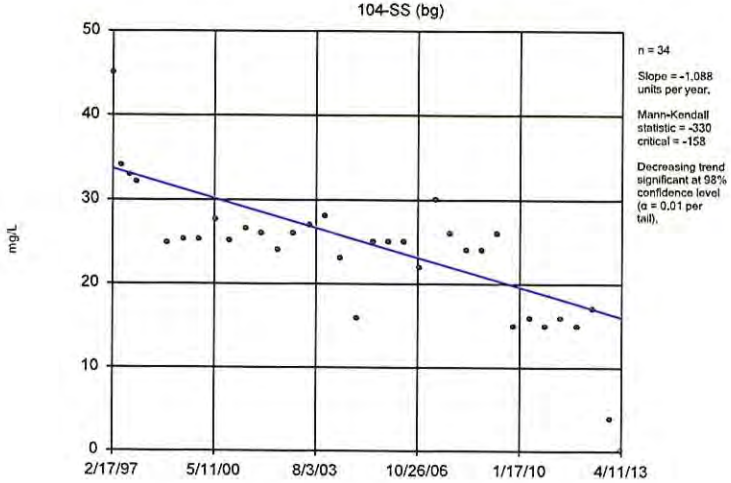


Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

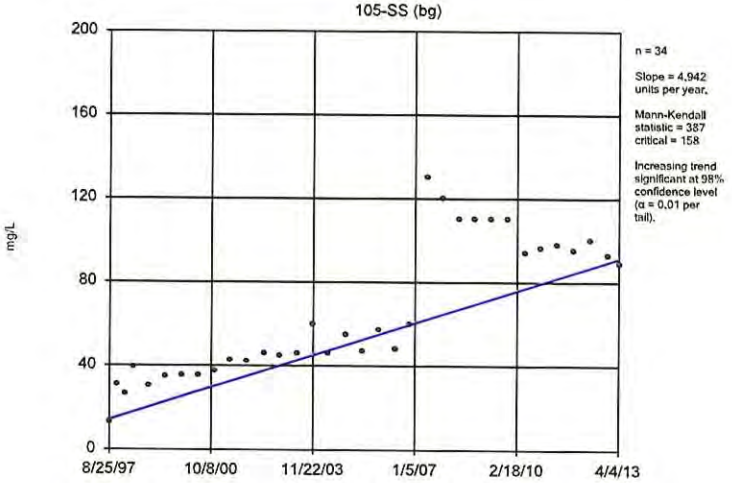


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Sen's Slope Estimator

105-SS (bg)

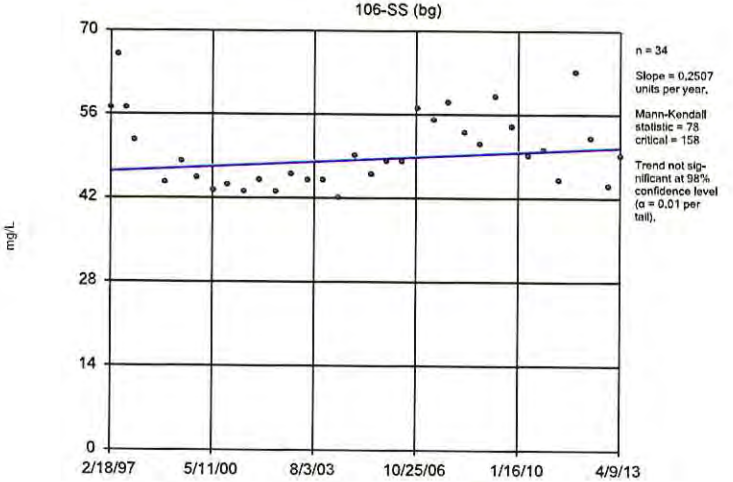


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Sen's Slope Estimator

106-SS (bg)



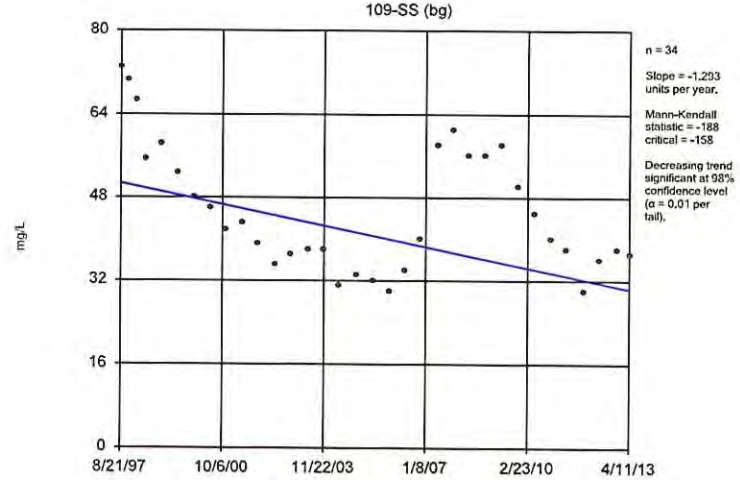
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Sen's Slope Estimator

109-SS (bg)



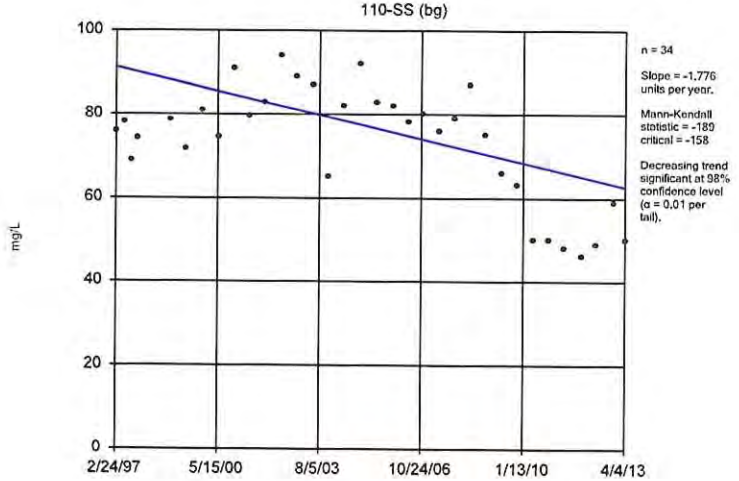
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Sen's Slope Estimator

110-SS (bg)



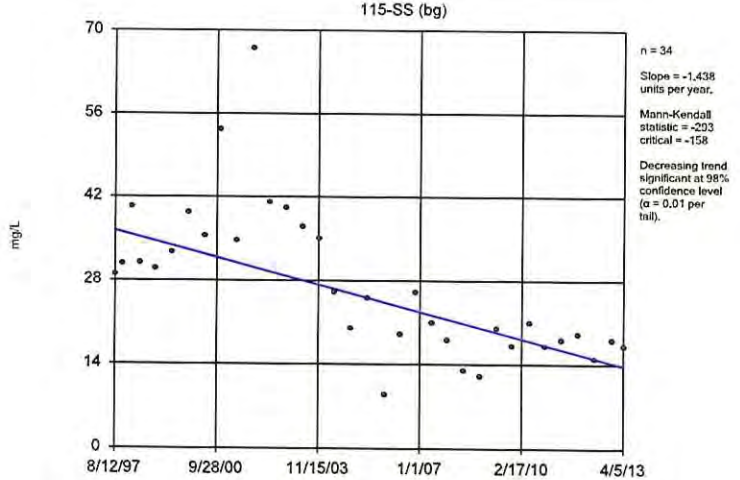
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Sen's Slope Estimator

115-SS (bg)



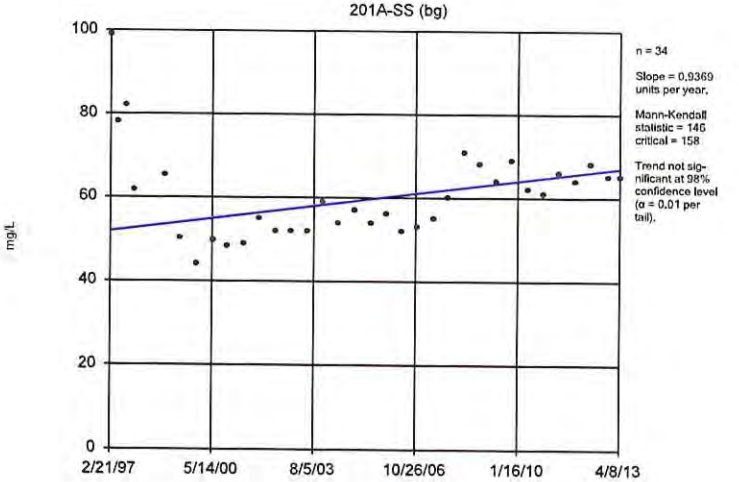
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Sen's Slope Estimator

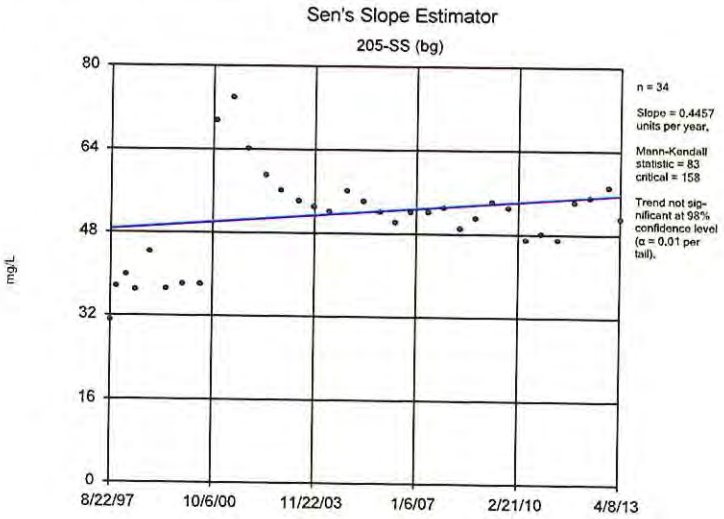
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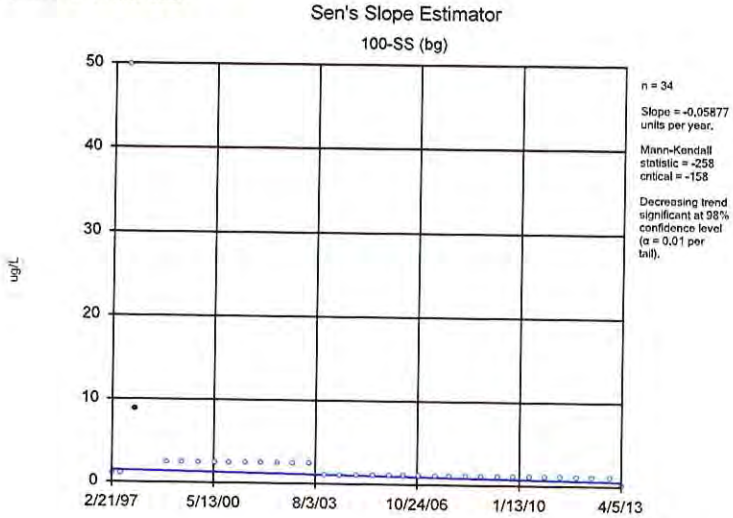
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



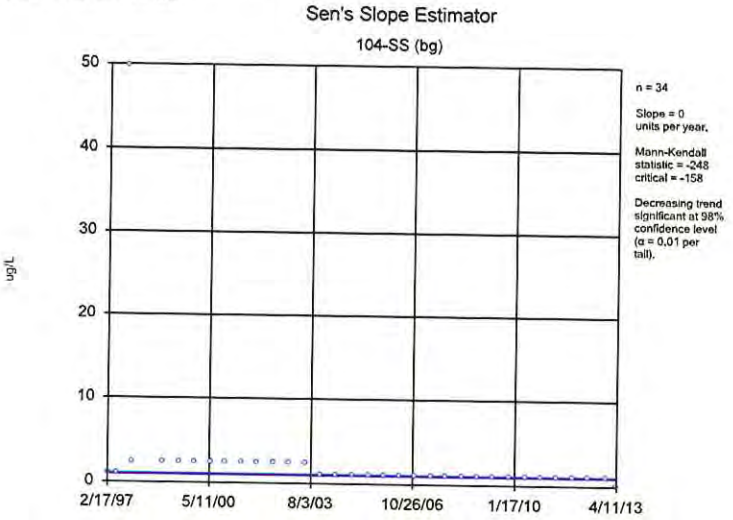
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Hollow symbols indicate censored values.



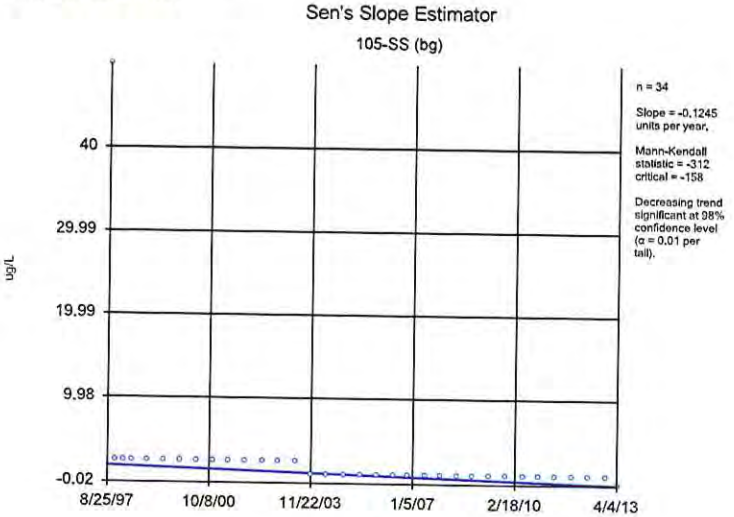
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: Thallium Total Analysis Run 12/17/2013 10:16 AM
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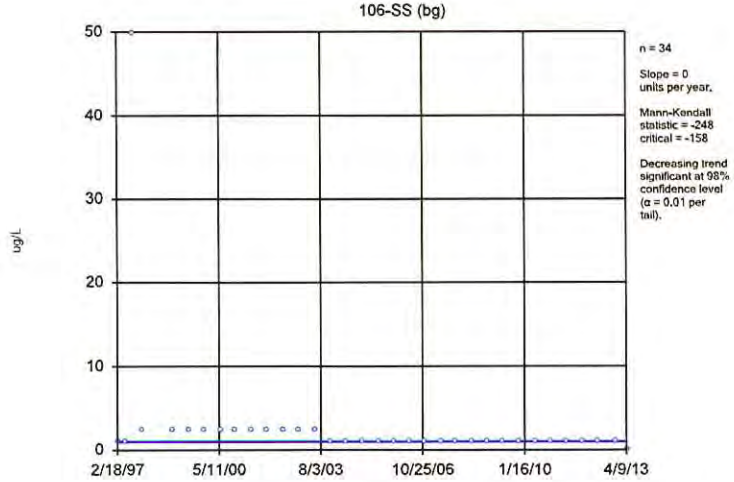
Constituent: Thallium Total Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)

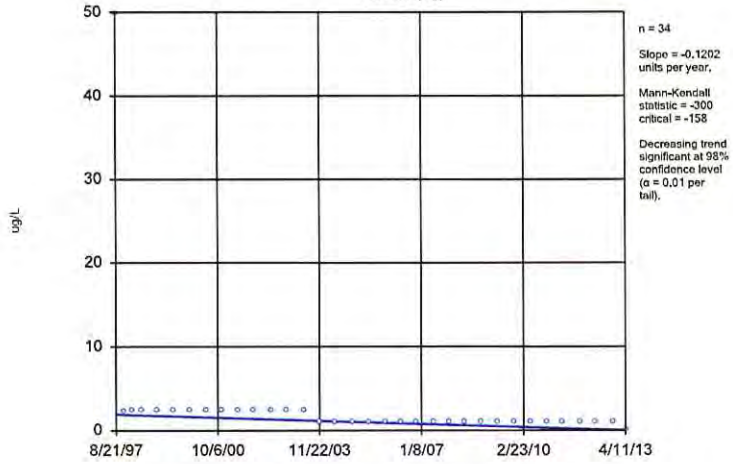


Constituent: Thallium Total Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

109-SS (bg)

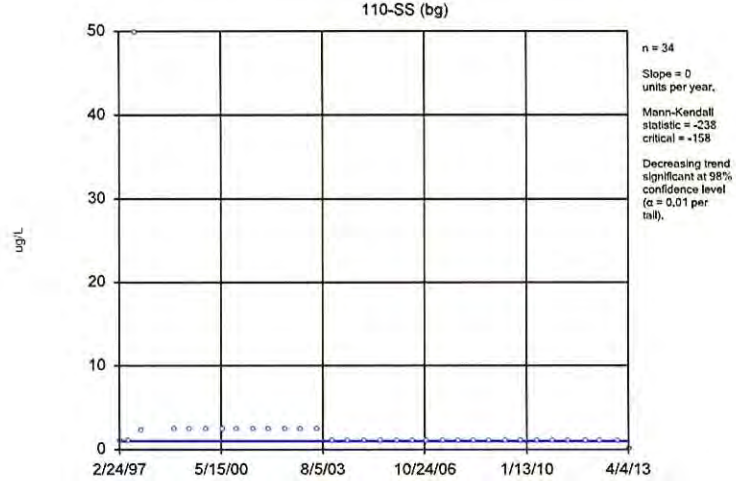


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

110-SS (bg)

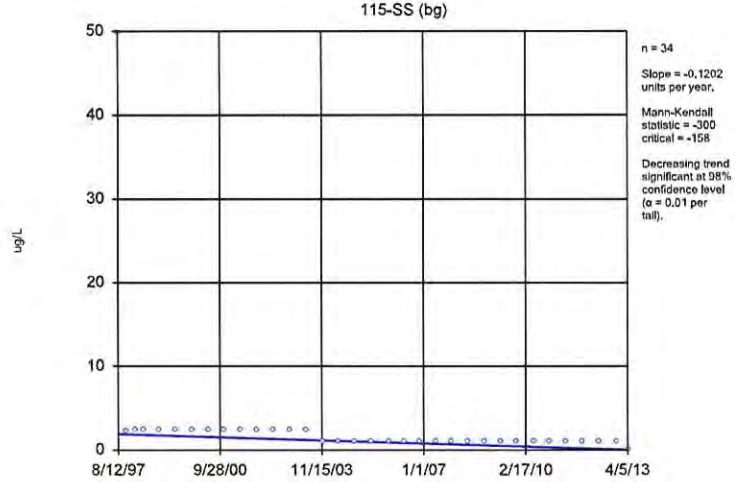


Constituent: Thallium Total Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

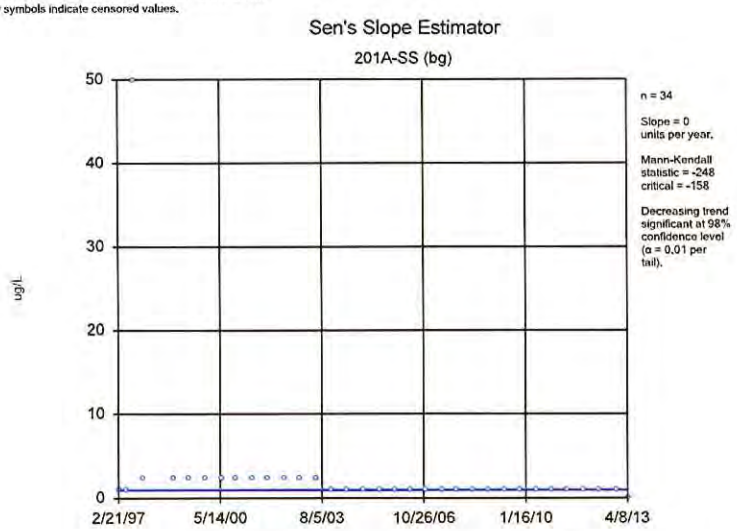
115-SS (bg)



Constituent: Thallium Total Analysis Run 12/17/2013 10:16 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

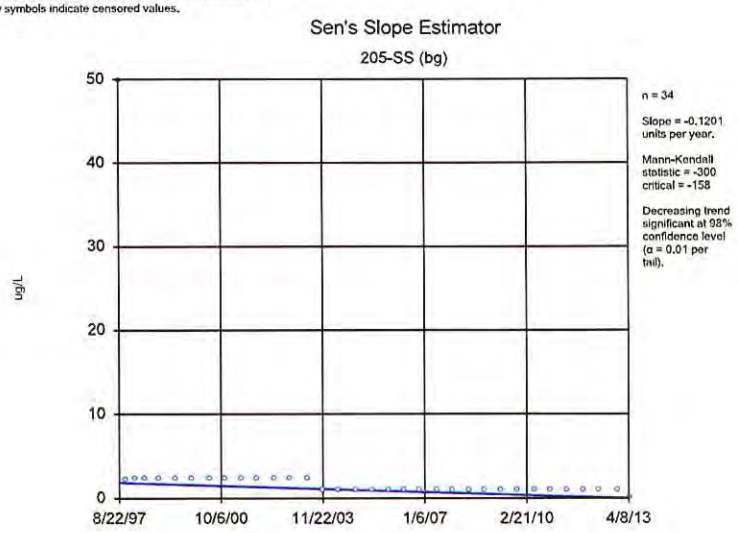
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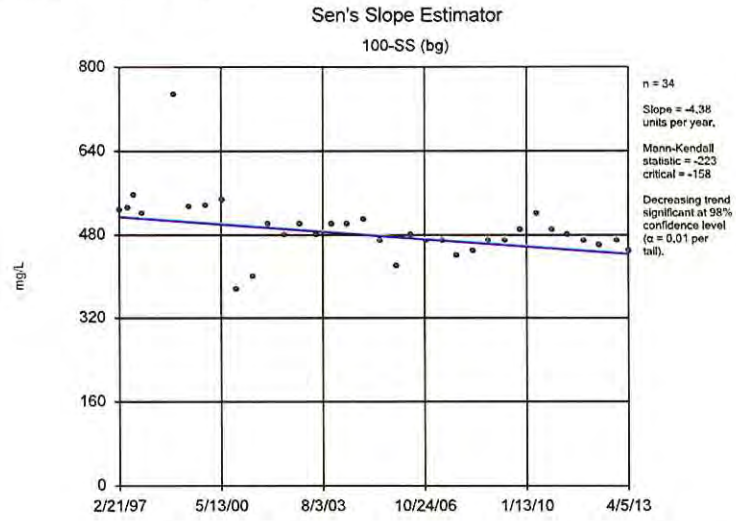
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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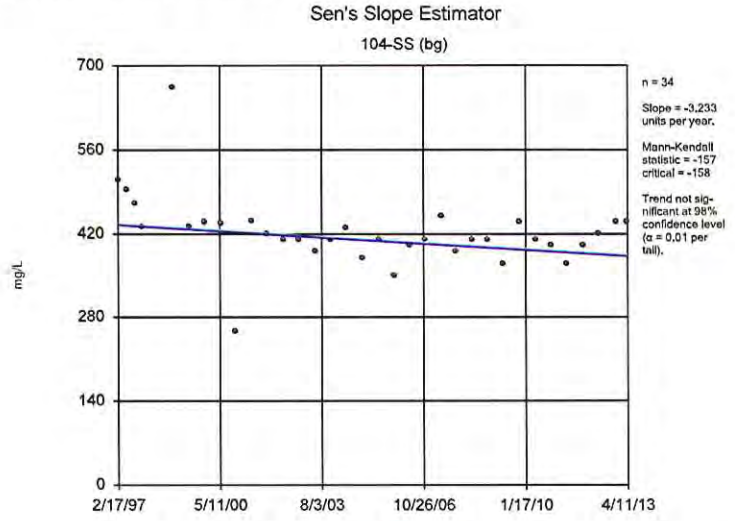
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Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

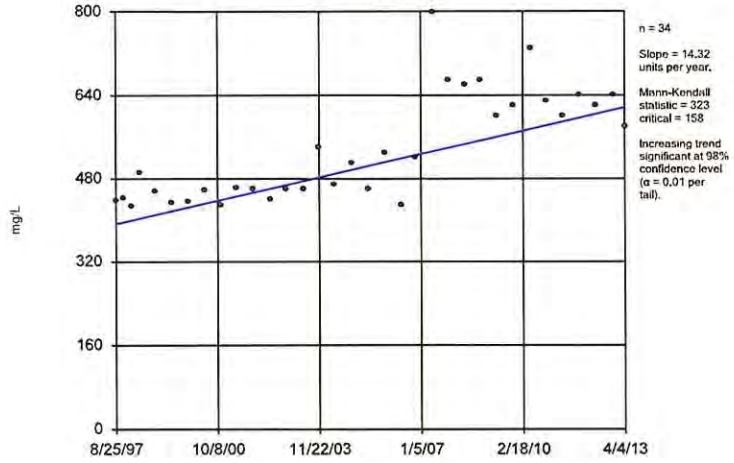


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

105-SS (bg)



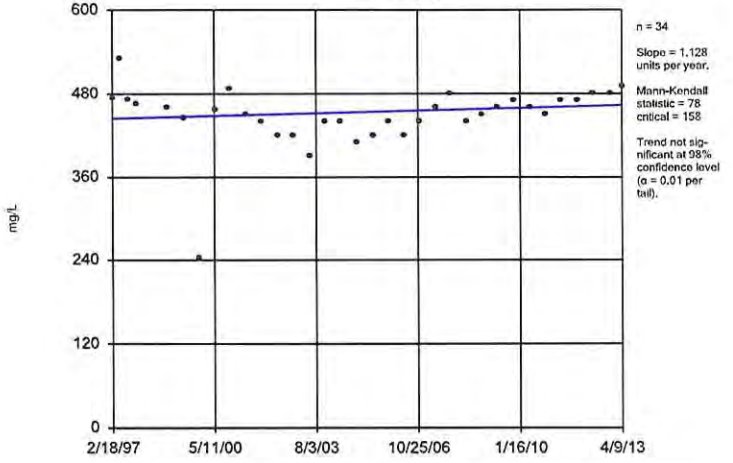
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SS (bg)



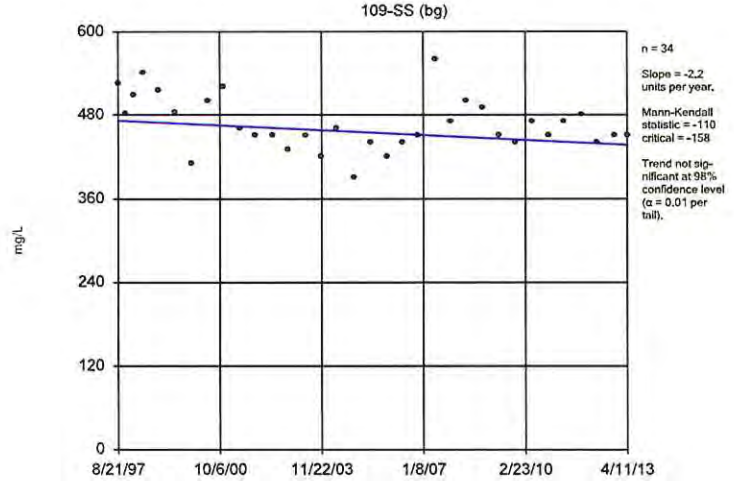
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

109-SS (bg)



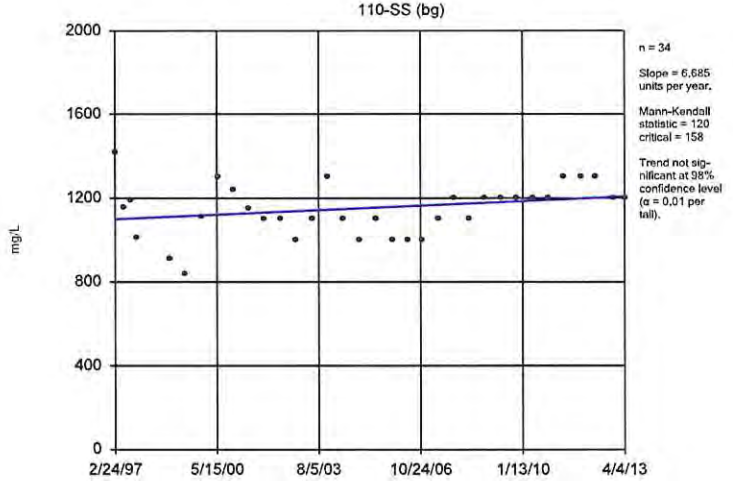
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

110-SS (bg)



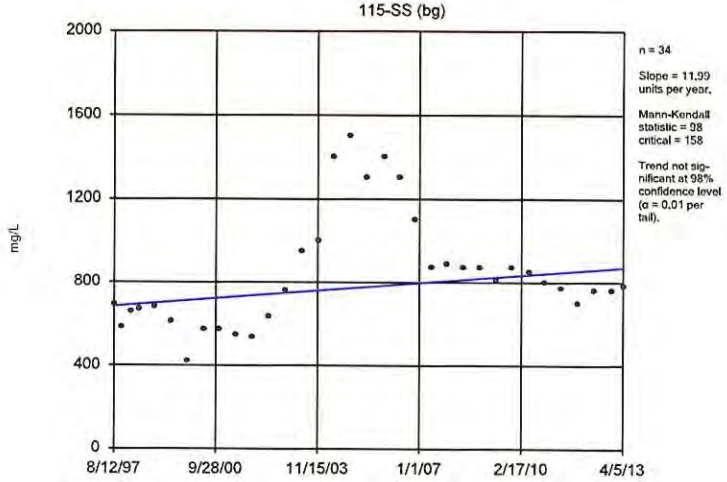
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

115-SS (bg)



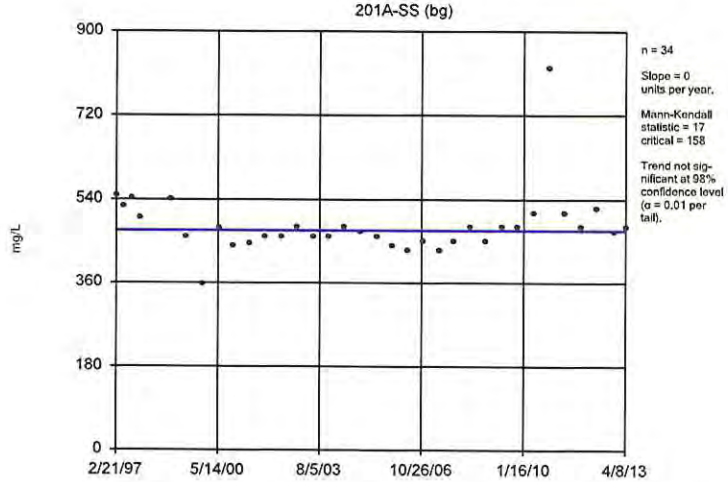
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

201A-SS (bg)



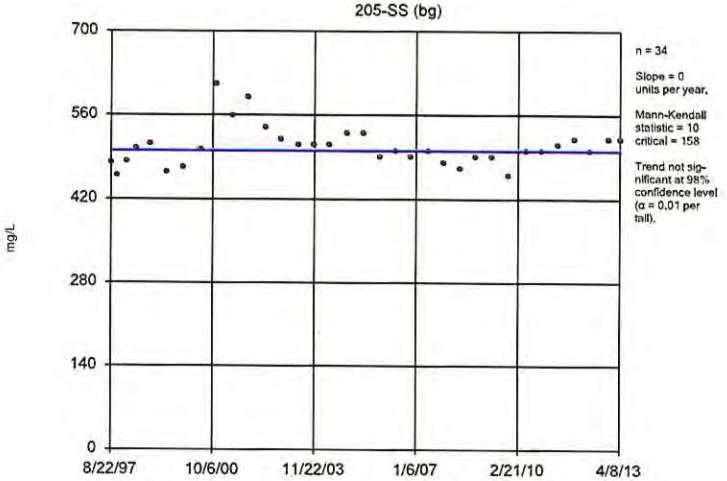
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Sen's Slope Estimator

205-SS (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:17 AM

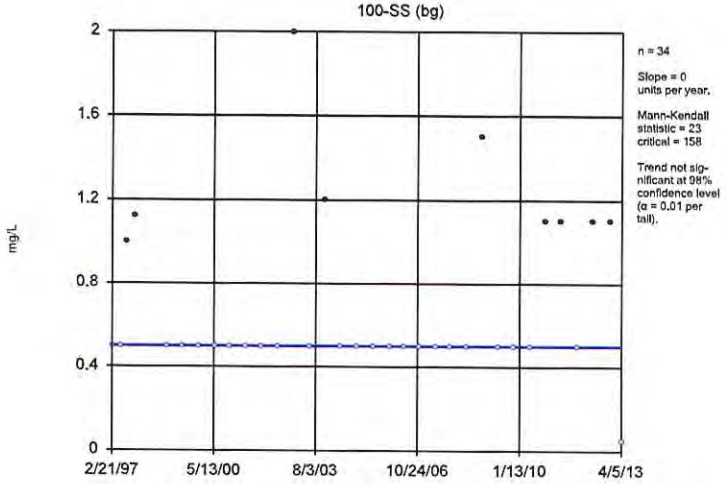
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)



Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:17 AM

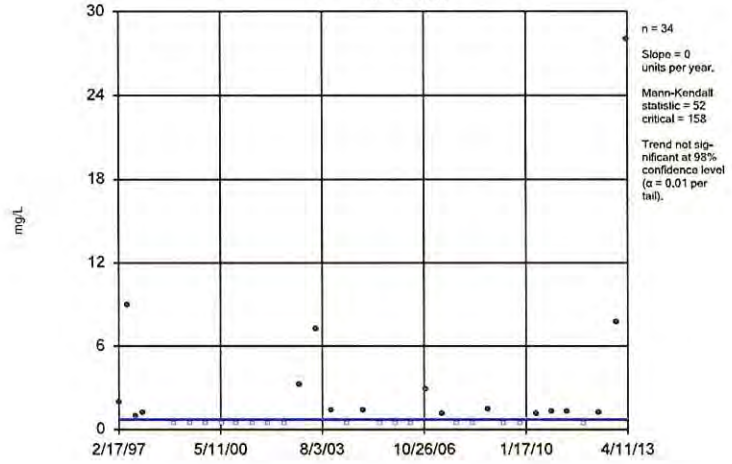
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Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

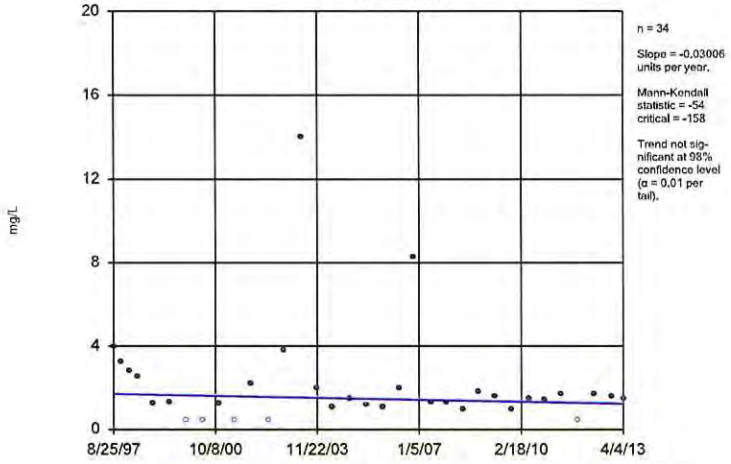


Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:17 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

105-SS (bg)

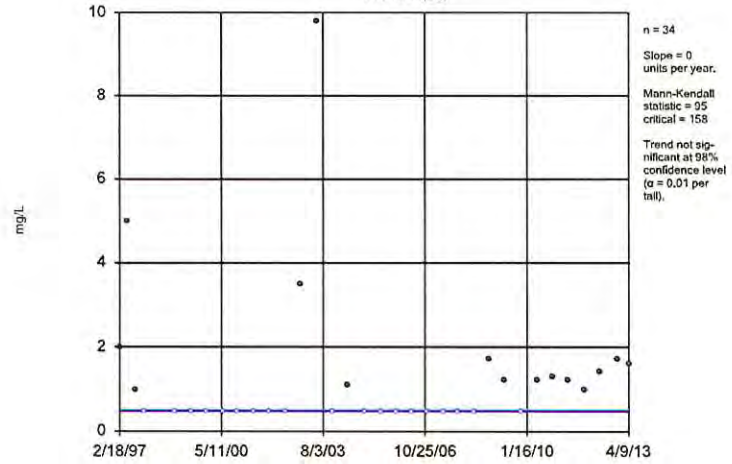


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Sen's Slope Estimator

106-SS (bg)

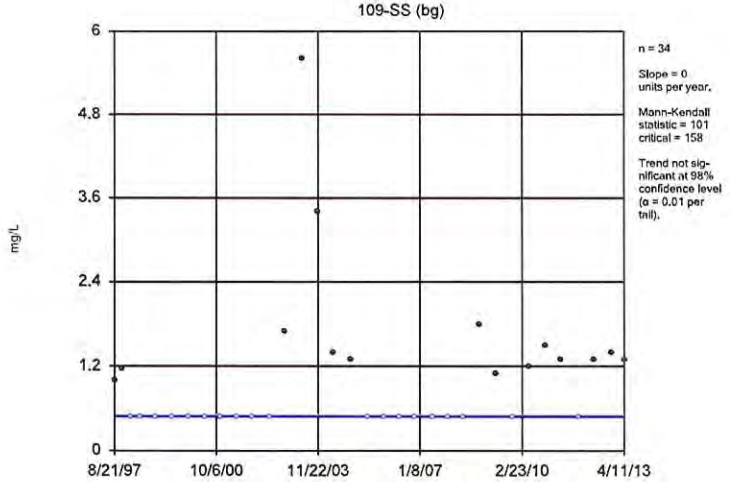


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Sen's Slope Estimator

109-SS (bg)



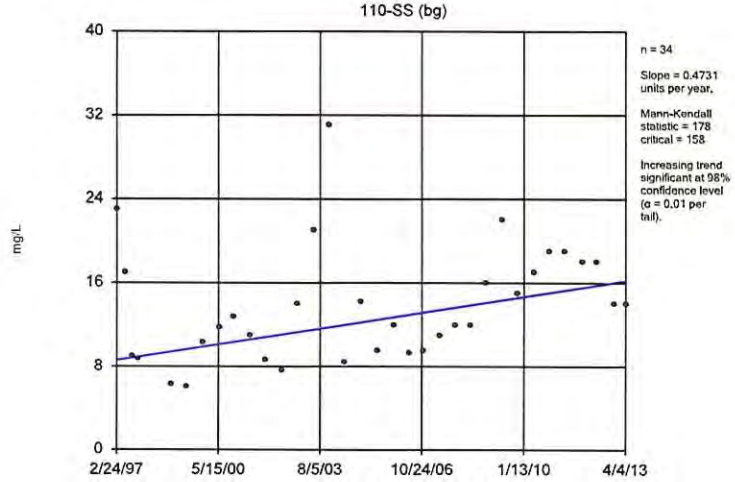
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Sen's Slope Estimator

110-SS (bg)



Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:17 AM

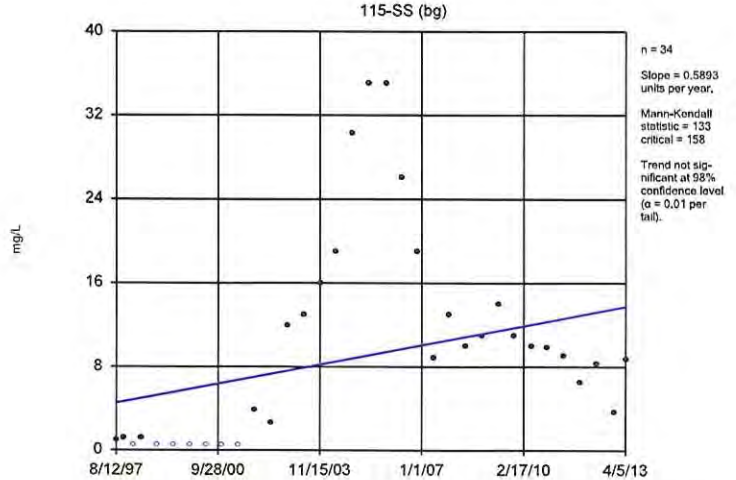
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Sen's Slope Estimator

115-SS (bg)



Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:17 AM

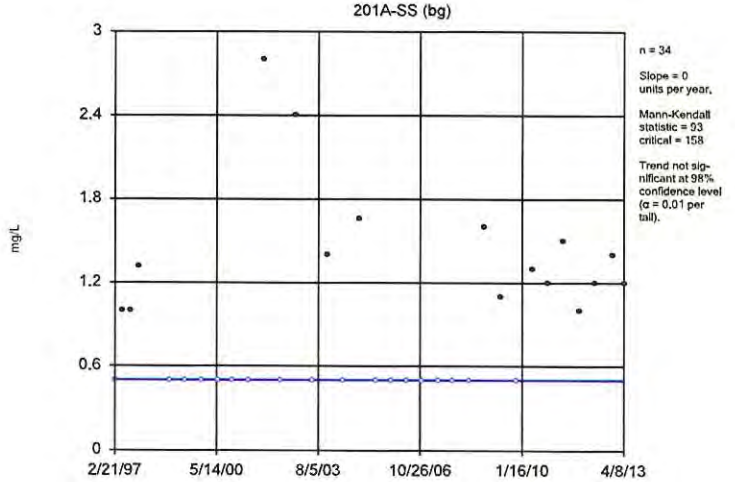
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)



Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:17 AM

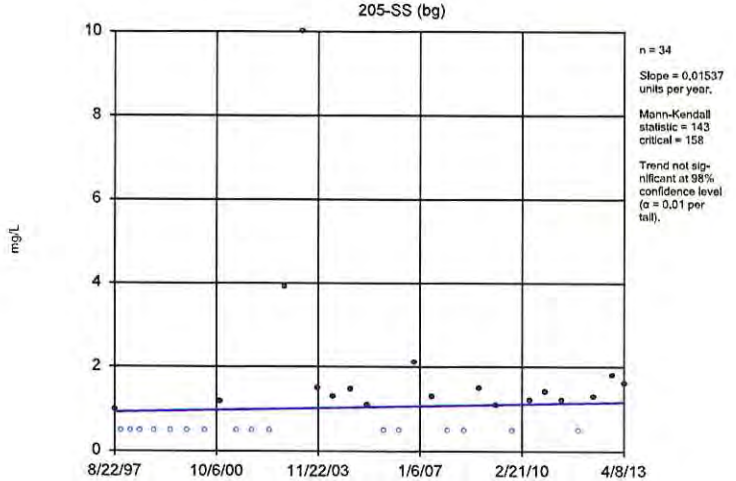
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Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)



Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:17 AM

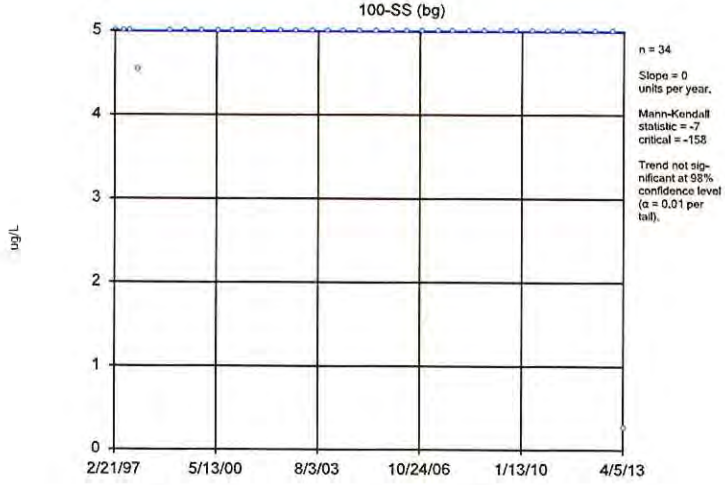
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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

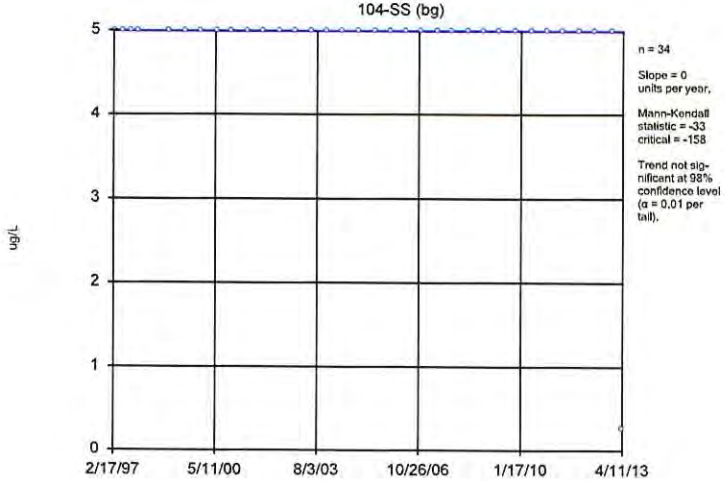


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

104-SS (bg)

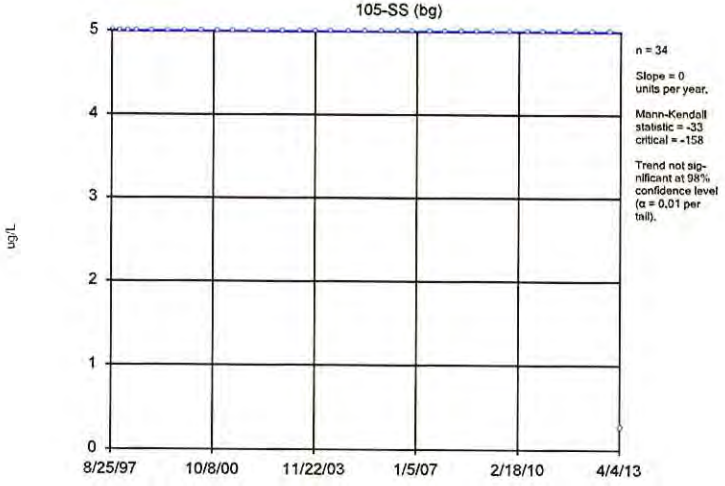


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Sen's Slope Estimator

105-SS (bg)

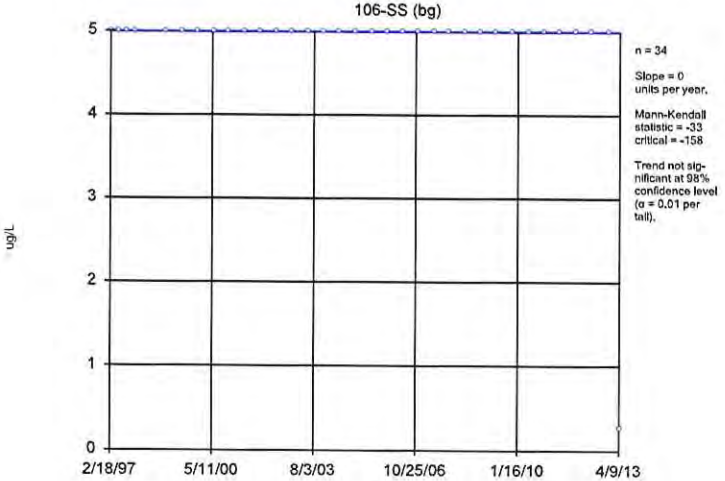


Constituent: Vanadium Total Analysis Run 12/17/2013 10:17 AM
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Sen's Slope Estimator

106-SS (bg)

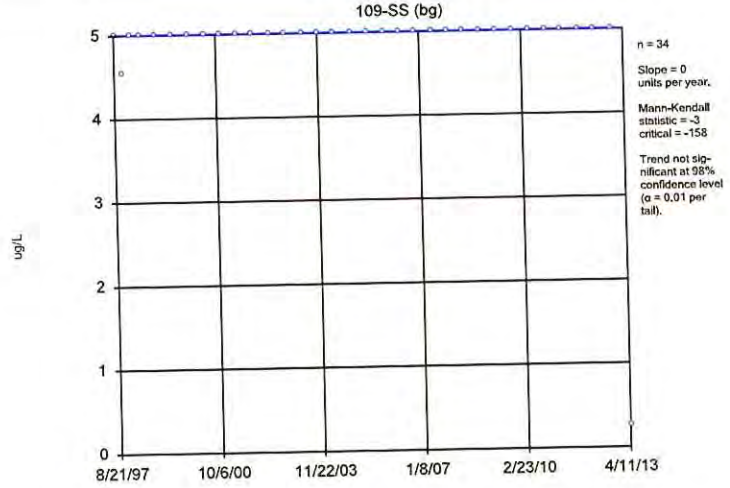


Constituent: Vanadium Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

109-SS (bg)

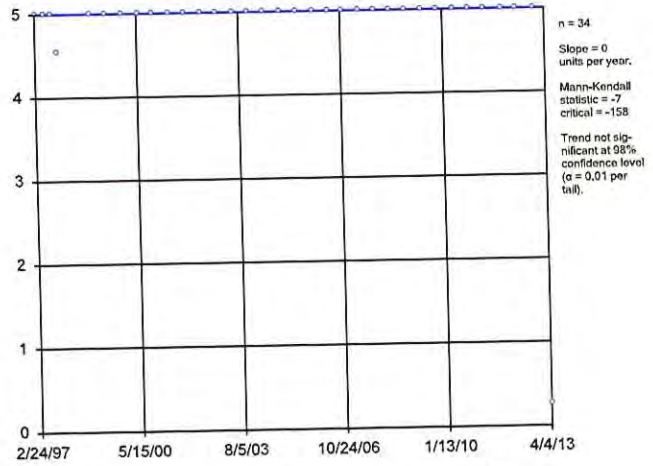


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Sen's Slope Estimator

110-SS (bg)

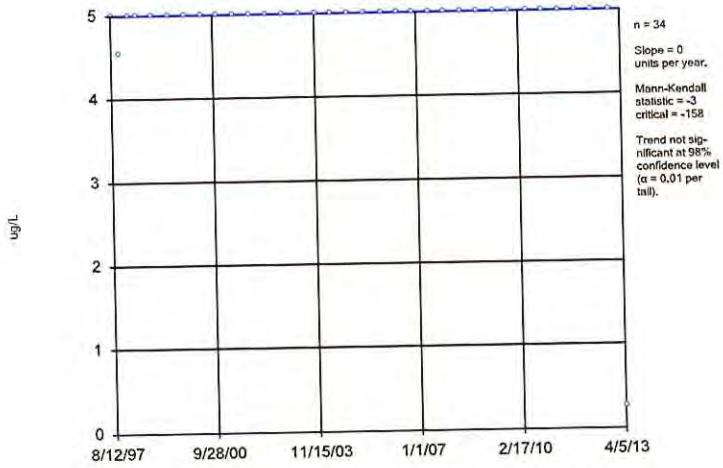


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Sen's Slope Estimator

115-SS (bg)

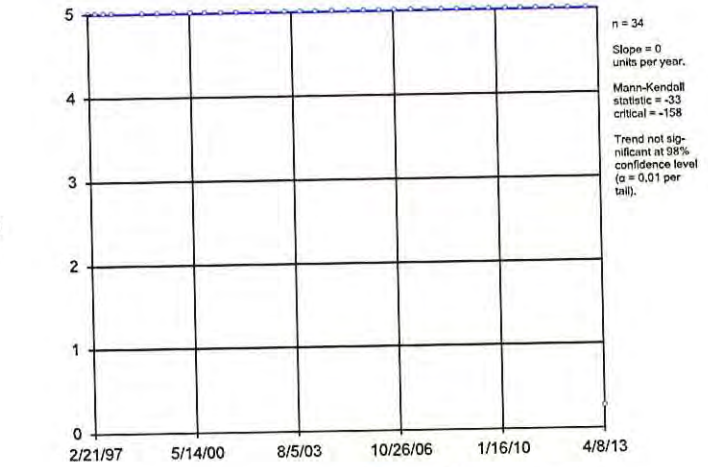


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Sen's Slope Estimator

201A-SS (bg)

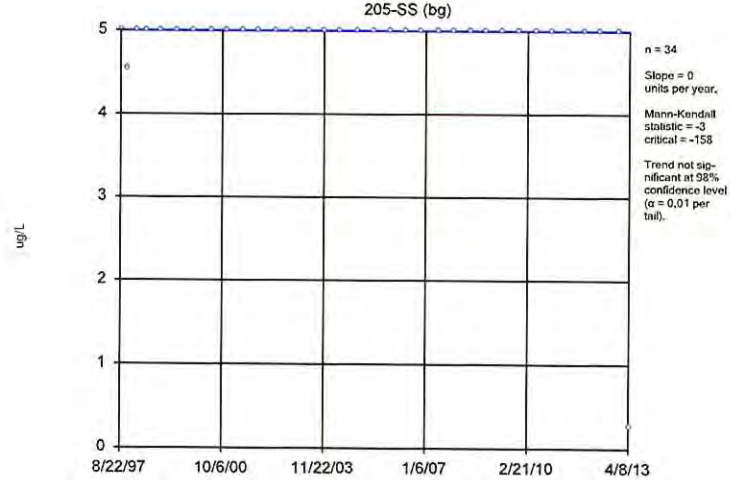


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

205-SS (bg)

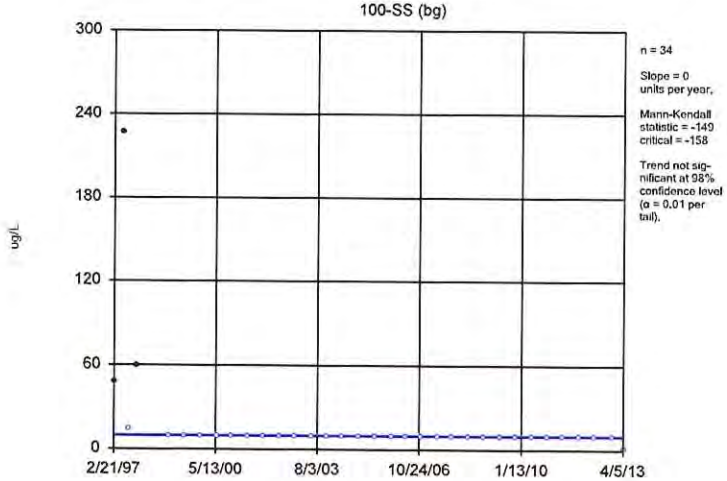


Constituent: Vanadium Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SS (bg)

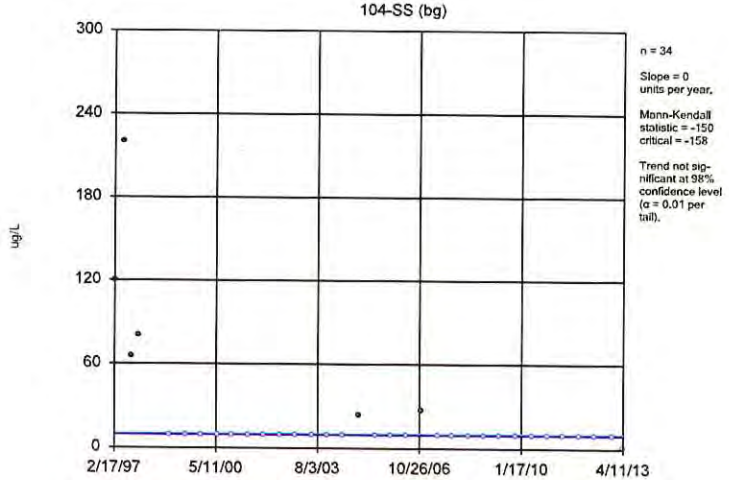


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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SS (bg)

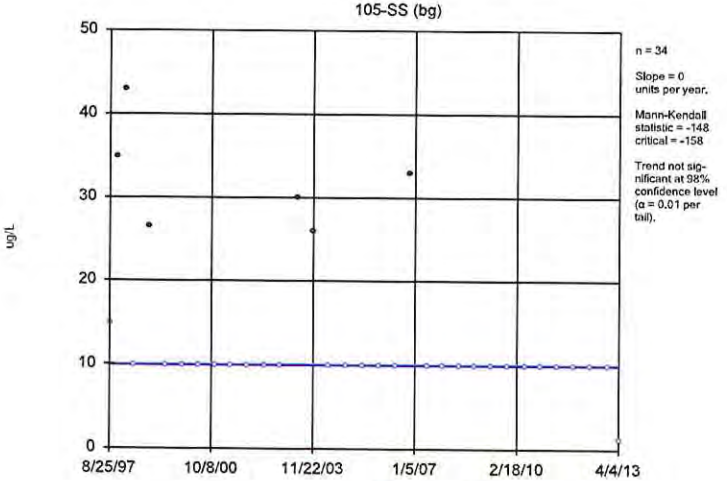


Constituent: Zinc Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

105-SS (bg)



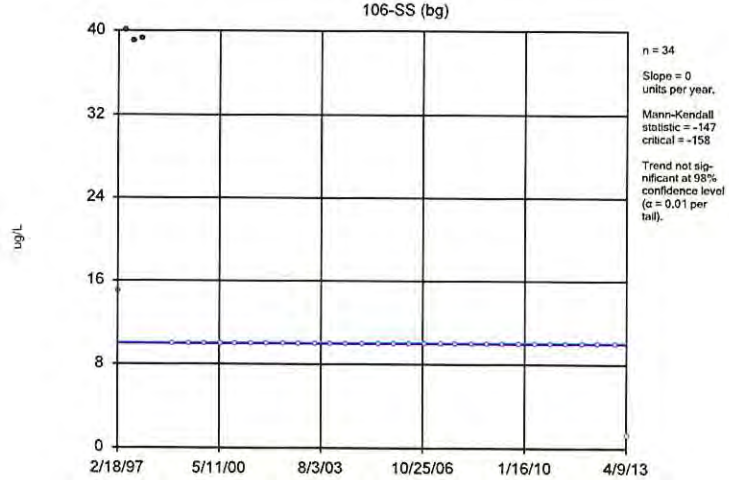
Constituent: Zinc Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SS (bg)

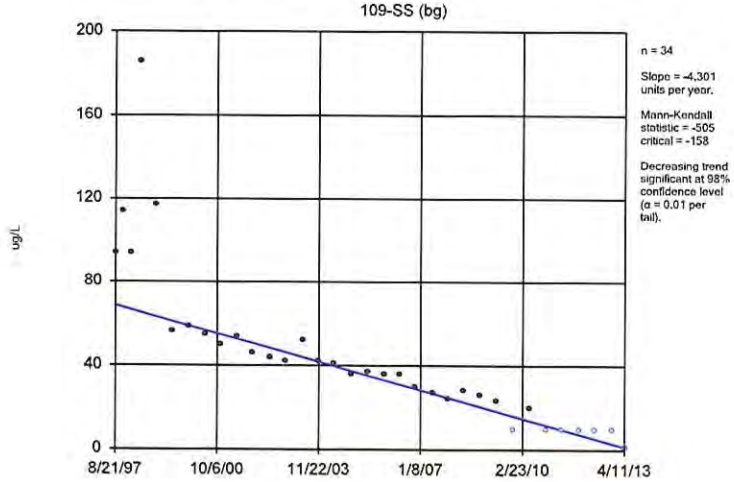


Constituent: Zinc Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

109-SS (bg)

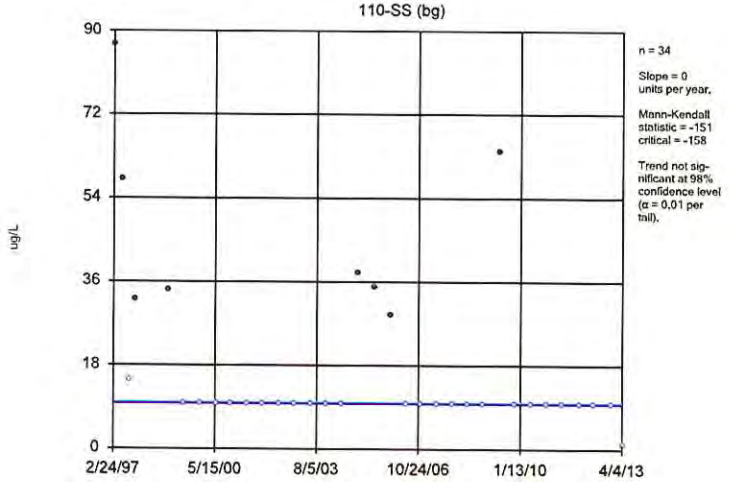


Constituent: Zinc Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

110-SS (bg)

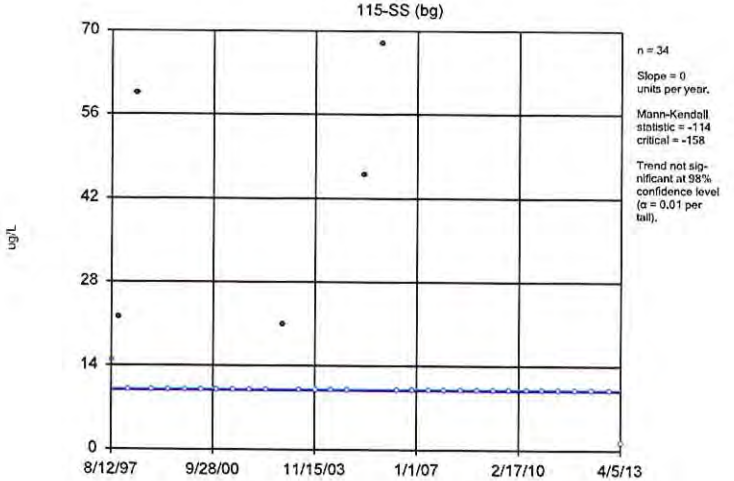


Constituent: Zinc Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

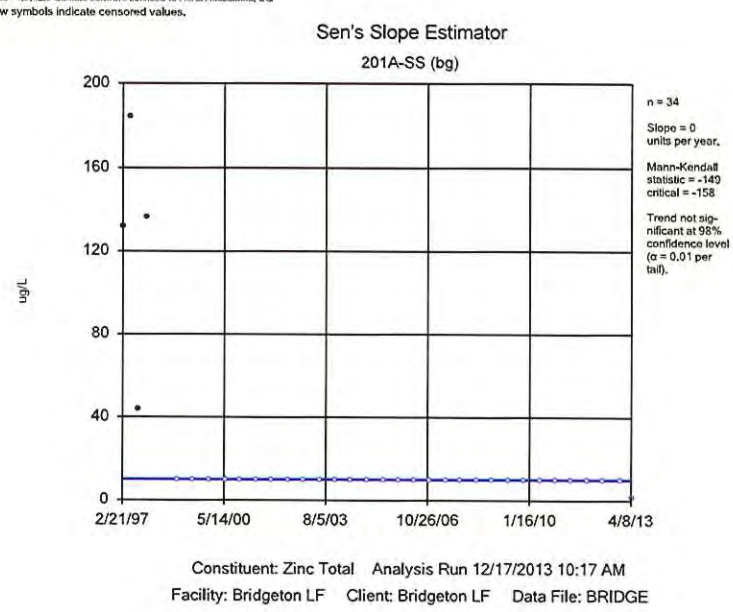
115-SS (bg)



Constituent: Zinc Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

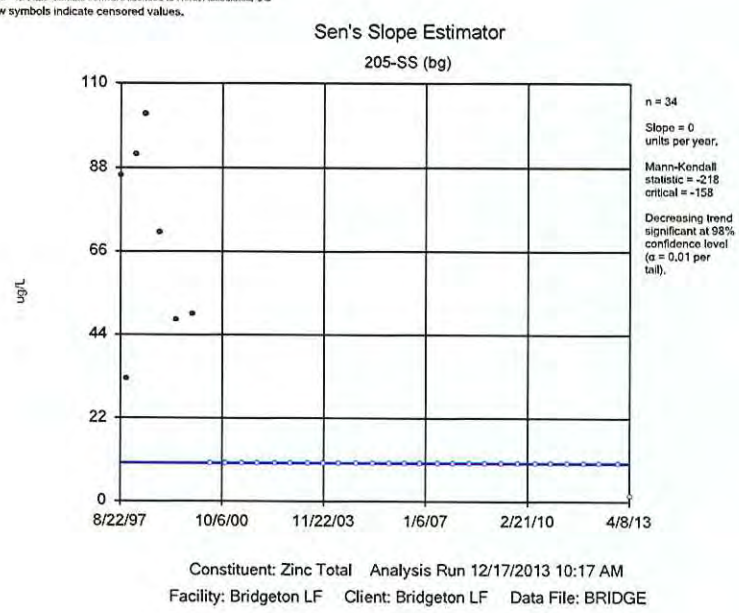
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: Zinc Total Analysis Run 12/17/2013 10:17 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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INTRA-WELL PREDICTION LIMITS
ST. LOUIS FORMATION

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Ammonia as N (mg/L)	100-SS	0.8	0.05ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Ammonia as N (mg/L)	104-SS	0.47	0.05ND	No	34	n/a	n/a	79.41	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Ammonia as N (mg/L)	105-SS	0.14	0.05ND	No	34	n/a	n/a	82.35	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Ammonia as N (mg/L)	106-SS	0.8	0.05ND	No	34	n/a	n/a	64.71	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Ammonia as N (mg/L)	109-SS	0.31	0.05ND	No	34	n/a	n/a	85.29	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Ammonia as N (mg/L)	110-SS	1.8	0.15	No	34	n/a	n/a	5.882	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Ammonia as N (mg/L)	115-SS	0.34	0.05ND	No	34	n/a	n/a	67.65	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Ammonia as N (mg/L)	201A-SS	0.32	0.05ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Ammonia as N (mg/L)	205-SS	0.335	0.05ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	100-SS	771	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	104-SS	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	105-SS	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	106-SS	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	109-SS	1760	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	110-SS	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	115-SS	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	201A-SS	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	205-SS	0.075	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	100-SS	2990	2.5ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	104-SS	11	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	105-SS	3	2.5ND	No	34	n/a	n/a	52.94	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	106-SS	9.8	2.5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	109-SS	5830	2.5ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	110-SS	5.25	2.5ND	No	34	n/a	n/a	61.76	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	115-SS	19	2.5ND	No	34	n/a	n/a	85.29	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	201A-SS	6.5	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	205-SS	5.25	2.5ND	No	34	67.88	6.037	0	None	No	0.0001721	Param Intra 1 of 2
Barium Total (ug/L)	100-SS	82.98	67	No	33	88.49	9.846	0	None	No	0.0001721	Param Intra 1 of 2
Barium Total (ug/L)	104-SS	113.2	100	No	34	146.7	46.18	0	None	No	0.0001721	Param Intra 1 of 2
Barium Total (ug/L)	105-SS	262.2	150	No	33	142.4	10.87	0	None	No	0.0001721	Param Intra 1 of 2
Barium Total (ug/L)	106-SS	169.7	140	No	34	64.73	4.95	0	None	No	0.0001721	Param Intra 1 of 2
Barium Total (ug/L)	109-SS	77.11	62	No	34	15.54	2.072	0	None	sqrt(x)	0.001599	NP Intra (normality) 1 of 2
Barium Total (ug/L)	110-SS	429.4	290	No	34	n/a	n/a	0	n/a	n/a	0.0001721	Param Intra 1 of 2
Barium Total (ug/L)	115-SS	520	310	No	33	110	15.34	0	None	No	0.001599	NP Intra (normality) 1 of 2
Barium Total (ug/L)	201A-SS	148.6	130	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Barium Total (ug/L)	205-SS	183	140	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	100-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	104-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	105-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	106-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	109-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	110-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	115-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	201A-SS	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	205-SS	0.0485	1ND	No	34	1465876	673905	11.76	None	x^3	0.0001721	Param Intra 1 of 2
Boron Total (ug/L)	100-SS	146.6	130	No	34	n/a	n/a	23.53	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Boron Total (ug/L)	104-SS	160	140	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	105-SS	6.9	50ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	106-SS	6.9	50ND	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Boron Total (ug/L)	109-SS	330	250									

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Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron Total (ug/L)	110-SS	317.4	270	No	32	255.9	24.42	0	None	No	0.0001721	Param Intra 1 of 2
Boron Total (ug/L)	115-SS	1000	230	No	34	n/a	n/a	32.35	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Boron Total (ug/L)	201A-SS	6.9	50ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	205-SS	282	50ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	100-SS	2.5	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	104-SS	0.0355	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	105-SS	2.5	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	106-SS	2.5	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	109-SS	4.62	0.1ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	110-SS	0.0355	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	115-SS	2.5	0.1ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	201A-SS	2.5	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	205-SS	5.83	0.1ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Calcium Total (ug/L)	100-SS	106758	98000	No	33	95455	4502	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	104-SS	96091	92000	No	34	81212	5949	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	105-SS	119400	92000	No	34	82547	14736	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	106-SS	110864	100000	No	32	95200	6214	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	109-SS	98187	91000	No	33	84194	5573	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	110-SS	297921	240000	No	33	220333	30902	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	115-SS	276673	180000	No	34	151538	50036	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	201A-SS	107912	100000	No	34	87944	7984	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	205-SS	110000	100000	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	100-SS	21	5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	104-SS	96	55	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	105-SS	42	5ND	No	34	n/a	n/a	70.59	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	106-SS	66	5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	109-SS	18	5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	110-SS	98.91	43	No	34	50.38	19.4	0	None	No	0.0001721	Param Intra 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	115-SS	180	5ND	No	34	n/a	n/a	32.35	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	201A-SS	27.4	5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	205-SS	52	5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chloride (mg/L)	100-SS	10.14	3.5	No	34	6.151	1.593	0	None	No	0.0001721	Param Intra 1 of 2
Chloride (mg/L)	104-SS	5.2	4.6	No	34	n/a	n/a	47.06	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chloride (mg/L)	105-SS	160	81	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chloride (mg/L)	106-SS	24	24	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chloride (mg/L)	109-SS	17	3.7	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chloride (mg/L)	110-SS	278.9	190	No	33	183.3	38.07	0	None	No	0.0001721	Param Intra 1 of 2
Chloride (mg/L)	115-SS	637.1	250	No	34	13.29	4.777	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Chloride (mg/L)	201A-SS	4.3	3.9	No	34	n/a	n/a	35.29	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chloride (mg/L)	205-SS	45.17	33	No	34	27.82	6.94	0	None	No	0.0001721	Param Intra 1 of 2
Chromium Total (ug/L)	100-SS	20.7	2.5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	104-SS	6.6	2.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	105-SS	6.4	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	106-SS	8	2.5ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	109-SS	13.7	2.5ND	No	34	n/a	n/a	79.41	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	110-SS	37.5	2.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	115-SS	5.5	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	201A-SS	7.5	2.5ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	205-SS	52	2.5ND	No	34	n/a	n/a	82.35	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	100-SS	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt Total (ug/L)	104-SS	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	105-SS	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	106-SS	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	109-SS	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	110-SS	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Cobalt Total (ug/L)	115-SS	62	13	No	34	n/a	n/a	50	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	201A-SS	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	205-SS	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	100-SS	19.5	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	104-SS	0.37	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	105-SS	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	106-SS	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	109-SS	30.6	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	110-SS	41	2.5ND	No	34	n/a	n/a	67.65	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	115-SS	21	2.5ND	No	34	n/a	n/a	79.41	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	201A-SS	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	205-SS	30	2.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	100-SS	0.9412	0.79	No	30	0.7418	0.07849	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	104-SS	1.013	0.63	No	30	0.7887	0.08838	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	105-SS	1.045	0.59	No	32	0.7518	0.1162	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	106-SS	2.336	2.1	No	32	1.936	0.1587	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	109-SS	2.547	2.3	No	32	2.087	0.1826	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	110-SS	1.041	0.43	No	32	0.6746	0.1371	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	115-SS	1.903	0.66	No	32	0.94	0.3822	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	201A-SS	0.6265	0.37	No	32	0.4877	0.05505	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	205-SS	0.572	0.36	No	32	0.4239	0.05875	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	100-SS	523.2	470	No	33	457	26.39	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	104-SS	469.7	450	No	33	400.1	27.71	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	105-SS	565.5	430	No	33	389.2	70.25	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	106-SS	497	460	No	32	426.4	28.04	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	109-SS	486.2	450	No	32	422	25.45	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	110-SS	1182	950	No	32	909.9	107.9	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	115-SS	1237	780	No	34	684.5	221	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	201A-SS	503.8	450	No	33	402	40.55	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	205-SS	557.9	500	No	33	457.1	40.14	0	None	No	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	100-SS	1950	10ND	No	34	n/a	n/a	17.65	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Iron Total (ug/L)	104-SS	7193	1500	No	34	40.01	17.91	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	105-SS	12863	310	No	34	7.08	0.9523	0	None	ln(x)	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	106-SS	2143	600	No	34	7.563	2.131	0	None	x^(1/3)	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	109-SS	4955	10ND	No	33	5.252	1.297	0	None	ln(x)	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	110-SS	10932	6500	No	33	6965	1580	0	None	No	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	115-SS	6252	1300	No	34	12.38	2.416	0	None	x^(1/3)	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	201A-SS	5959	67	No	34	5.937	1.102	0	None	ln(x)	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	205-SS	2041	99	No	33	806.4	491.7	0	None	No	0.0001721	Param Intra 1 of 2
Lead Total (ug/L)	100-SS	2720	2.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	104-SS	25	2.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	105-SS	0.12	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	106-SS	0.12	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	109-SS	3370	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	110-SS	0.12	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead Total (ug/L)	115-SS	0.12	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	201A-SS	25	2.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	205-SS	88.6	2.5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Magnesium Total (ug/L)	100-SS	60939	54000	No	34	52865	3229	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	104-SS	56549	53000	No	34	47774	3509	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	105-SS	62216	48000	No	34	44035	7270	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	106-SS	52557	49000	No	33	44803	3088	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	109-SS	59054	53000	No	33	51530	2997	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	110-SS	107252	87000	No	33	85806	8541	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	115-SS	124066	81000	No	34	76685	18945	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	201A-SS	55725	48000	No	34	43371	4940	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	205-SS	63724	57000	No	34	52806	4366	0	None	No	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	100-SS	75	2.5ND	No	34	n/a	n/a	50	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Manganese Total (ug/L)	104-SS	127	38	No	34	5.673	2.239	2.941	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	105-SS	51.48	6.5	No	33	20.11	12.5	3.03	None	No	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	106-SS	63.66	16	No	33	4.473	1.396	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	109-SS	237.3	2.5ND	No	34	1.629	1.535	41.18	Aitchison	ln(x)	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	110-SS	269.4	180	No	31	193.1	30.14	0	None	No	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	115-SS	148.4	46	No	34	54.97	37.35	2.941	None	No	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	201A-SS	622.6	11	No	34	12.09	5.142	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	205-SS	118.4	2.5ND	No	34	1.746	1.211	26.47	Aitchison	ln(x)	0.0001721	Param Intra 1 of 2
Mercury Total (ug/L)	100-SS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	104-SS	0.3	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	105-SS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	106-SS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	109-SS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	110-SS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	115-SS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	201A-SS	0.35	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	205-SS	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	100-SS	46.09	16	No	34	4.124	1.066	11.76	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Nickel Total (ug/L)	104-SS	23	5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	105-SS	20	5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	106-SS	20	5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	109-SS	20	5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	110-SS	55	14	No	34	n/a	n/a	29.41	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Nickel Total (ug/L)	115-SS	140	43	No	34	n/a	n/a	35.29	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Nickel Total (ug/L)	201A-SS	20	5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	205-SS	32.2	5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	100-SS	0.21	0.05ND	No	34	n/a	n/a	76.47	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	104-SS	0.39	0.05ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	105-SS	0.12	0.05ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	106-SS	0.54	0.05ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	109-SS	0.18	0.05ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	110-SS	0.0053	0.05ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	115-SS	5	0.05ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	201A-SS	0.34	0.34	No	34	n/a	n/a	58.82	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	205-SS	0.138	0.05ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
pH [Field] (su)	100-SS	8.17	6.95	No	34	7.254	0.3664	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	104-SS	8.341	6.69	No	34	7.296	0.418	0	None	No	0.00008607	Param Intra 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH [Field] (su)	105-SS	8.224	7.21	No	34	7.464	0.3038	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	106-SS	8.164	6.94	No	34	7.221	0.3769	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	109-SS	8.03	7.08	No	33	7.223	0.3214	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	110-SS	7.591	6.6	No	34	6.778	0.3251	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	115-SS	7.572	6.67	No	33	6.79	0.3113	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	201A-SS	8.275	6.99	No	34	7.297	0.3912	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	205-SS	7.819	6.96	No	34	7.154	0.2663	0	None	No	0.00008607	Param Intra 1 of 2
Phosphorus Total (mg/L)	100-SS	0.21	0.025ND	No	34	n/a	n/a	64.71	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	104-SS	0.46	0.025ND	No	34	n/a	n/a	52.94	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	105-SS	0.22	0.025ND	No	34	n/a	n/a	41.18	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Phosphorus Total (mg/L)	106-SS	0.38	0.025ND	No	34	n/a	n/a	67.65	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	109-SS	0.25	0.025ND	No	34	n/a	n/a	67.65	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	110-SS	0.4211	0.15	No	33	0.4222	0.09032	3.03	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Phosphorus Total (mg/L)	115-SS	0.3056	0.15	No	34	0.1102	0.07811	11.76	None	No	0.0001721	Param Intra 1 of 2
Phosphorus Total (mg/L)	201A-SS	0.37	0.025ND	No	34	n/a	n/a	64.71	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	205-SS	0.112	0.025ND	No	34	n/a	n/a	64.71	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	100-SS	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	104-SS	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	105-SS	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	106-SS	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	109-SS	39	2.5ND	No	34	n/a	n/a	76.47	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	110-SS	50	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	115-SS	50	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	201A-SS	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	205-SS	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	100-SS	0.06	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	104-SS	0.06	2.5ND	No	33	n/a	n/a	100	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	105-SS	0.06	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	106-SS	0.06	2.5ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	109-SS	0.06	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	110-SS	0.06	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	115-SS	5.94	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	201A-SS	0.06	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	205-SS	0.06	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Sodium Total (ug/L)	100-SS	33674	12000	No	34	20209	5384	0	None	No	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	104-SS	24768	13000	No	33	15885	3538	0	None	No	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	105-SS	77287	60000	No	34	55971	8523	0	None	No	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	106-SS	19268	18000	No	34	13747	2208	0	None	No	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	109-SS	42862	18000	No	33	154.3	21	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	110-SS	122710	94000	No	33	83697	15538	0	None	No	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	115-SS	272162	65000	No	34	37.73	10.83	0	None	x^(1/3)	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	201A-SS	59548	13000	No	34	175.3	27.47	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	205-SS	55500	15000	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Specific Conductance [Field] (umhos/cm)	100-SS	1012	828	No	33	856.6	61.84	0	None	No	0.0001721	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	104-SS	937.6	869	No	33	754.5	72.89	0	None	No	0.0001721	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	105-SS	1309	1036	No	34	903.7	161.9	0	None	No	0.0001721	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	106-SS	984.6	879	No	34	803.1	72.57	0	None	No	0.0001721	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	109-SS	1270	824	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Specific Conductance [Field] (umhos/cm)	110-SS	2427	1948	No	32	1856	226.3	0	None	No	0.0001721	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	115-SS	2736	2015	No	34	1496	496.1	0	None	No	0.0001721	Param Intra 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Specific Conductance [Field] (umhos/cm)	201A-SS	992.2	809	No	33	808.2	73.32	0	None	No	0.0001721	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	205-SS	1270	936	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Sulfate as SO4 (mg/L)	100-SS	82.93	39	No	34	58.74	9.674	0	None	No	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	104-SS	44	6.1	No	34	23.34	8.257	2.941	None	No	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	105-SS	168.2	85	No	34	7.849	2.048	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	106-SS	65.28	49	No	34	49.88	6.158	0	None	No	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	109-SS	75.64	33	No	34	45.46	12.07	0	None	No	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	110-SS	101.7	55	No	34	5534	1920	0	None	x^2	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	115-SS	58.32	12	No	34	27.26	12.42	0	None	No	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	201A-SS	81.43	63	No	33	59.46	8.75	0	None	No	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	205-SS	73.48	54	No	34	50.55	9.17	0	None	No	0.0001721	Param Intra 1 of 2
Thallium Total (ug/L)	100-SS	50	1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	104-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	105-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	106-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	109-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	110-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	115-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	201A-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	205-SS	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	100-SS	584.8	460	No	33	483.8	40.22	0	None	No	0.0001721	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	104-SS	504.3	420	No	32	419.6	33.63	0	None	No	0.0001721	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	105-SS	800	590	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	106-SS	523.1	470	No	33	454.1	27.47	0	None	No	0.0001721	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	109-SS	562.2	430	No	34	466.7	38.16	0	None	No	0.0001721	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	110-SS	1455	1100	No	34	1142	125	0	None	No	0.0001721	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	115-SS	1580	920	No	34	28.63	4.445	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	201A-SS	569.3	520	No	33	473.4	38.19	0	None	No	0.0001721	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	205-SS	572.7	500	No	33	503.5	27.53	0	None	No	0.0001721	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	100-SS	2	1.5	No	34	n/a	n/a	73.53	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Organic Carbon [TOC] (mg/L)	104-SS	28	9.2	No	34	n/a	n/a	50	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Total Organic Carbon [TOC] (mg/L)	105-SS	5.563	1.6	No	33	0.4832	0.491	15.15	Aitchison`s	ln(x)	0.0001721	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	106-SS	9.8	2.2	No	34	n/a	n/a	55.88	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Organic Carbon [TOC] (mg/L)	109-SS	5.6	1.5	No	34	n/a	n/a	55.88	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Organic Carbon [TOC] (mg/L)	110-SS	27.37	15	No	34	13.76	5.44	0	None	No	0.0001721	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	115-SS	50.78	11	No	34	2.608	1.806	20.59	Aitchison`s	sqrt(x)	0.0001721	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	201A-SS	2.8	1.6	No	34	n/a	n/a	52.94	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Organic Carbon [TOC] (mg/L)	205-SS	10	1.9	No	34	n/a	n/a	47.06	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Vanadium Total (ug/L)	100-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	104-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	105-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	106-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	109-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	110-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	115-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	201A-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	205-SS	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	100-SS	227	10ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	104-SS	220	10ND	No	34	n/a	n/a	82.35	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	105-SS	42.9	10ND	No	34	n/a	n/a	82.35	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Zinc Total (ug/L)	106-SS	40	10ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	109-SS	204.4	10ND	No	34	5.612	3.472	20.59	Aitchison`ssqrt(x)		0.0001721	Param Intra 1 of 2
Zinc Total (ug/L)	110-SS	87	10ND	No	34	n/a	n/a	76.47	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	115-SS	68	10ND	No	34	n/a	n/a	85.29	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	201A-SS	184	10ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	205-SS	102	10ND	No	34	n/a	n/a	79.41	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 11:07 AM

Constituent	Well	Upper Lim.	Lower Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH [Field] (su)	100-SS	8.17	6.337	6.95	No	34	7.254	0.3664	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	104-SS	8.341	6.251	6.69	No	34	7.296	0.418	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	105-SS	8.224	6.704	7.21	No	34	7.464	0.3038	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	106-SS	8.164	6.279	6.94	No	34	7.221	0.3769	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	109-SS	8.03	6.416	7.08	No	33	7.223	0.3214	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	110-SS	7.591	5.965	6.6	No	34	6.778	0.3251	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	115-SS	7.572	6.008	6.67	No	33	6.79	0.3113	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	201A-SS	8.275	6.319	6.99	No	34	7.297	0.3912	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	205-SS	7.819	6.488	6.96	No	34	7.154	0.2663	0	None	No	0.00008607	Param Intra 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 12:44 PM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Ammonia as N (mg/L)	110-SS	0.77	0.15	No	26	n/a	n/a	7.692	n/a	n/a	0.002667	NP Intra (normality) 1 of 2
Barium Total (ug/L)	105-SS	165.8	150	No	13	98.36	21.38	0	None	No	0.0001721	Param Intra 1 of 2
Barium Total (ug/L)	110-SS	292.6	290	No	22	203.7	33.04	0	None	No	0.0001721	Param Intra 1 of 2
Boron Total (ug/L)	100-SS	146.6	130	No	32	1434837	680436	12.5	None	x^3	0.0001721	Param Intra 1 of 2
Boron Total (ug/L)	104-SS	160	140	No	20	n/a	n/a	40	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Calcium Total (ug/L)	**105-SS**	**82685**	**92000**	**Yes**	**11**	**65055**	**5201**	**0**	**None**	**No**	**0.0001721**	**Param Intra 1 of 2**
Calcium Total (ug/L)	106-SS	111169	100000	No	29	94807	6401	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	110-SS	271498	240000	No	20	202050	25357	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	201A-SS	101955	100000	No	22	85186	6232	0	None	No	0.0001721	Param Intra 1 of 2
Calcium Total (ug/L)	205-SS	102000	100000	No	27	n/a	n/a	0	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	110-SS	93.98	43	No	23	45	18.37	0	None	No	0.0001721	Param Intra 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	115-SS	77	5ND	No	15	n/a	n/a	73.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Chloride (mg/L)	104-SS	5	4.6	No	33	n/a	n/a	48.48	n/a	n/a	0.001701	NP Intra (normality) 1 of 2
Chloride (mg/L)	**105-SS**	**22.32**	**81**	**Yes**	**7**	**3.649**	**0.2253**	**0**	**None**	**sqrt(x)**	**0.0001721**	**Param Intra 1 of 2**
Chloride (mg/L)	**106-SS**	**17**	**24**	**Yes**	**29**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.002172**	**NP Intra (normality) 1 of 2**
Chloride (mg/L)	110-SS	269	190	No	28	176	36.15	0	None	No	0.0001721	Param Intra 1 of 2
Chloride (mg/L)	201A-SS	4	3.9	No	24	n/a	n/a	50	n/a	n/a	0.003124	NP Intra (normality) 1 of 2
Chloride (mg/L)	205-SS	45.28	33	No	32	27.53	7.044	0	None	No	0.0001721	Param Intra 1 of 2
Fluoride (mg/L)	109-SS	2.513	2.3	No	20	2.034	0.1749	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	105-SS	487.1	430	No	15	6.897	0.3248	0	None	x^(1/3)	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	106-SS	497.1	460	No	29	424.3	28.5	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	110-SS	1088	950	No	19	844.6	87.33	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	201A-SS	488.3	450	No	21	389.8	36.3	0	None	No	0.0001721	Param Intra 1 of 2
Hardness Total (mg/L)	205-SS	526.4	500	No	23	3.8e10	1.4e10	0	None	x^4	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	106-SS	935.1	600	No	26	17.18	5.15	0	None	sqrt(x)	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	110-SS	10853	6500	No	10	5406	1536	0	None	No	0.0001721	Param Intra 1 of 2
Iron Total (ug/L)	115-SS	7200	1300	No	24	n/a	n/a	0	n/a	n/a	0.003124	NP Intra (normality) 1 of 2
Magnesium Total (ug/L)	100-SS	57529	54000	No	13	50954	2085	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	104-SS	56048	53000	No	32	47478	3400	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	**105-SS**	**45551**	**48000**	**Yes**	**11**	**10.46**	**0.07764**	**0**	**None**	**ln(x)**	**0.0001721**	**Param Intra 1 of 2**
Magnesium Total (ug/L)	106-SS	52709	49000	No	25	44220	3242	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	110-SS	98650	87000	No	17	79741	6595	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	201A-SS	49014	48000	No	13	38969	3186	0	None	No	0.0001721	Param Intra 1 of 2
Magnesium Total (ug/L)	205-SS	62560	57000	No	17	50259	4290	0	None	No	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	110-SS	228.1	180	No	10	172.6	15.66	0	None	No	0.0001721	Param Intra 1 of 2
Manganese Total (ug/L)	**115-SS**	**18.27**	**46**	**Yes**	**11**	**8.983**	**2.739**	**9.091**	**None**	**No**	**0.0001721**	**Param Intra 1 of 2**
Nitrate/Nitrite (mg/L)	**201A-SS**	**0.33**	**0.34**	**Yes**	**27**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.002502**	**NP Intra (NDs) 1 of 2**
Phosphorus Total (mg/L)	115-SS	0.3123	0.15	No	31	0.107	0.08113	12.9	None	No	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	105-SS	75025	60000	No	29	54345	8091	0	None	No	0.0001721	Param Intra 1 of 2
Sodium Total (ug/L)	**106-SS**	**17049**	**18000**	**Yes**	**26**	**12900**	**1594**	**0**	**None**	**No**	**0.0001721**	**Param Intra 1 of 2**
Specific Conductance [Field] (umhos/cm)	105-SS	1049	1036	No	22	813.5	87.59	0	None	No	0.0001721	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	106-SS	1004	879	No	27	798.4	79.43	0	None	No	0.0001721	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	**105-SS**	**51.67**	**85**	**Yes**	**8**	**33.83**	**4.344**	**0**	**None**	**No**	**0.0001721**	**Param Intra 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**105-SS**	**540**	**590**	**Yes**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004291**	**NP Intra (normality) 1 of 2**
Total Organic Carbon [TOC] (mg/L)	110-SS	27.91	15	No	30	13.46	5.687	0	None	No	0.0001721	Param Intra 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 12:44 PM

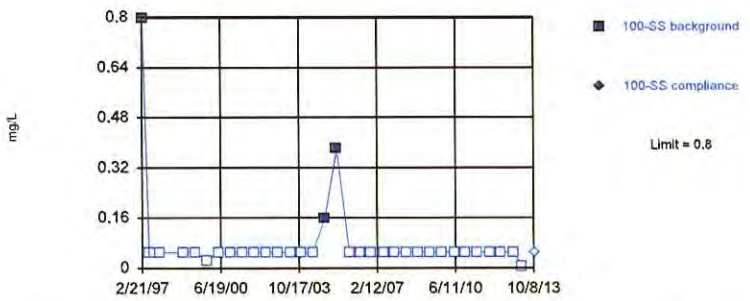
Constituent	Well	Upper Lim.	Lower Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH [Field] (su)	105-SS	8.249	6.716	7.21	No	32	7.482	0.3041	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	106-SS	8.219	6.28	6.94	No	31	7.25	0.3831	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	110-SS	7.608	5.962	6.6	No	33	6.785	0.3278	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	201A-SS	8.334	6.362	6.99	No	30	7.348	0.3882	0	None	No	0.00008607	Param Intra 1 of 2
pH [Field] (su)	205-SS	7.842	6.496	6.96	No	32	7.169	0.2669	0	None	No	0.00008607	Param Intra 1 of 2

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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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

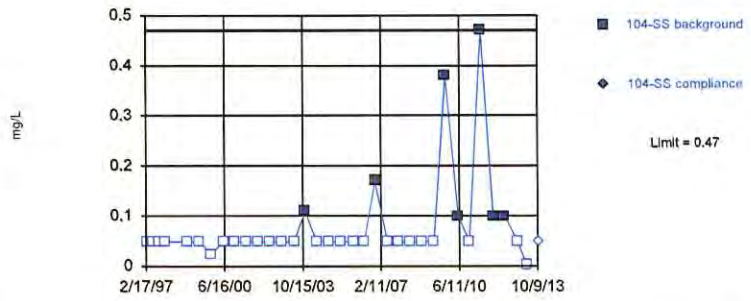
Constituent: Ammonia as N Analysis Run 12/17/2013 10:54 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 79.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

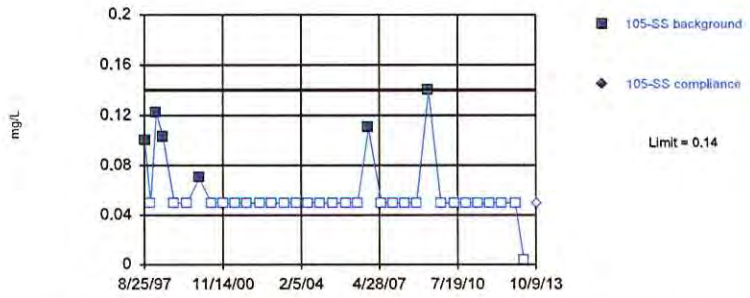
Constituent: Ammonia as N Analysis Run 12/17/2013 10:54 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

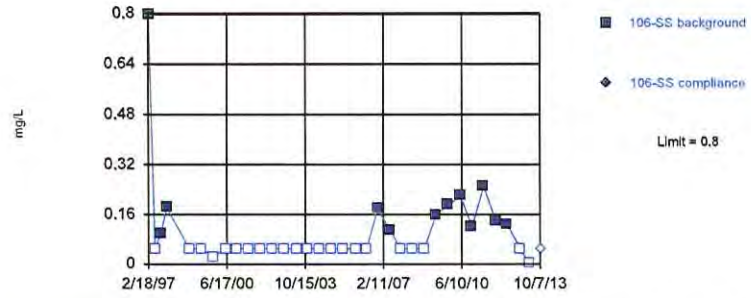
Constituent: Ammonia as N Analysis Run 12/17/2013 10:54 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 12/17/2013 10:54 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

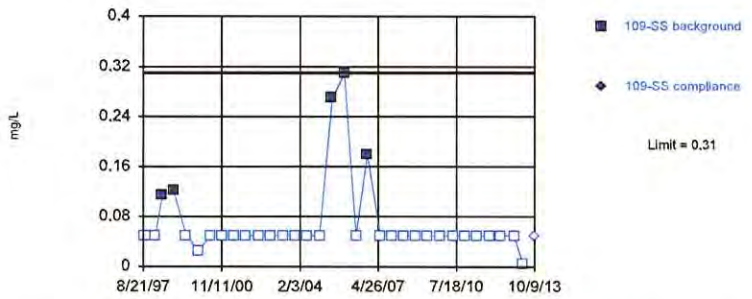
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

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 34 background values. 85.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

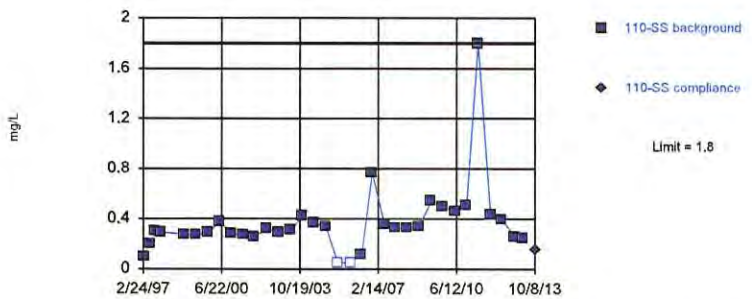
Constituent: Ammonia as N Analysis Run 12/17/2013 10:54 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 5.882% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

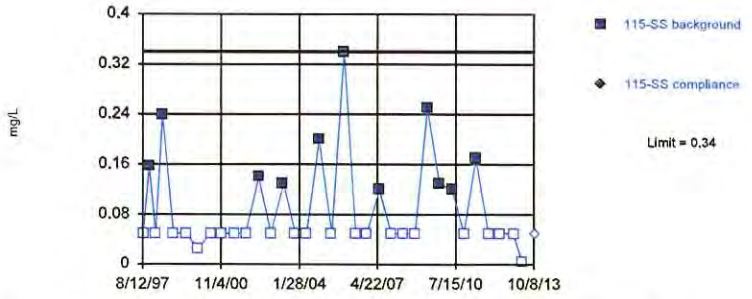
Constituent: Ammonia as N Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 67.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

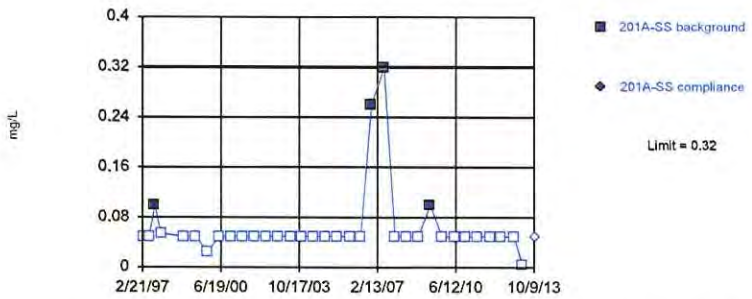
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



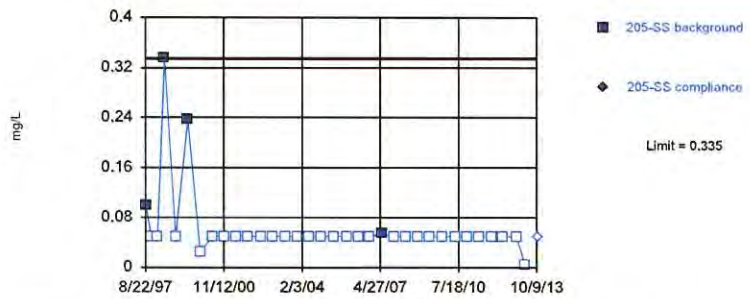
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



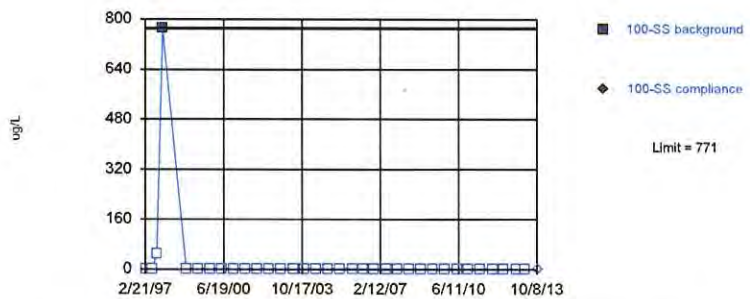
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



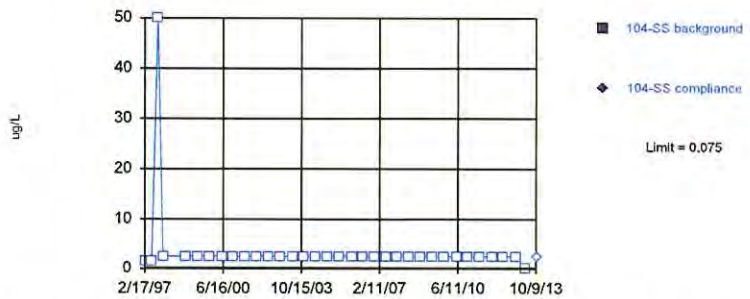
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



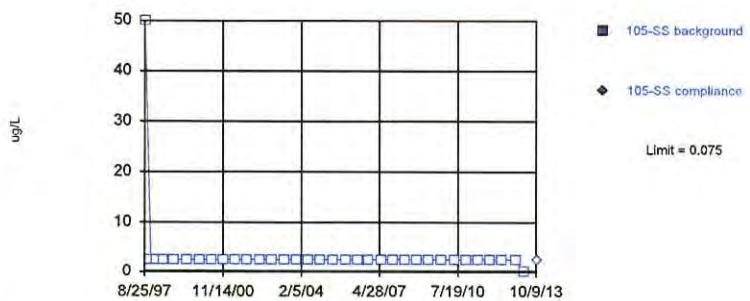
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:55 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



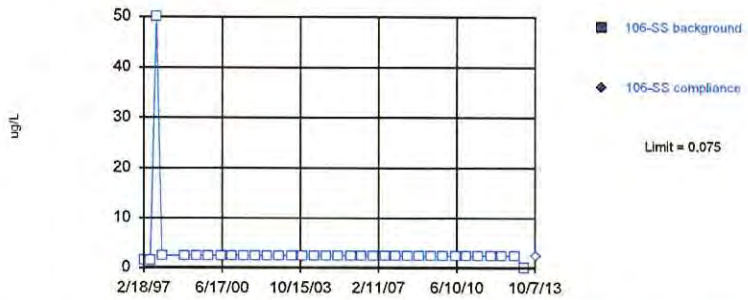
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



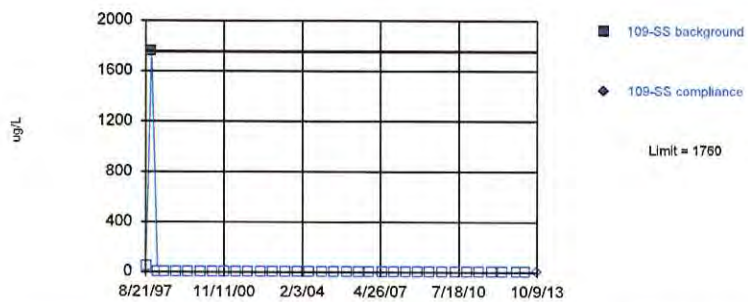
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



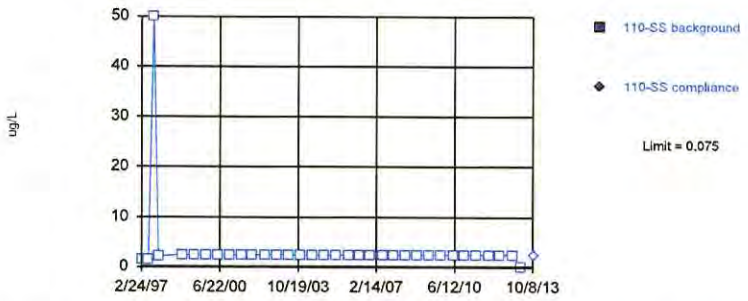
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:55 AM
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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



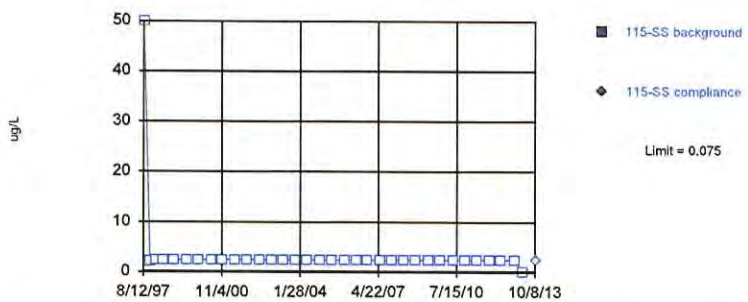
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



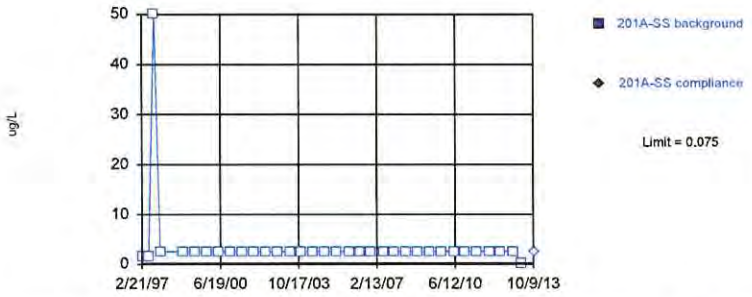
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



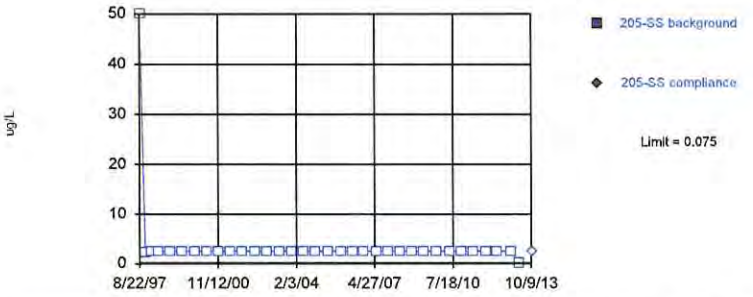
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



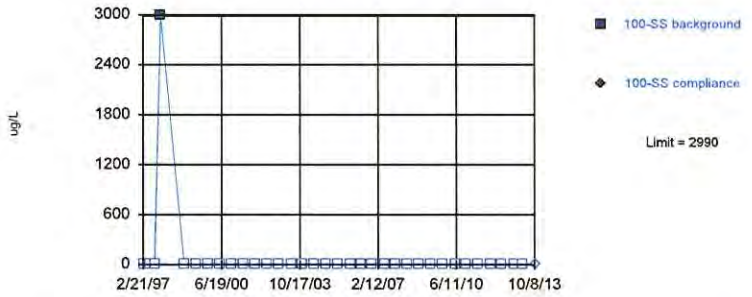
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



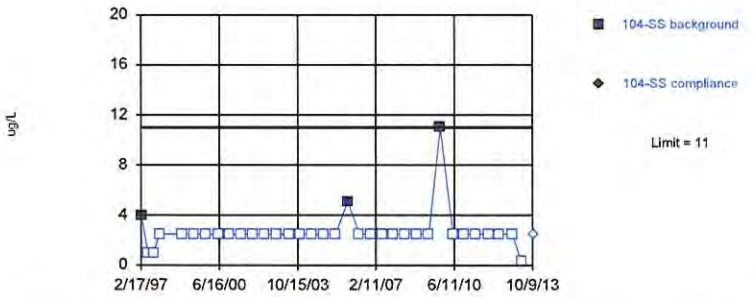
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



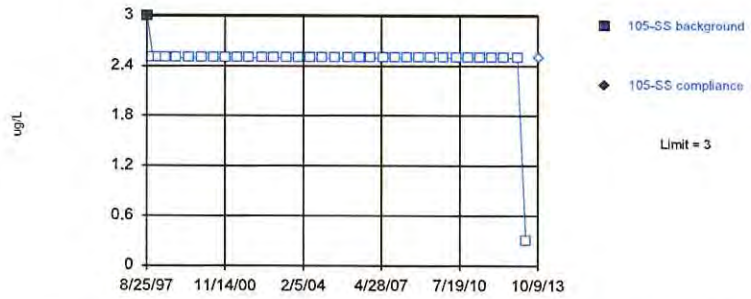
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



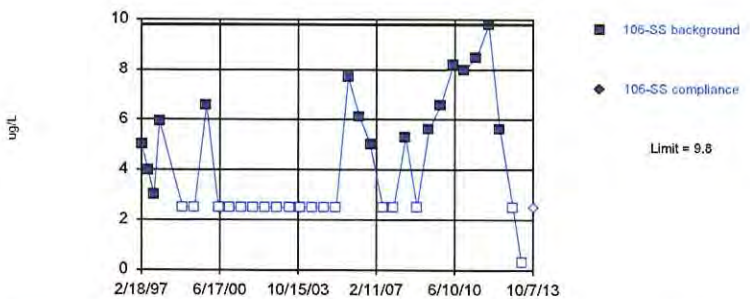
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



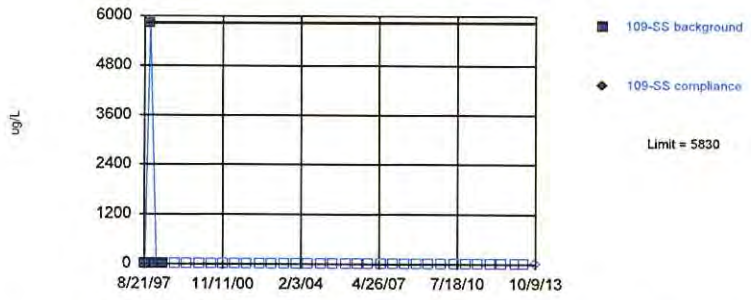
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Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



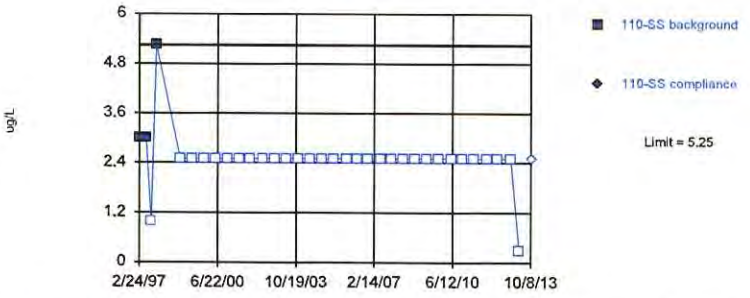
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

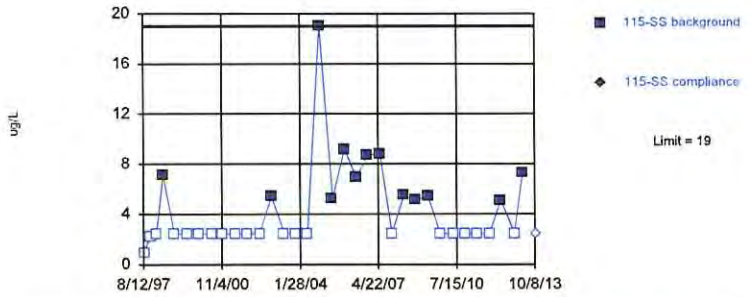
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Hollow symbols indicate censored values.

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 34 background values. 61.76% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

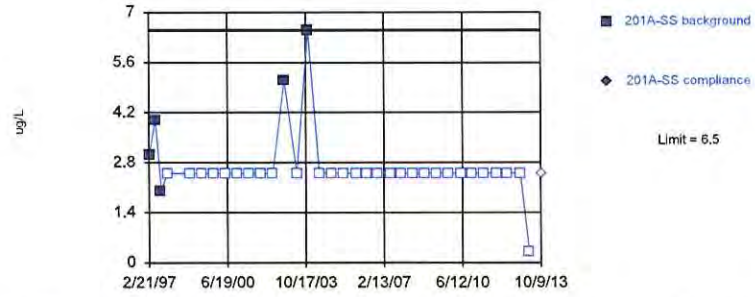
Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 85.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

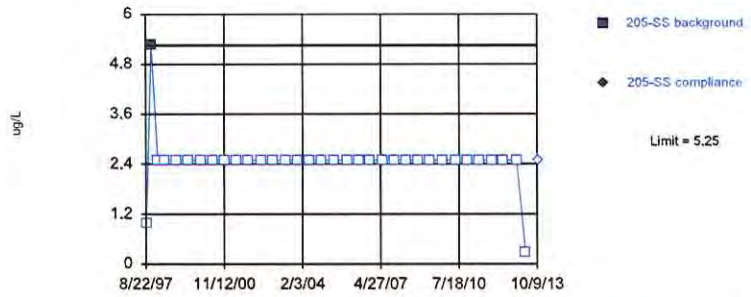
Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

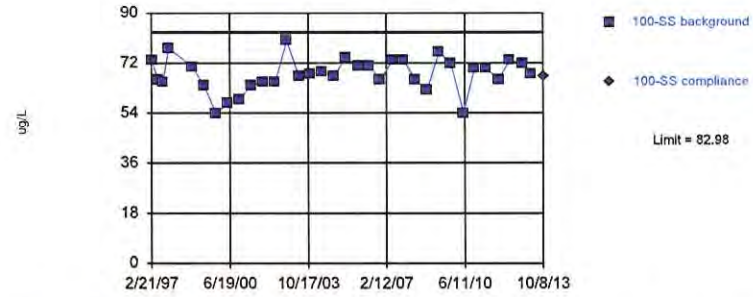
Constituent: Arsenic Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=67.88, Std. Dev.=6.037, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9627, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

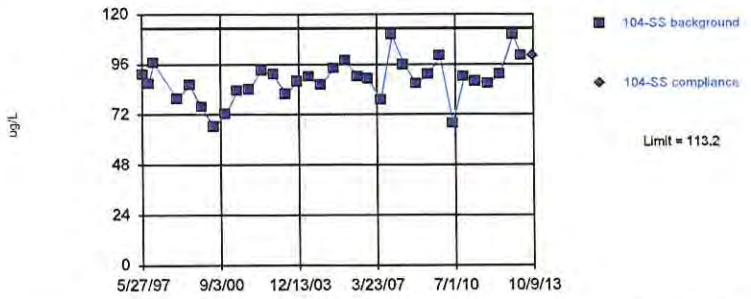
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=88.49, Std. Dev.=9.846, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9608, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 214 (2/17/1997).

Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

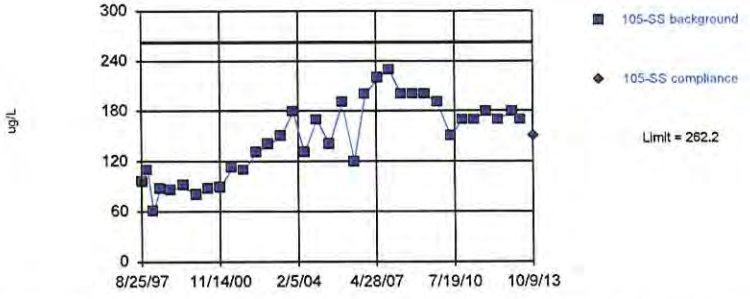
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=146.7, Std. Dev.=46.18, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9454, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

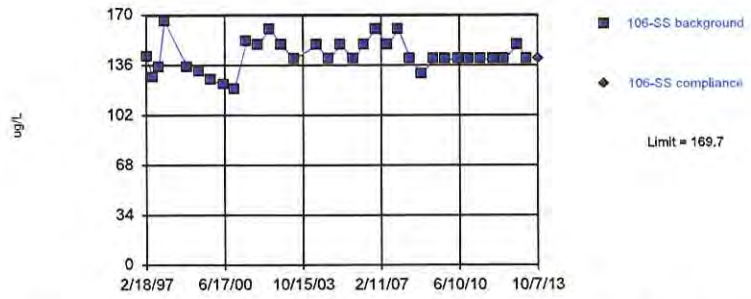
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=142.4, Std. Dev.=10.87, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9478, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 78 (11/20/2003).

Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

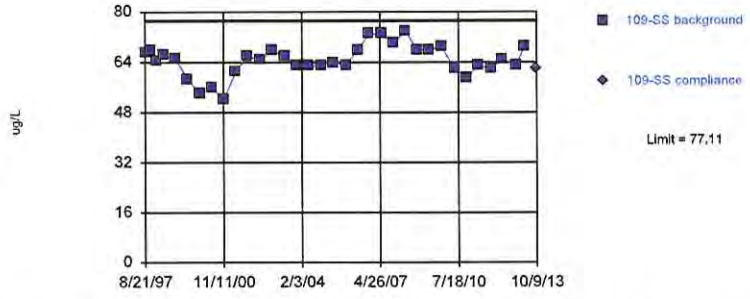
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=64.73, Std. Dev.=4.95, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9615, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

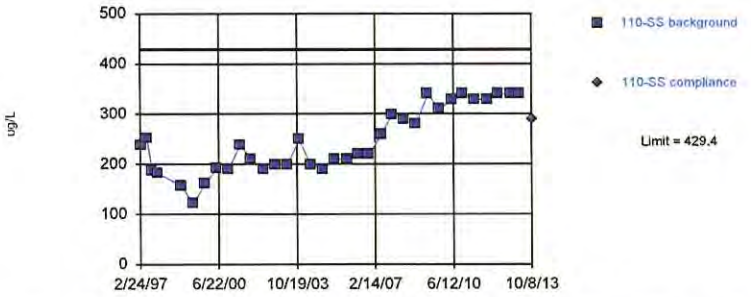
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=15.54, Std. Dev.=2.072, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9204, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

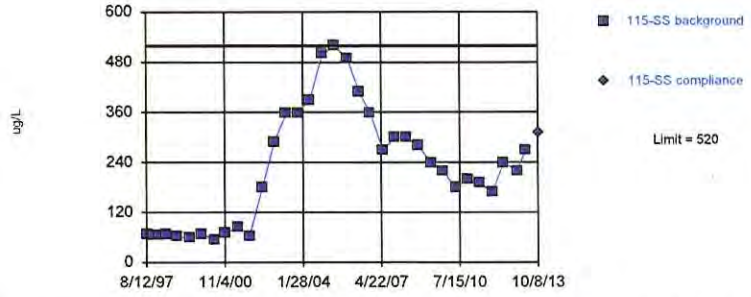
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

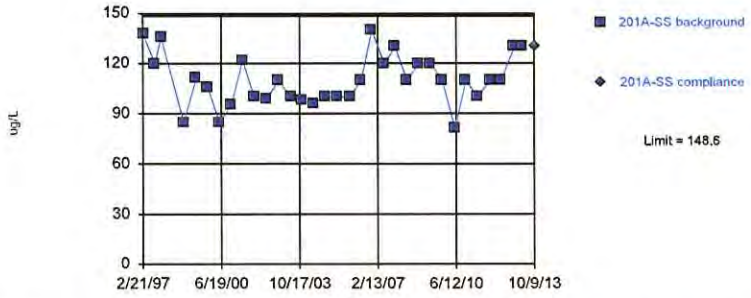
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=110, Std. Dev.=15.34, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9538, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 206 (5/27/1997).

Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

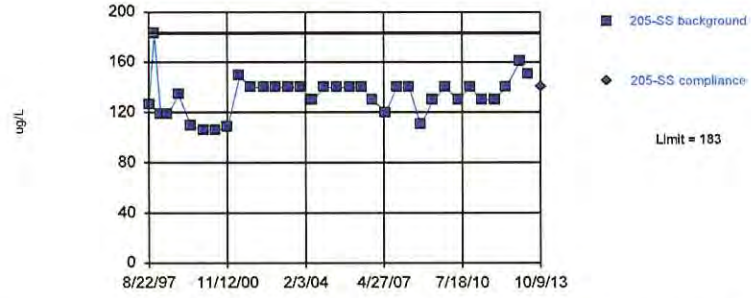
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

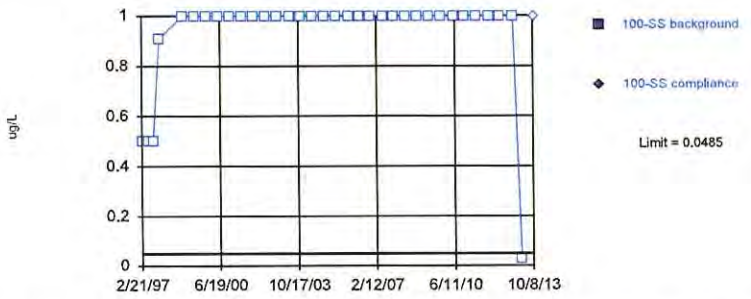
Constituent: Barium Total Analysis Run 12/17/2013 10:55 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



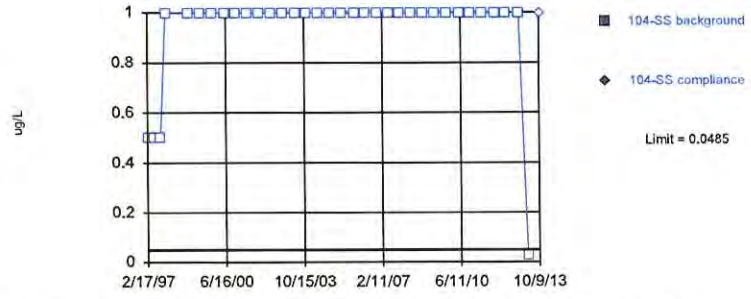
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



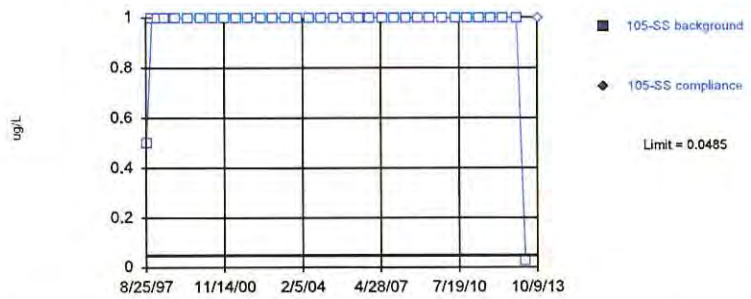
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



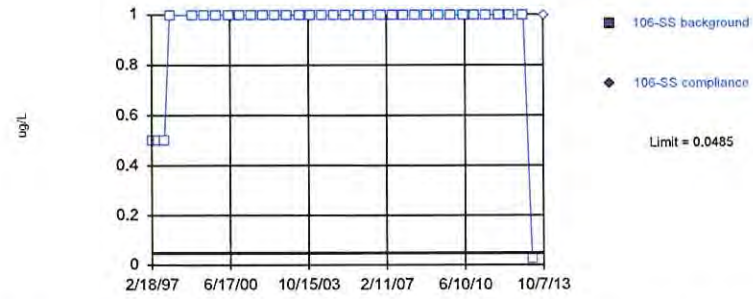
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

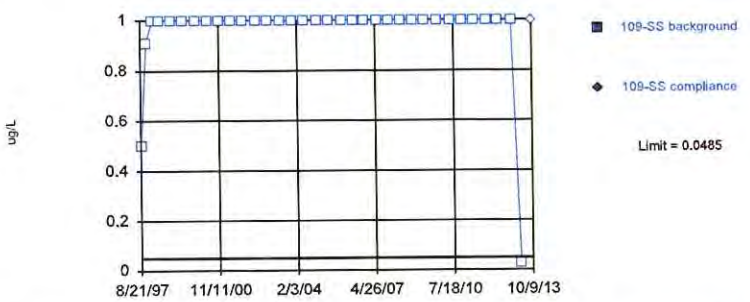
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

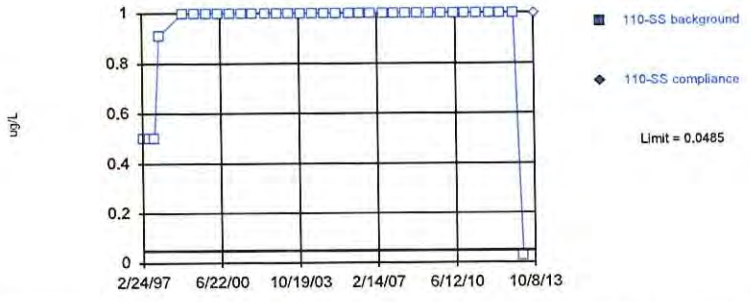
Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

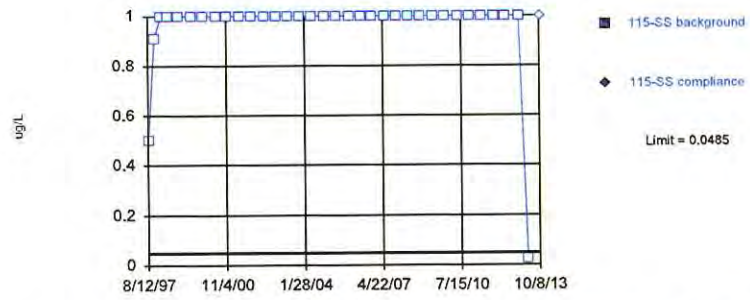
Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

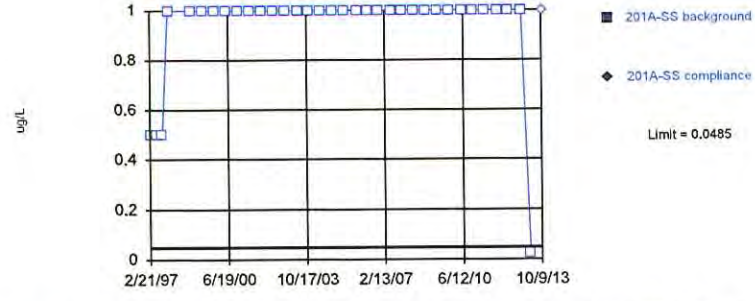
Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



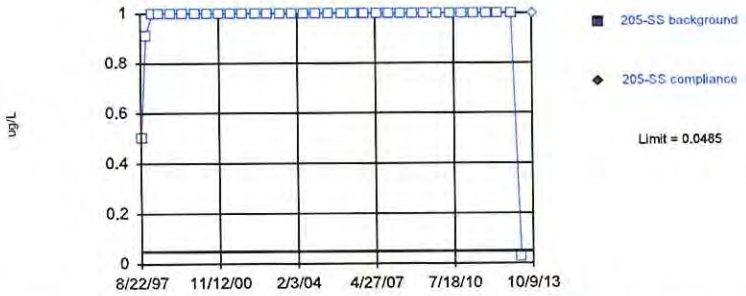
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

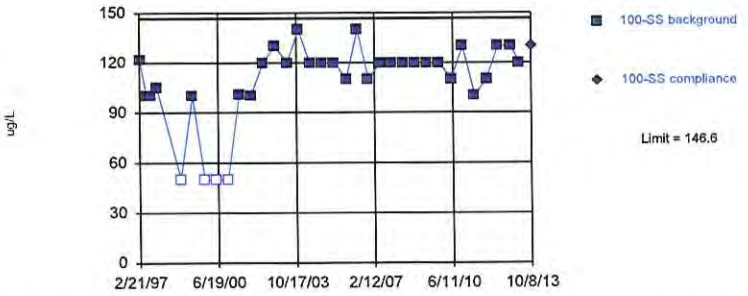


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Beryllium Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Parametric

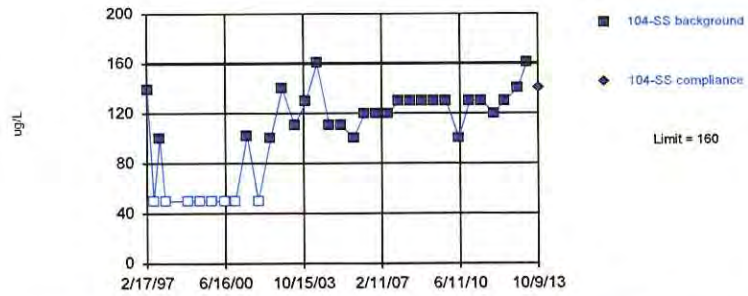


Background Data Summary (based on cube transformation): Mean=1465876, Std. Dev.=673905, n=34, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9115, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

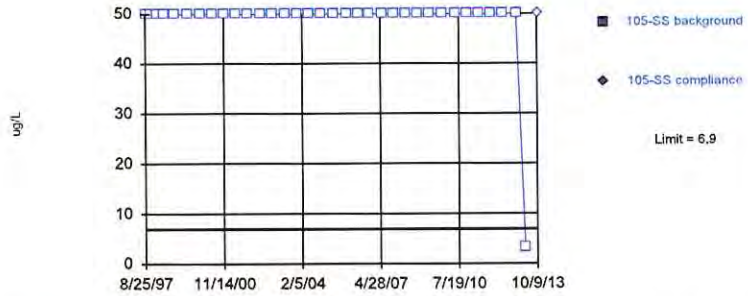


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 23.53% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

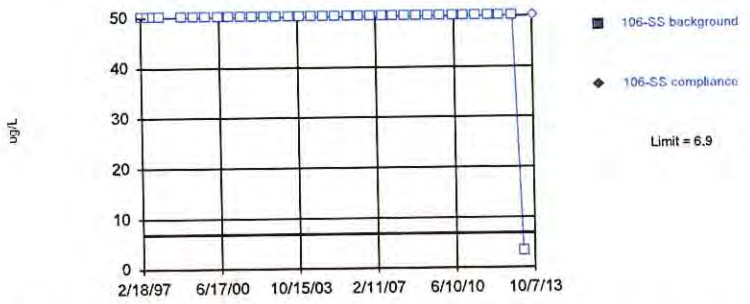
Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

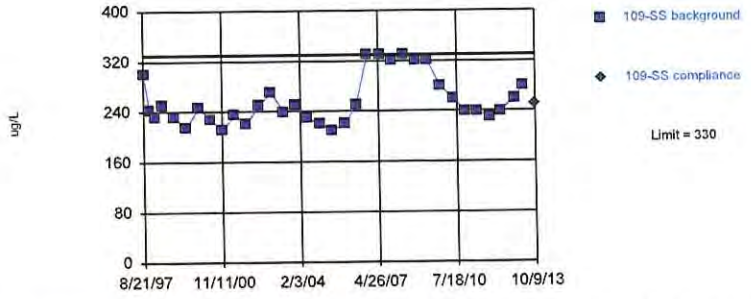
Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

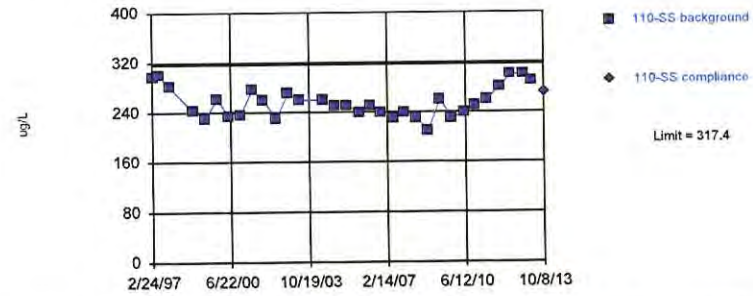
Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=255.9, Std. Dev.=24.42, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.93, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: <100 (8/22/1997); 400 (11/20/2003).

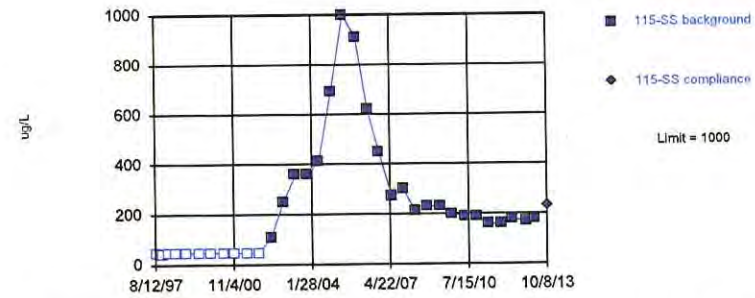
Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 32.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

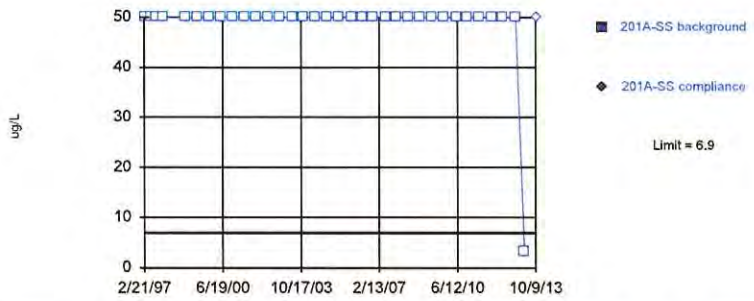
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

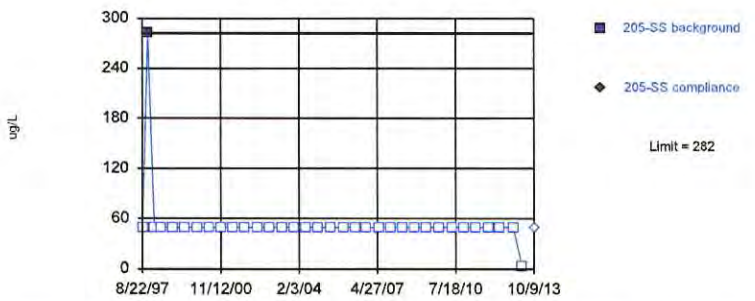
Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

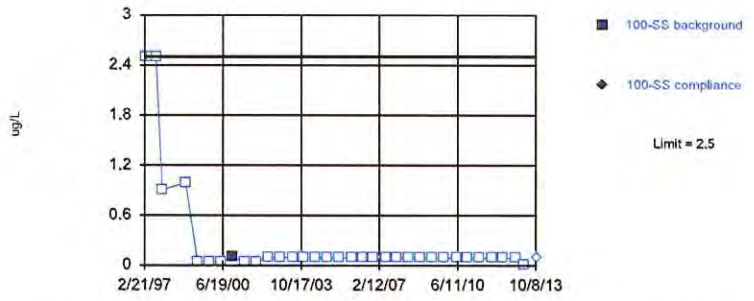
Constituent: Boron Total Analysis Run 12/17/2013 10:55 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

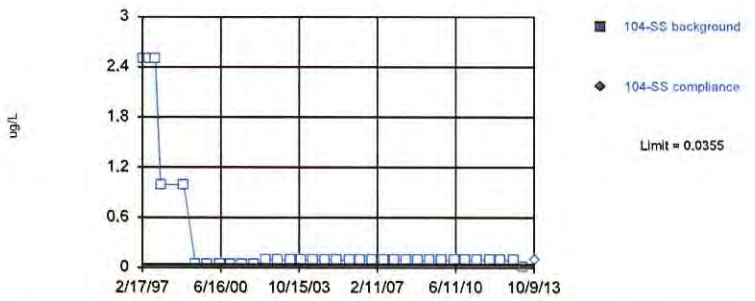
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

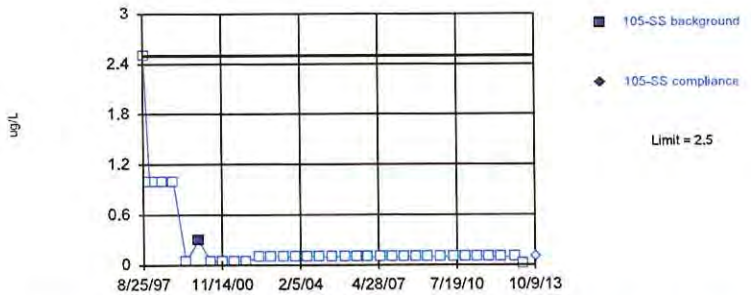
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

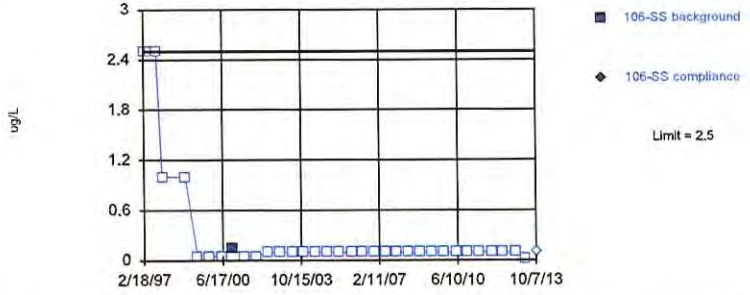
Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

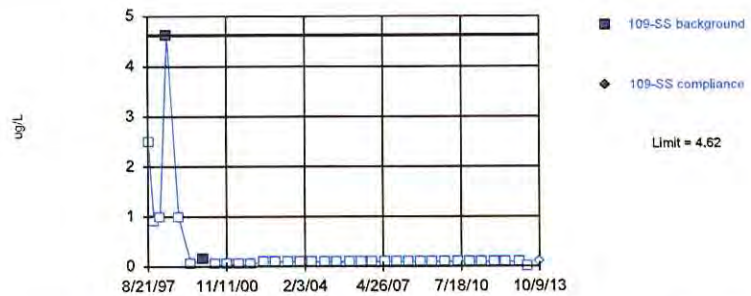
Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

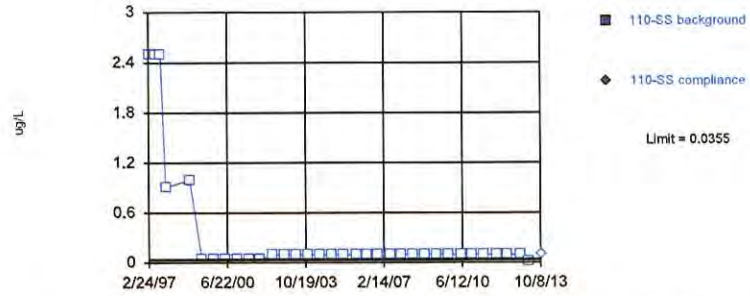
Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



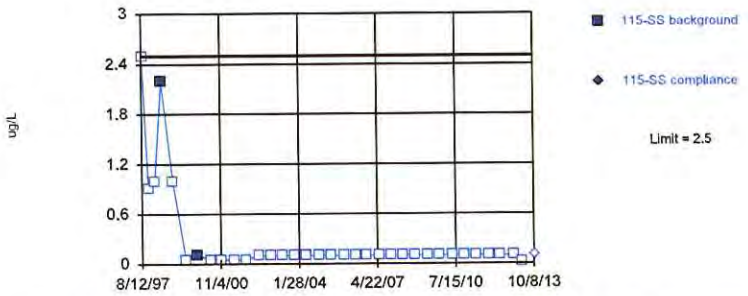
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

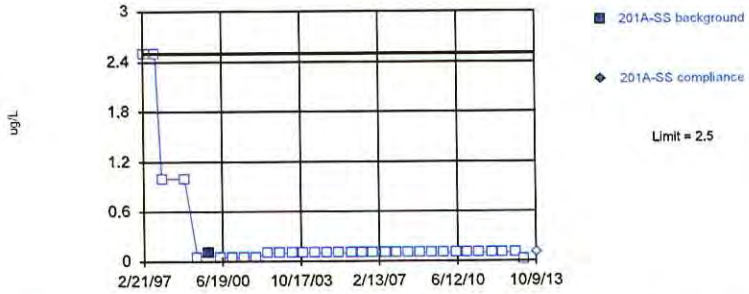


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

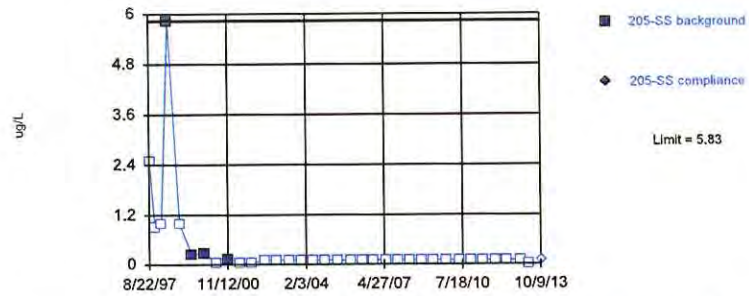


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

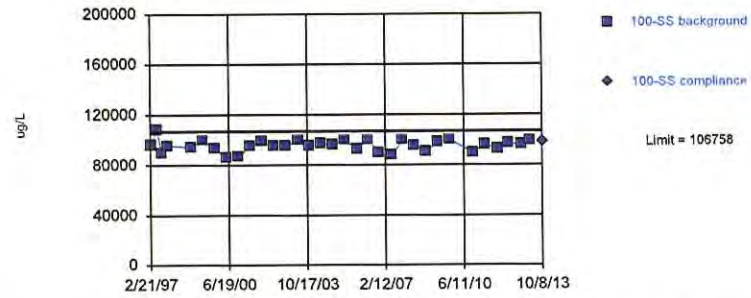


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Within Limit

Prediction Limit
Intrawell Parametric

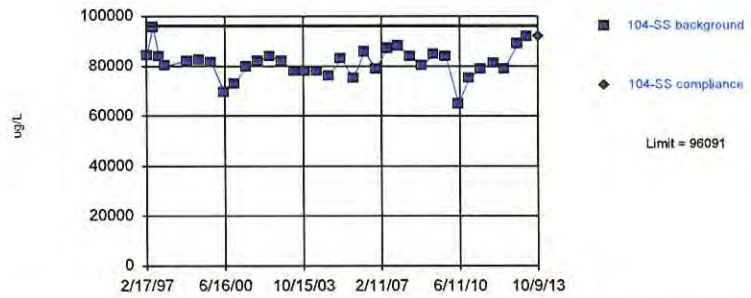


Background Data Summary: Mean=95455, Std. Dev.=4502, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9538, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 76000 (5/19/2010).

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Within Limit

Prediction Limit
Intrawell Parametric



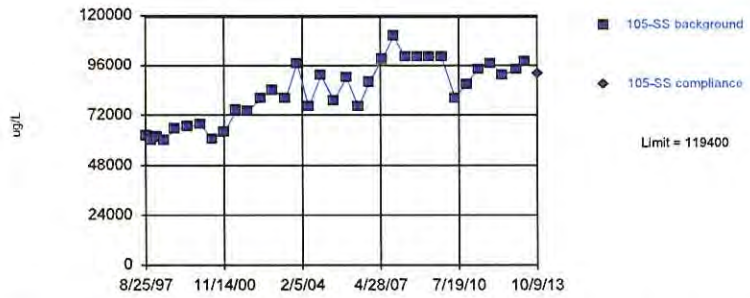
Background Data Summary: Mean=81212, Std. Dev.=5949, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9775, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. No background outliers were found.

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



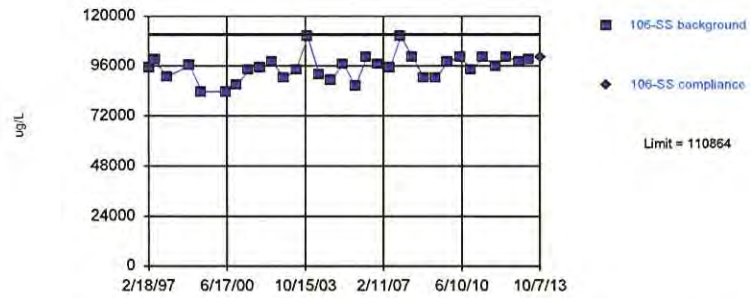
Background Data Summary: Mean=82547, Std. Dev.=14736, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9276, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit
Intrawell Parametric



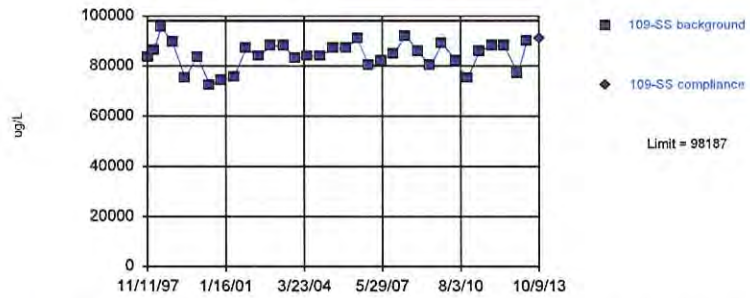
Background Data Summary: Mean=95200, Std. Dev.=6214, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9449, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 60000 (8/25/1997); 9000 (11/19/1999).

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=84194, Std. Dev.=5573, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9547, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 174000 (8/21/1997).

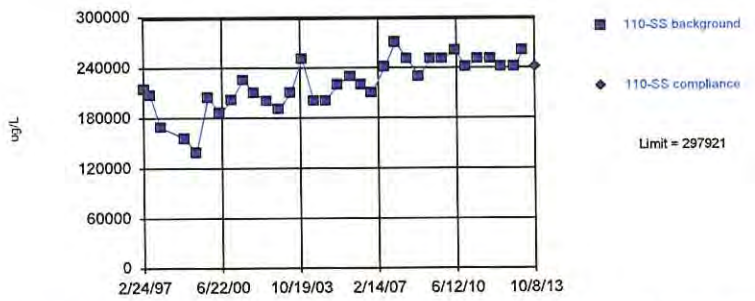
Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=220333, Std. Dev.=30902, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9472, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 91000 (8/22/1997).

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM

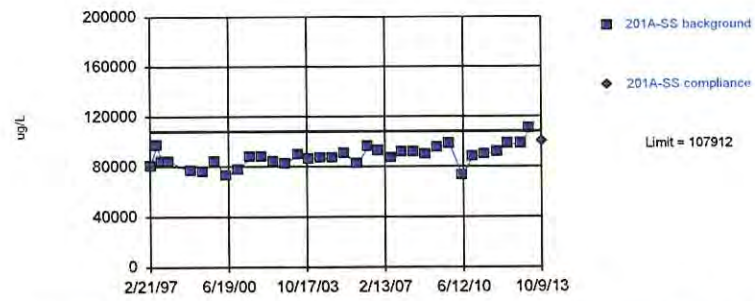
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=87944, Std. Dev.=7984, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9754, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM

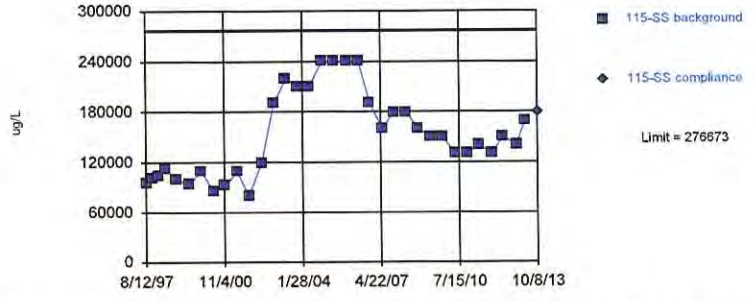
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=151538, Std. Dev.=50036, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9198, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM

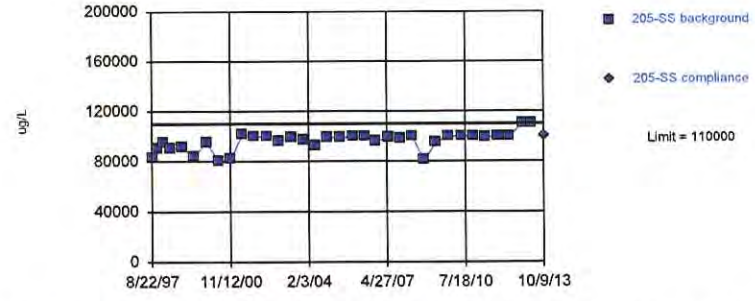
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Calcium Total Analysis Run 12/17/2013 10:56 AM

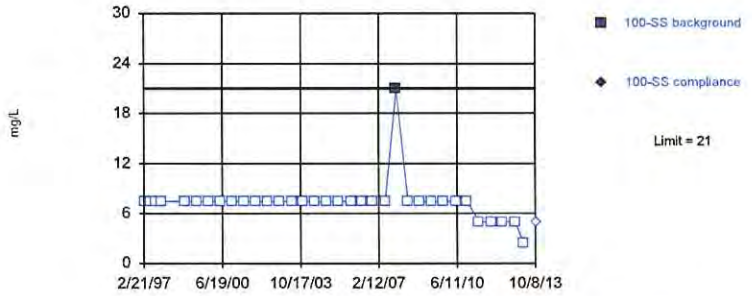
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

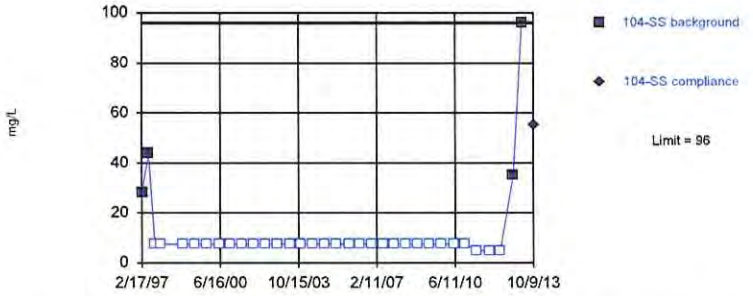
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

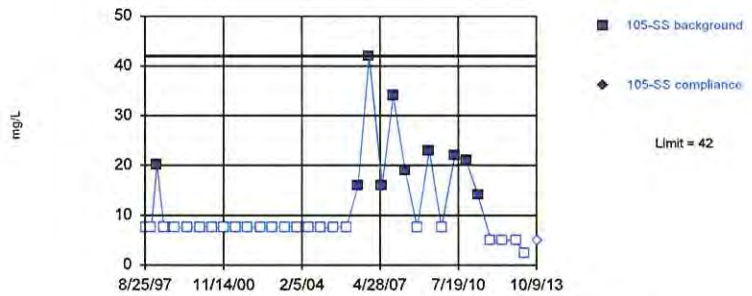
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 70.59% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

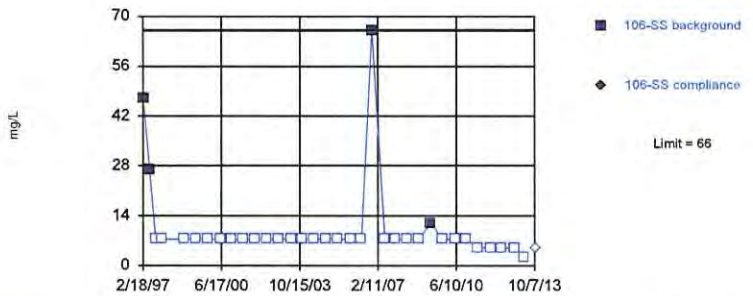
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



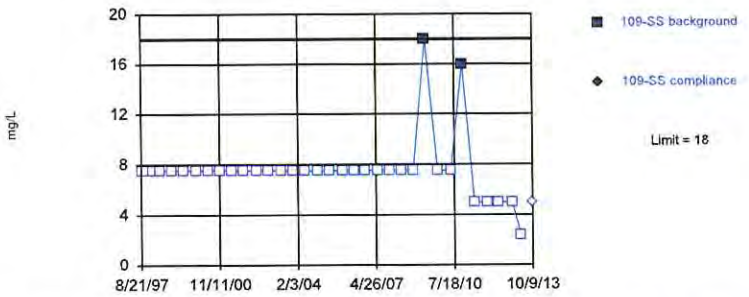
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

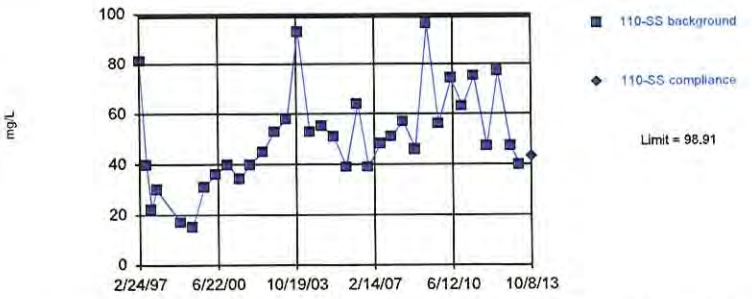


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Within Limit

Prediction Limit
Intrawell Parametric

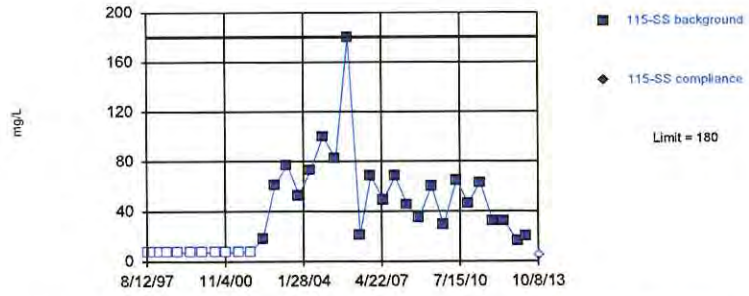


Background Data Summary: Mean=50.38, Std. Dev.=19.4, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9618, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Within Limit

Prediction Limit
Intrawell Non-parametric

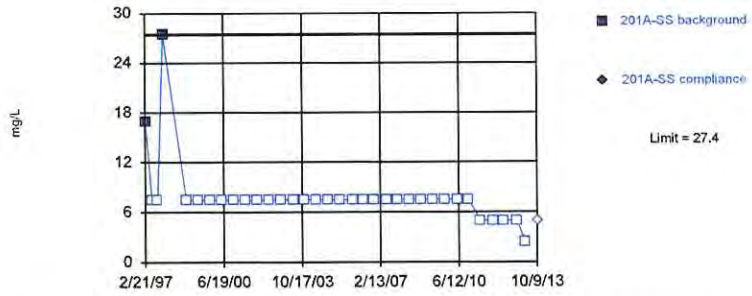


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 32.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

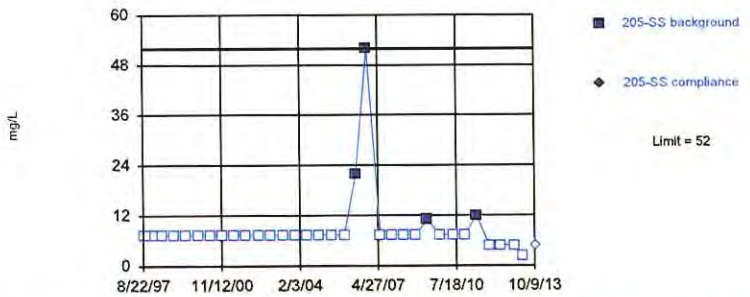


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

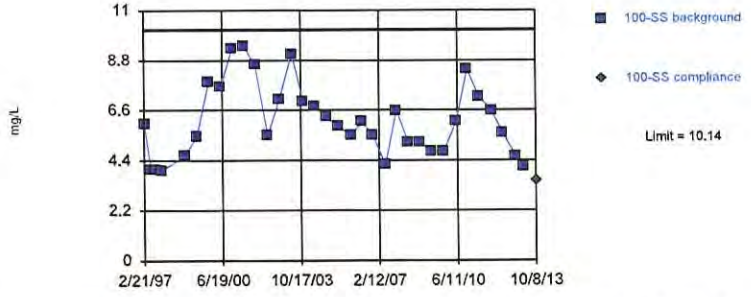


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Within Limit

Prediction Limit
Intrawell Parametric

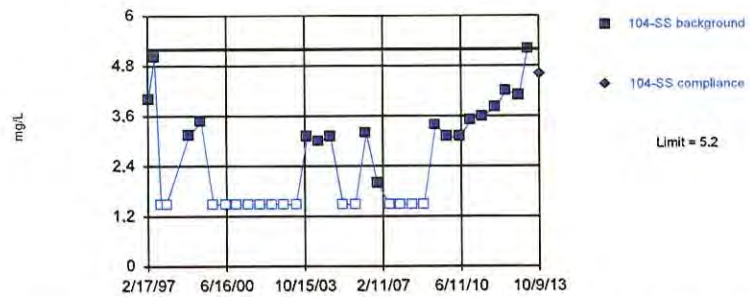


Background Data Summary: Mean=6.151, Std. Dev.=1.593, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9361, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chloride Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

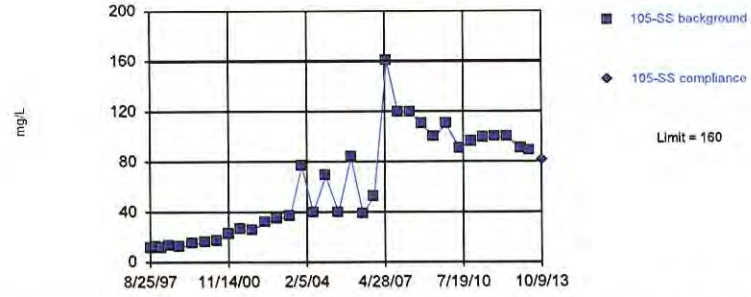


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 47.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

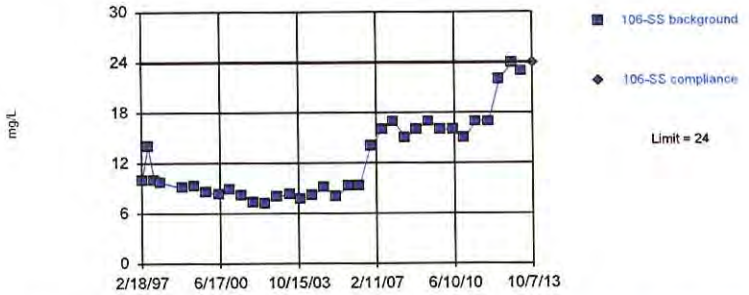
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Within Limit

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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 12/17/2013 10:56 AM

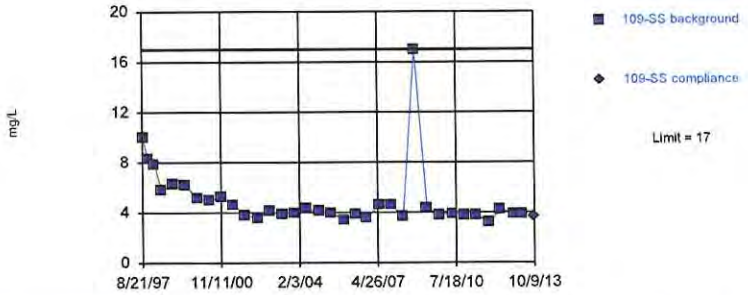
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (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 12/17/2013 10:56 AM

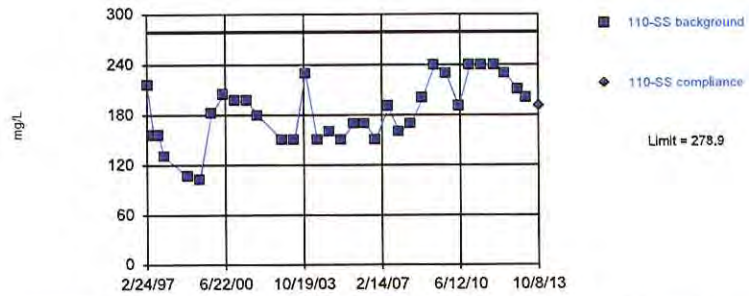
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=183.3, Std. Dev.=38.07, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9464, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: <3 (5/21/2002).

Constituent: Chloride Analysis Run 12/17/2013 10:56 AM

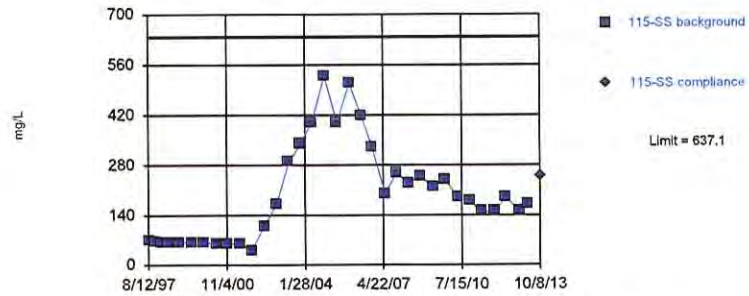
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=13.29, Std. Dev.=4.777, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9242, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chloride Analysis Run 12/17/2013 10:56 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

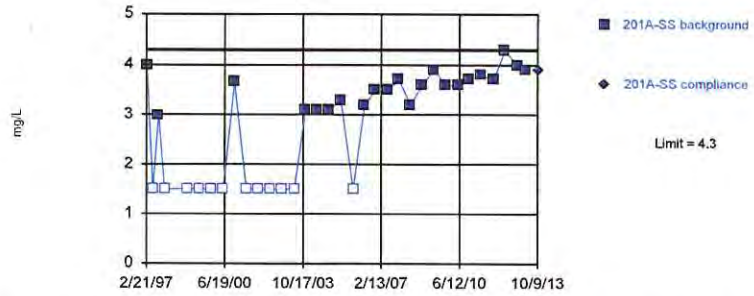
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Hollow symbols indicate censored values.

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 34 background values. 35.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

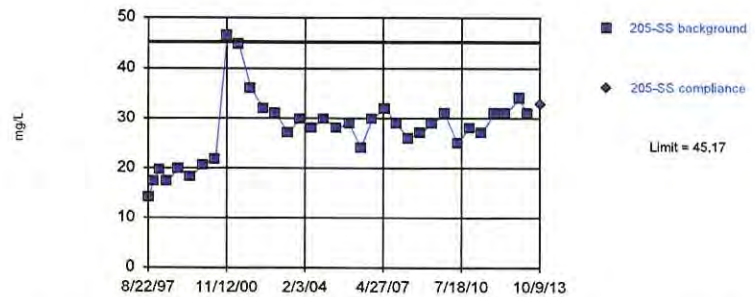
Constituent: Chloride Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=27.82, Std. Dev.=6.94, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9359, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

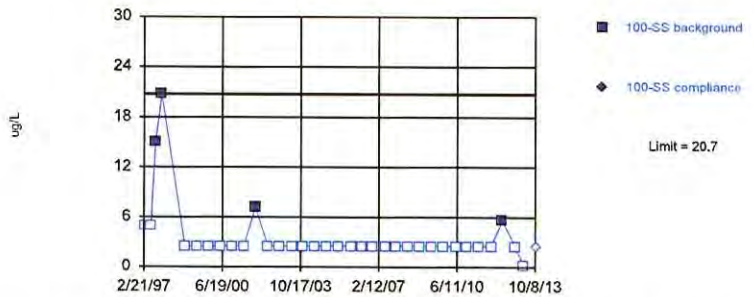
Constituent: Chloride Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

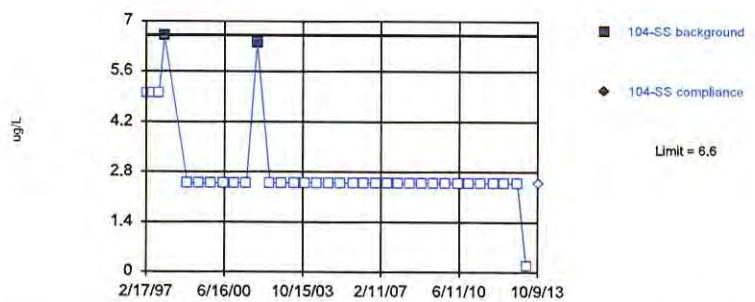
Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

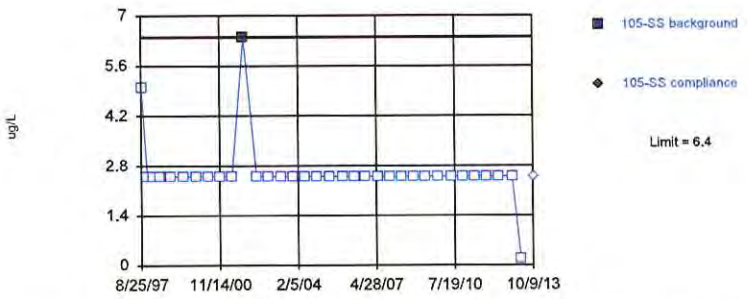
Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



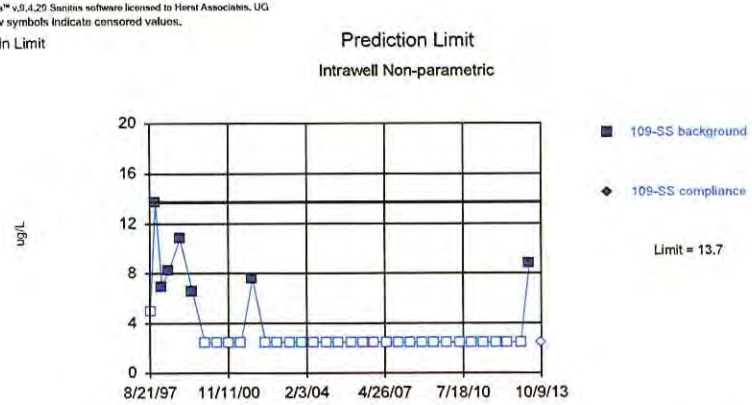
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



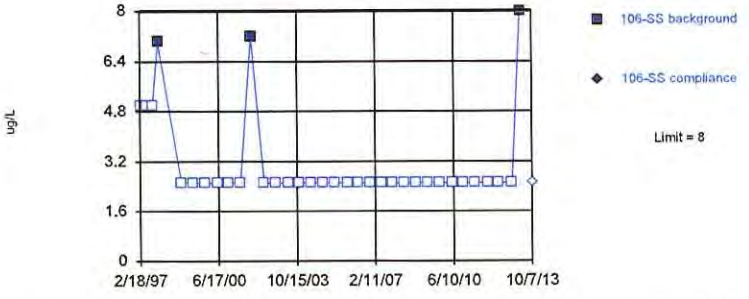
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 79.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



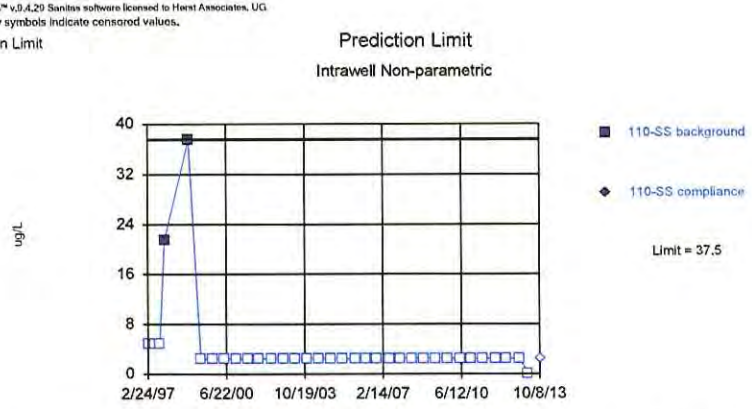
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

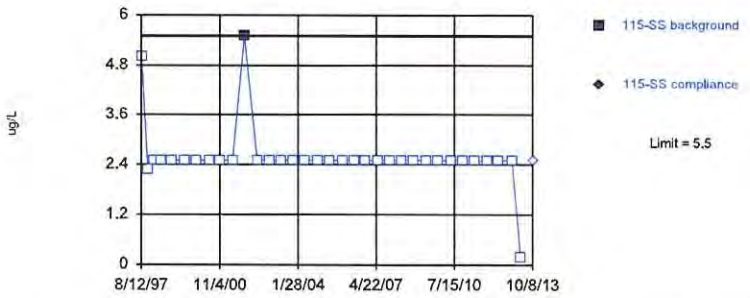
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Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

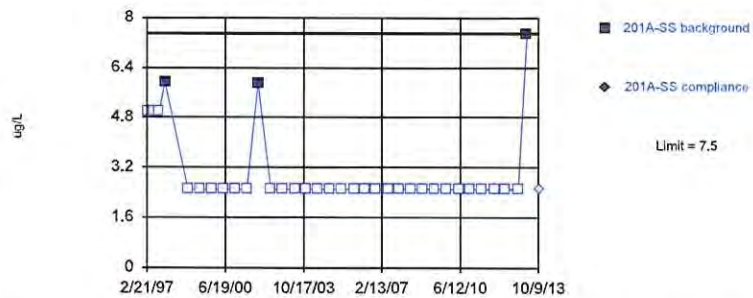
Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

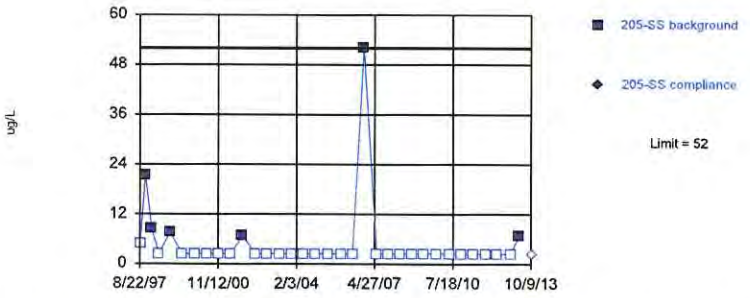
Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

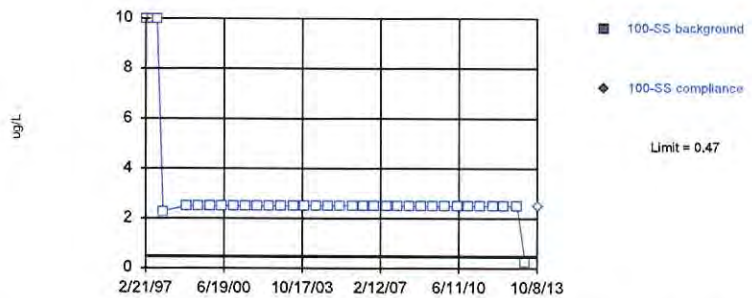
Constituent: Chromium Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cobalt Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

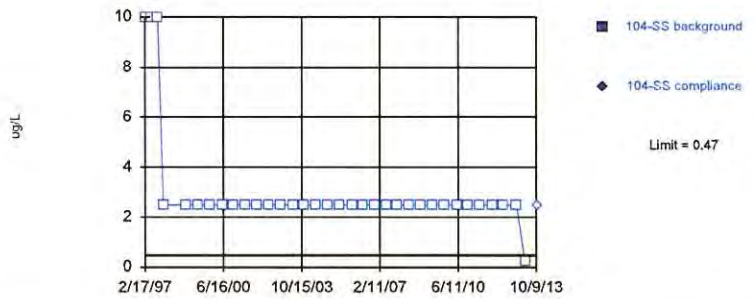
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

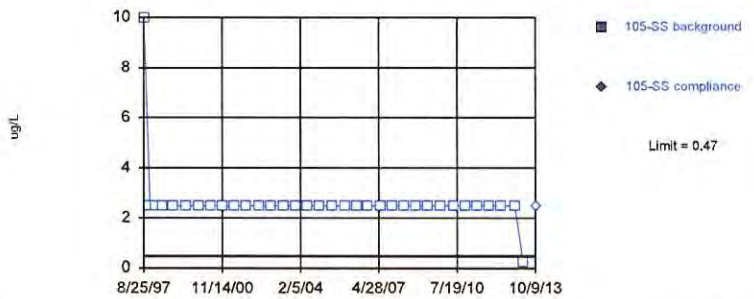
Constituent: Cobalt Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

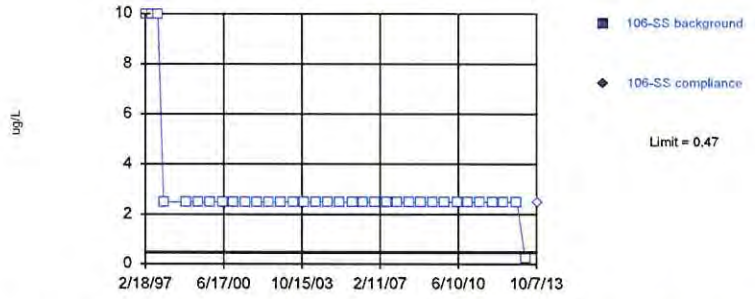
Constituent: Cobalt Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

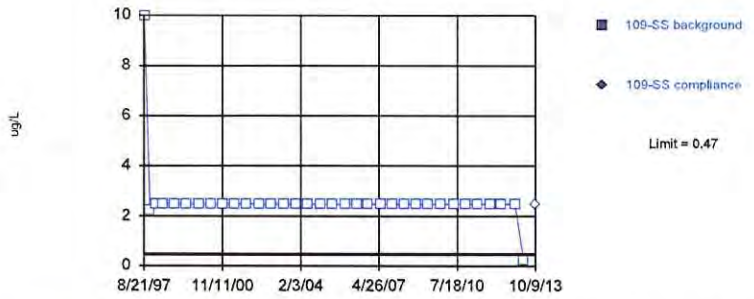
Constituent: Cobalt Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cobalt Total Analysis Run 12/17/2013 10:56 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

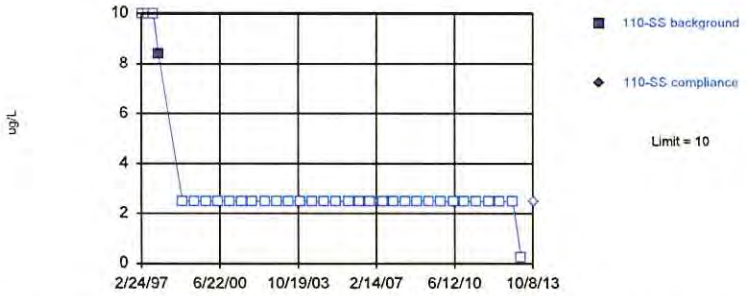
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Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

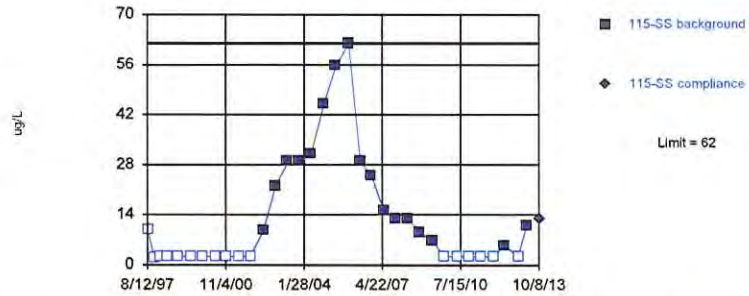
Constituent: Cobalt Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 50% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

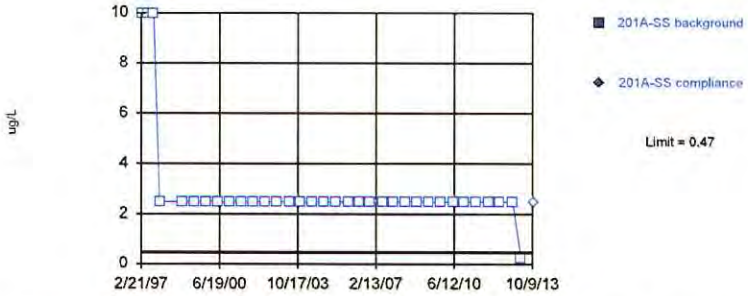
Constituent: Cobalt Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

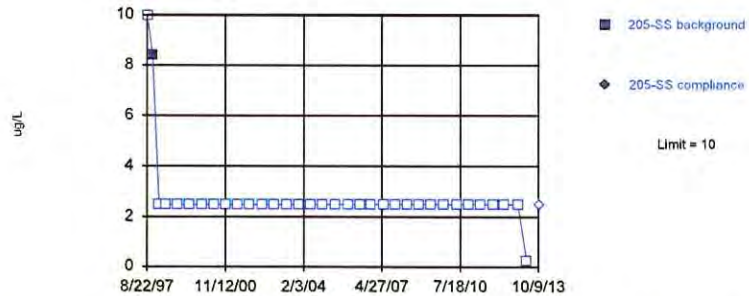
Constituent: Cobalt Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cobalt Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

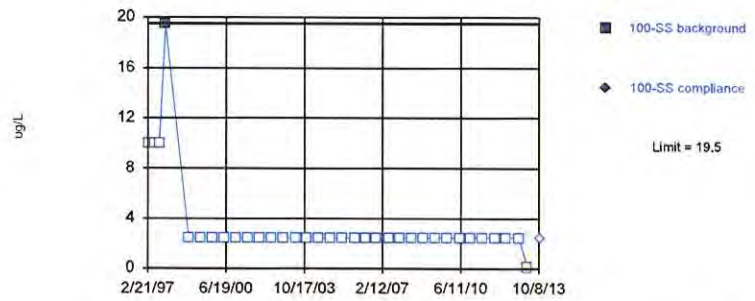
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Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

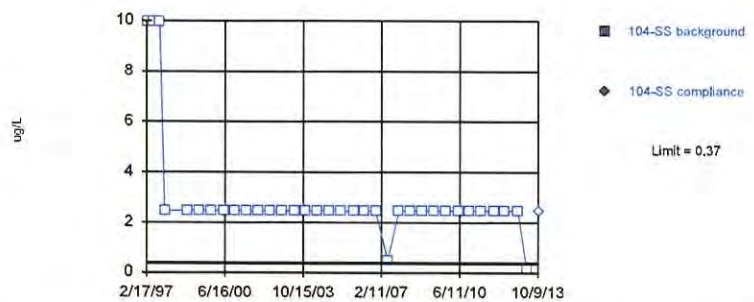
Constituent: Copper Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

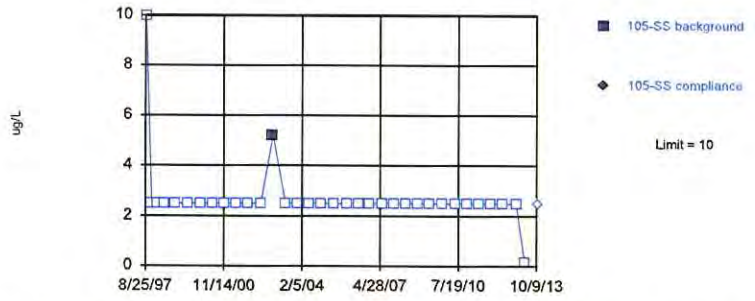
Constituent: Copper Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

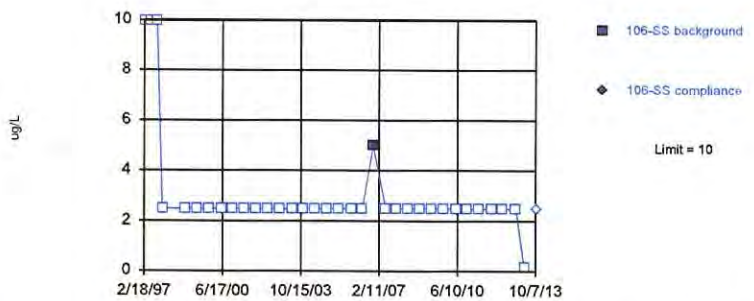
Constituent: Copper Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

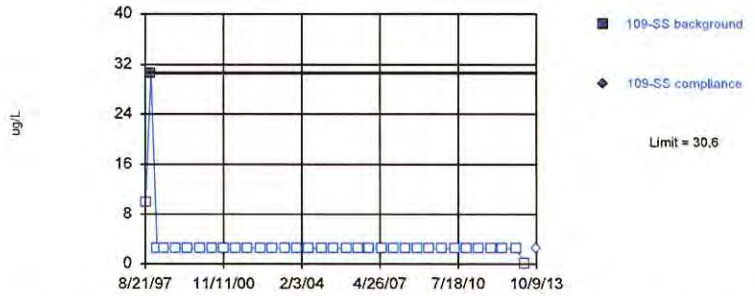
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Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

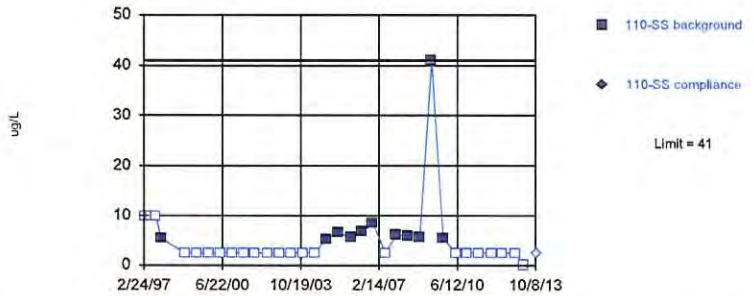
Constituent: Copper Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 67.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

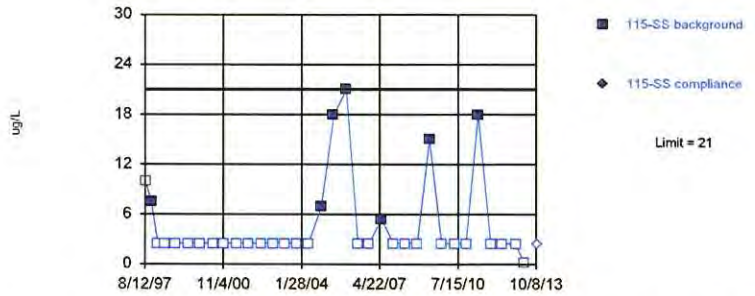
Constituent: Copper Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 79.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

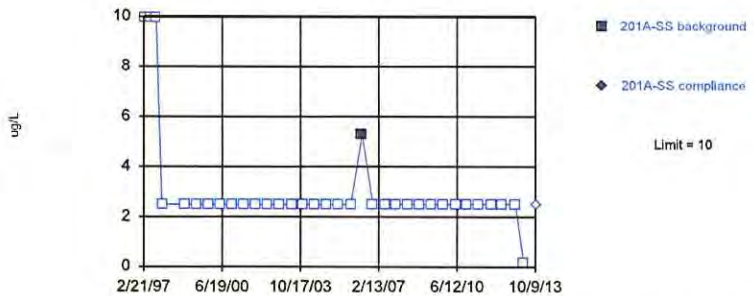
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

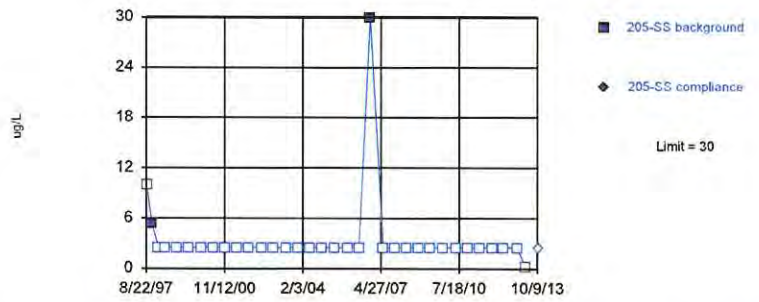
Constituent: Copper Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



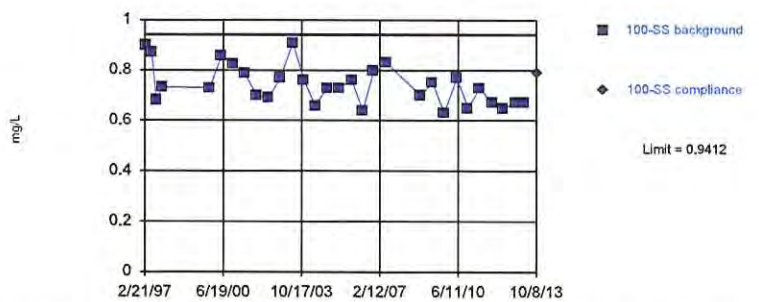
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



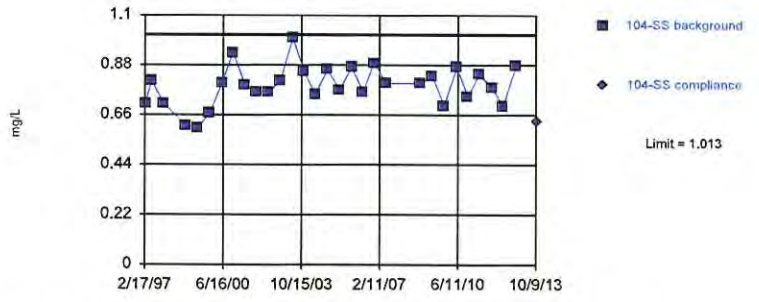
Background Data Summary: Mean=0.7418, Std. Dev.=0.07849, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9389, critical = 0.9. Kappa = 2.541 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 0.34 (11/12/1998); <0.25 (5/18/1999).

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



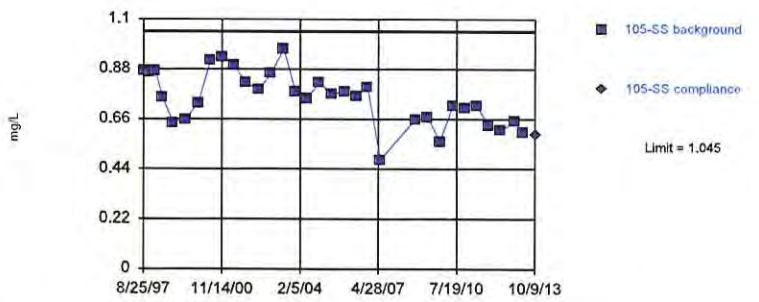
Background Data Summary: Mean=0.7887, Std. Dev.=0.08838, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9862, critical = 0.9. Kappa = 2.541 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: <0.25 (8/28/1997); 0.3 (4/11/2013).

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



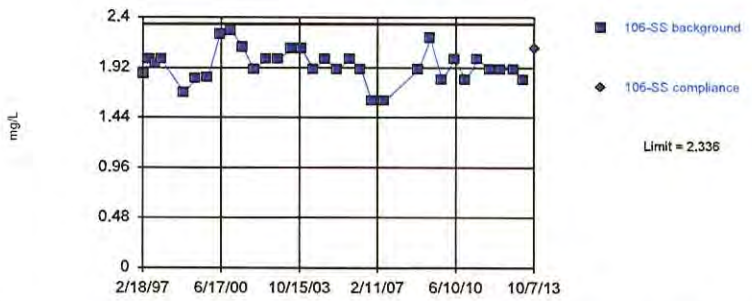
Background Data Summary: Mean=0.7518, Std. Dev.=0.1162, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9857, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



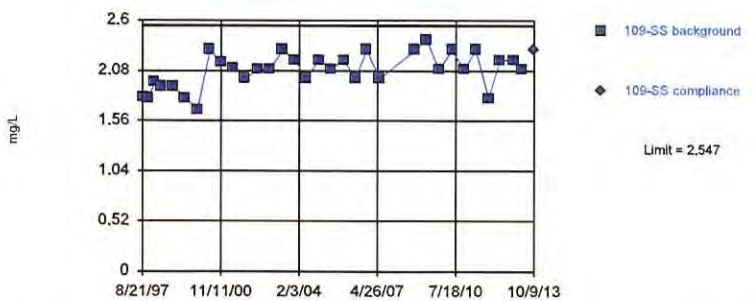
Background Data Summary: Mean=1.936, Std. Dev.=0.1587, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9547, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



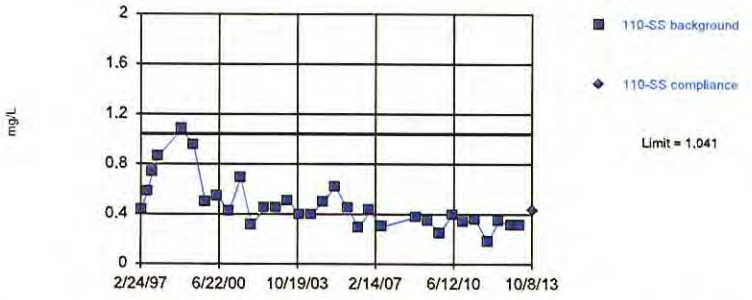
Background Data Summary: Mean=2.087, Std. Dev.=0.1826, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9461, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

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Within Limit

Prediction Limit
Intrawell Parametric



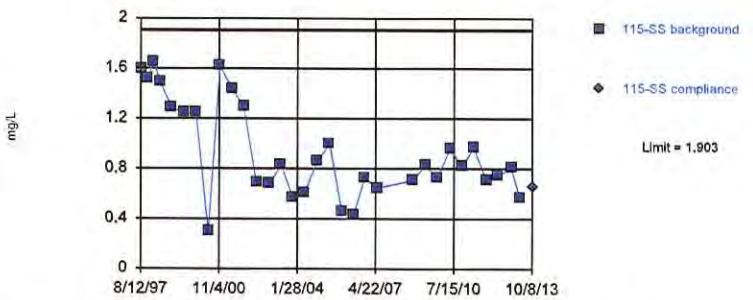
Background Data Summary (based on square root transformation): Mean=0.6746, Std. Dev.=0.1371, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9324, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Fluoride Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.94, Std. Dev.=0.3822, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9188, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

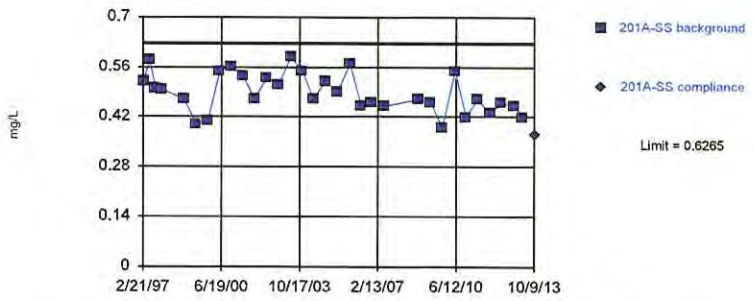
Constituent: Fluoride Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4877, Std. Dev.=0.05505, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9612, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Fluoride Analysis Run 12/17/2013 10:57 AM

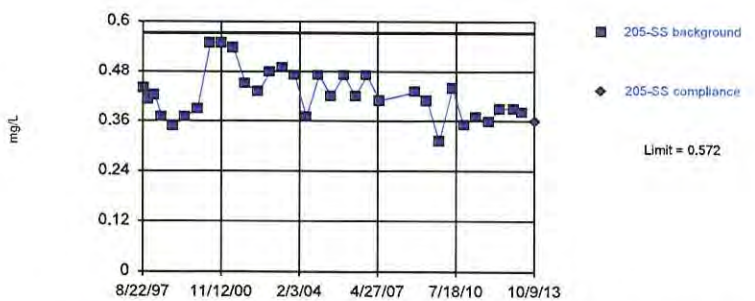
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4239, Std. Dev.=0.05875, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9619, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Fluoride Analysis Run 12/17/2013 10:57 AM

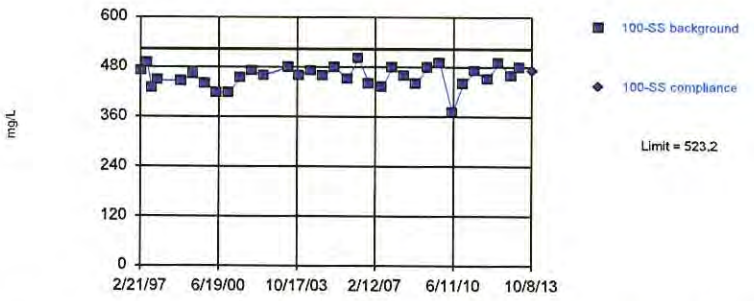
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=457, Std. Dev.=26.39, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9359, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 150 (11/19/2002).

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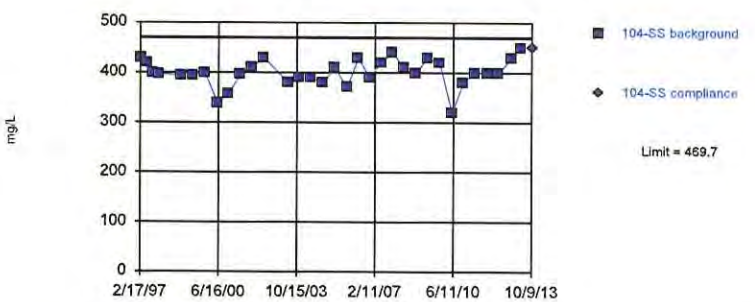
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=400.1, Std. Dev.=27.71, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9425, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 130 (11/19/2002).

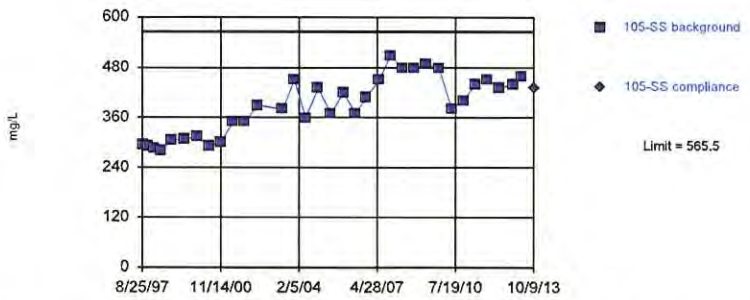
Constituent: Hardness Total Analysis Run 12/17/2013 10:57 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



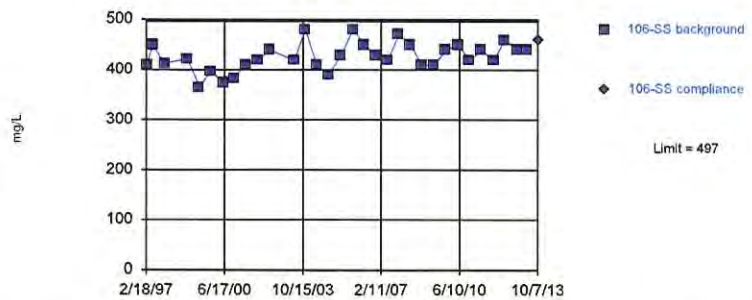
Background Data Summary: Mean=389.2, Std. Dev.=70.25, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9294, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 130 (11/19/2002).

Constituent: Hardness Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



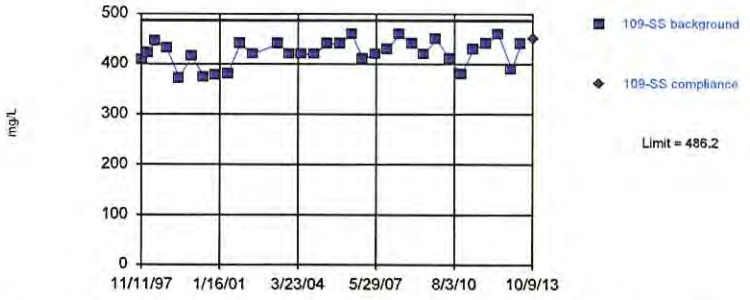
Background Data Summary: Mean=426.4, Std. Dev.=28.04, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9716, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 265 (8/25/1997); 130 (11/19/2002).

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Within Limit

Prediction Limit
Intrawell Parametric



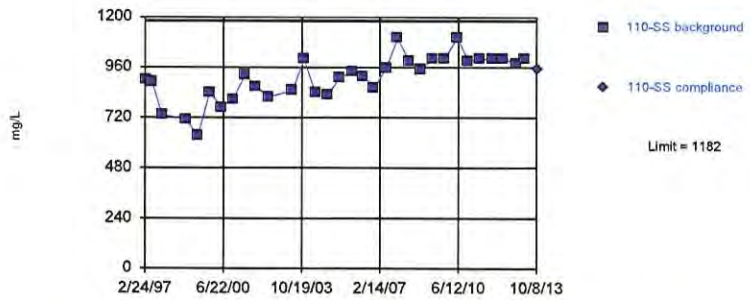
Background Data Summary: Mean=422, Std. Dev.=25.45, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9191, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 739 (8/21/1997); 140 (11/19/2002).

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Within Limit

Prediction Limit
Intrawell Parametric

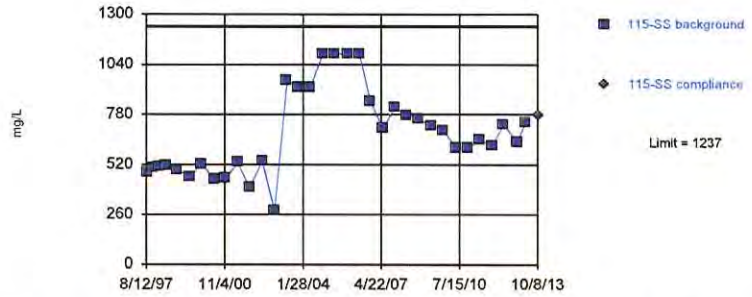


Background Data Summary: Mean=909.9, Std. Dev.=107.9, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9528, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 437 (8/22/1997); 270 (11/19/2002).

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Within Limit

Prediction Limit
Intrawell Parametric



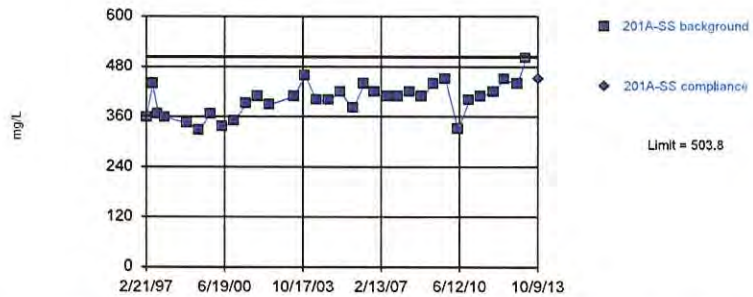
Background Data Summary: Mean=684.5, Std. Dev.=221, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9372, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

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Within Limit

Prediction Limit
Intrawell Parametric



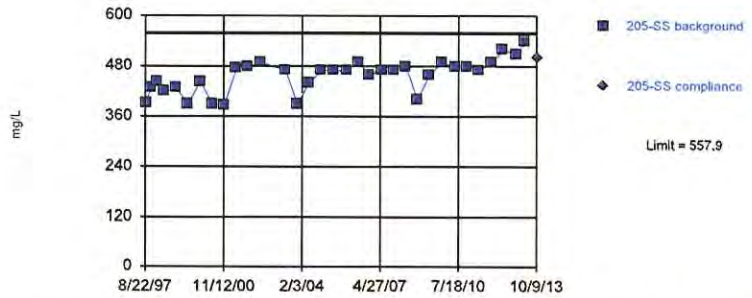
Background Data Summary: Mean=402, Std. Dev.=40.55, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9675, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 120 (11/19/2002).

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Within Limit

Prediction Limit
Intrawell Parametric



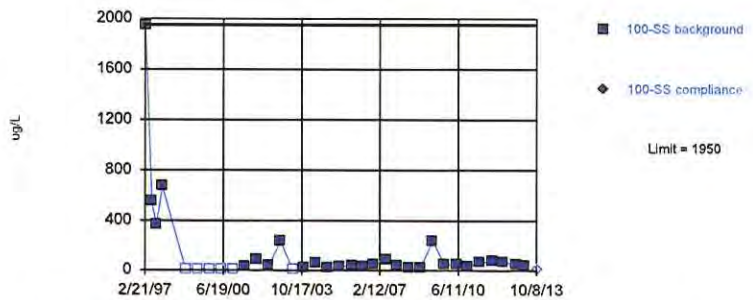
Background Data Summary: Mean=457.1, Std. Dev.=40.14, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9264, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 150 (11/19/2002).

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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 34 background values. 17.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). Rosner's Outlier Test was performed on the background data. No background outliers were found.

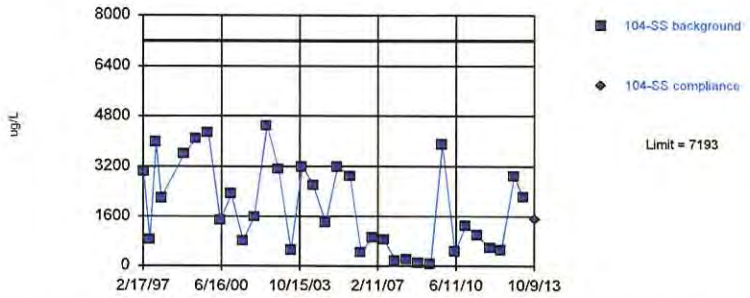
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=40.01, Std. Dev.=17.91, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9337, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Iron Total Analysis Run 12/17/2013 10:57 AM

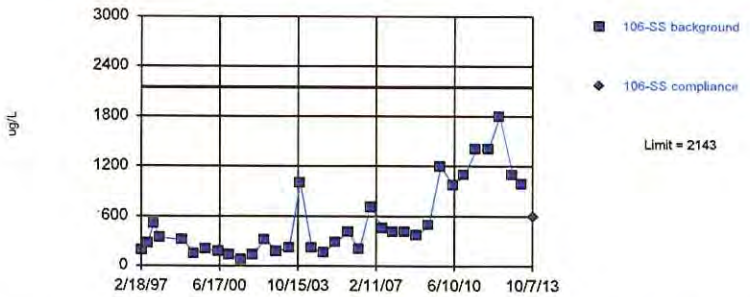
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=7.563, Std. Dev.=2.131, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9221, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Iron Total Analysis Run 12/17/2013 10:57 AM

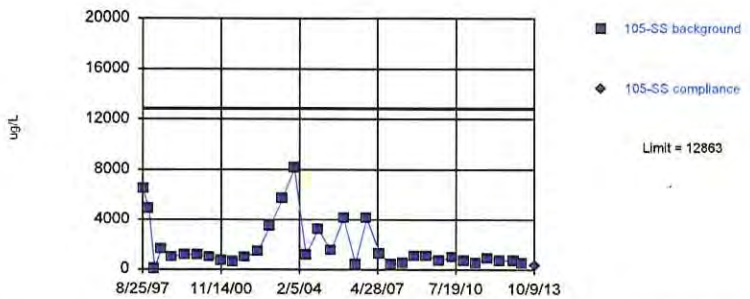
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=7.08, Std. Dev.=0.9523, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9378, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

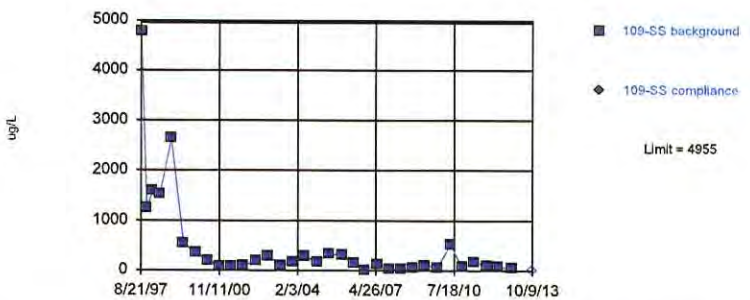
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=5.252, Std. Dev.=1.297, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9503, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: <3 (4/11/2013).

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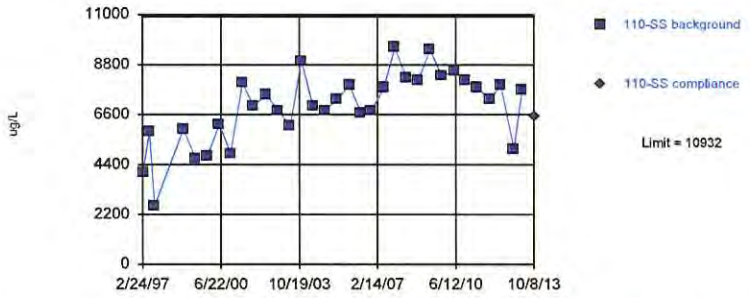
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6965, Std. Dev.=1580, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9527, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: <18.2 (11/8/1997).

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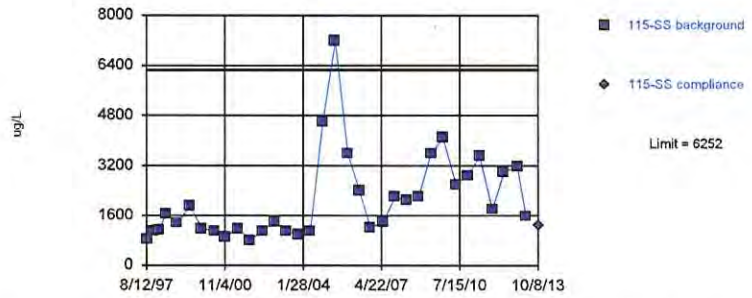
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=12.38, Std. Dev.=2.416, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9121, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

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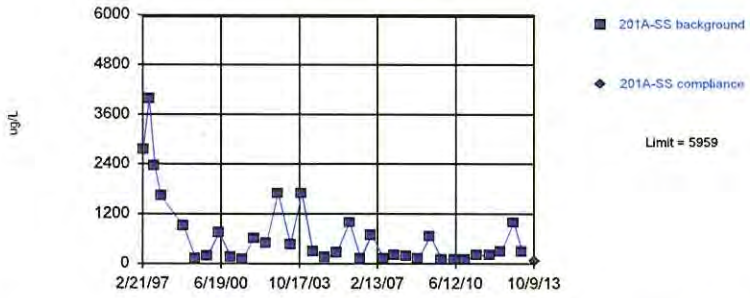
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=5.937, Std. Dev.=1.102, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9243, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Iron Total Analysis Run 12/17/2013 10:57 AM

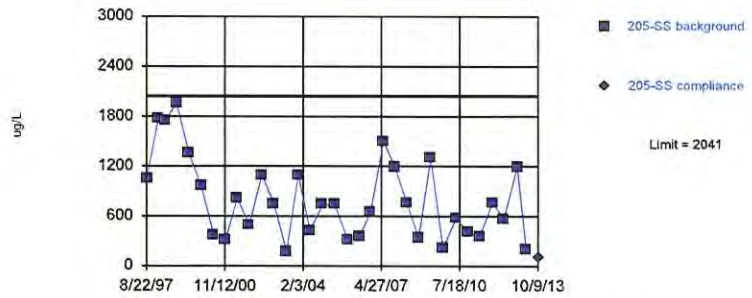
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=806.4, Std. Dev.=491.7, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9198, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 6260 (11/8/1997).

Constituent: Iron Total Analysis Run 12/17/2013 10:57 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

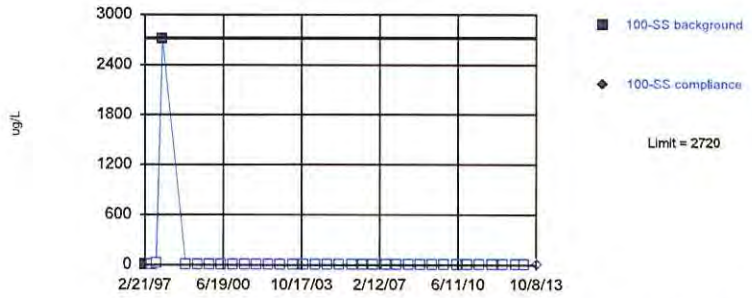
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Hollow symbols indicate censored values.

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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

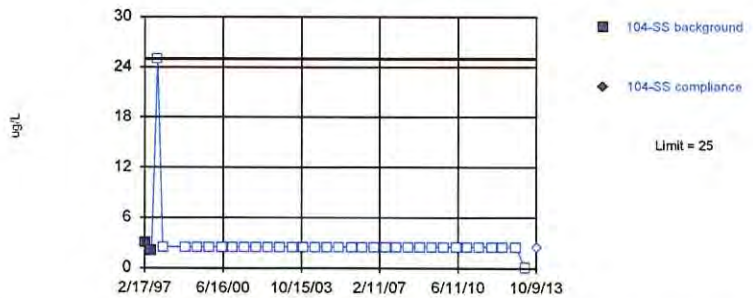
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

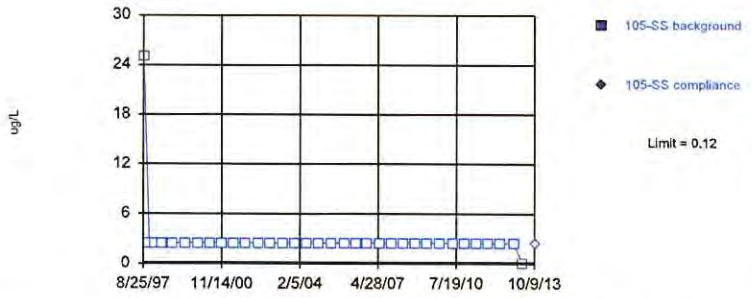
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

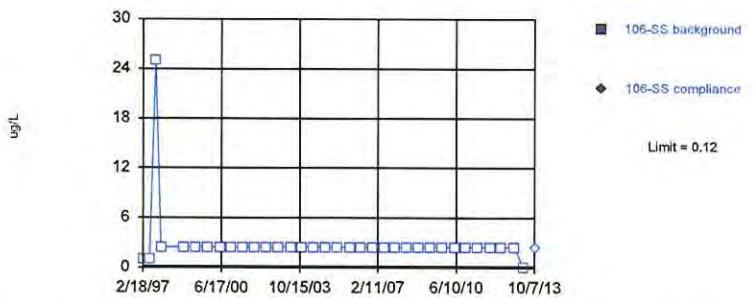
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

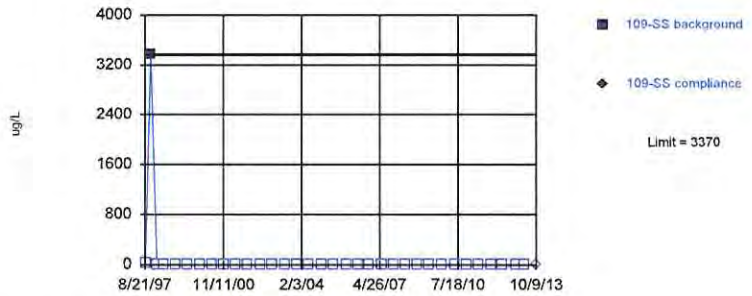
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Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

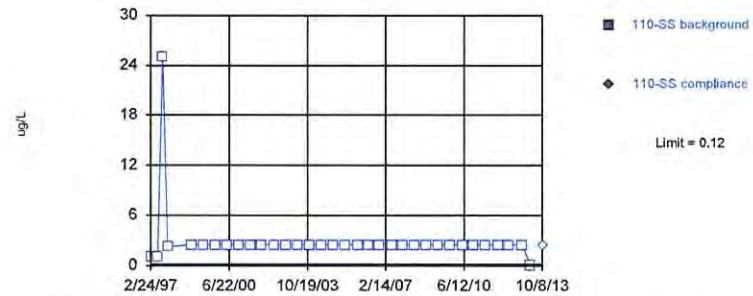
Constituent: Lead Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

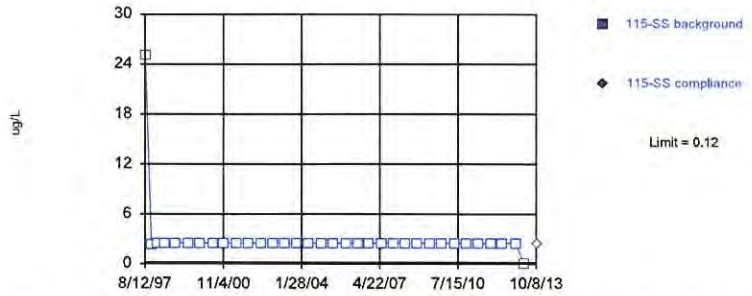
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

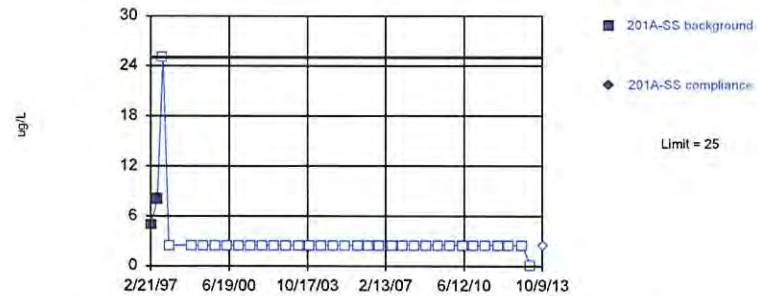
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

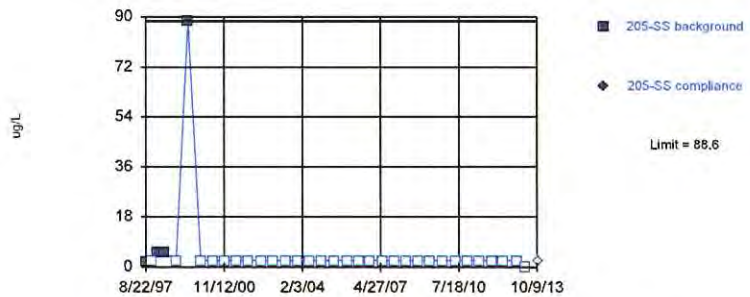
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

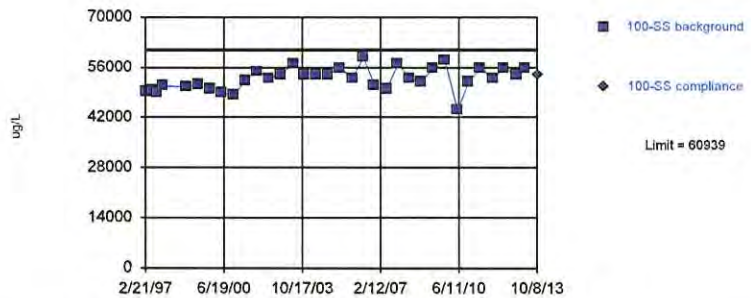
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=52865, Std. Dev.=3229, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9761, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. No background outliers were found.

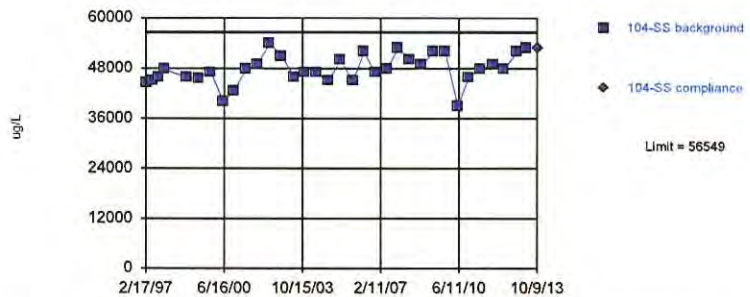
Constituent: Magnesium Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=47774, Std. Dev.=3509, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9616, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

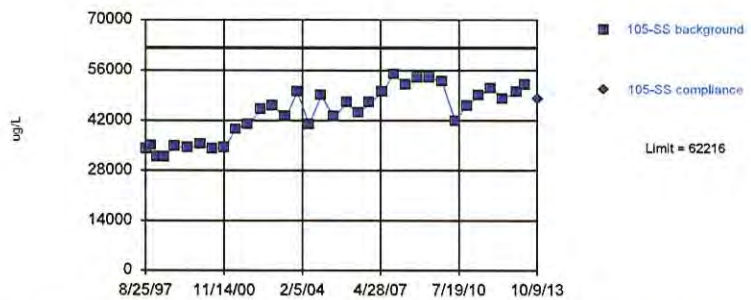
Constituent: Magnesium Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=44035, Std. Dev.=7270, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9185, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Magnesium Total Analysis Run 12/17/2013 10:57 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

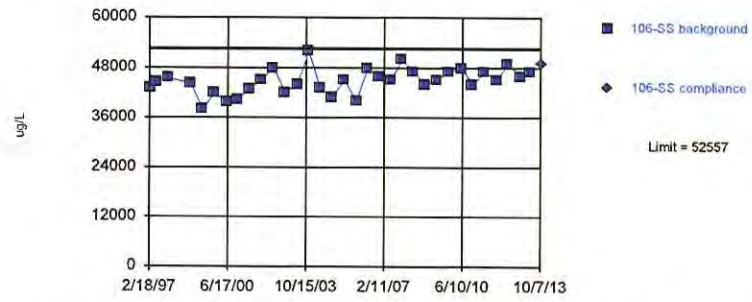
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=44803, Std. Dev.=3088, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9881, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 28000 (8/25/1997).

Constituent: Magnesium Total Analysis Run 12/17/2013 10:58 AM

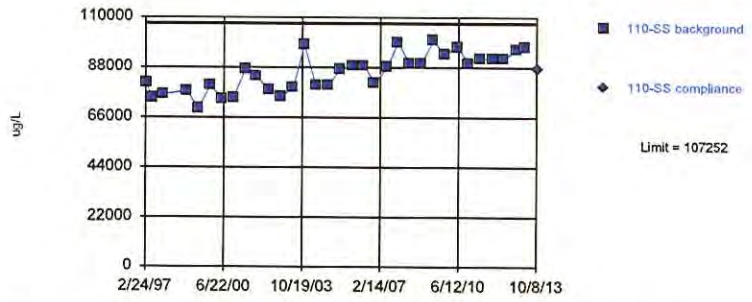
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=85806, Std. Dev.=8541, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9466, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 51000 (8/22/1997).

Constituent: Magnesium Total Analysis Run 12/17/2013 10:58 AM

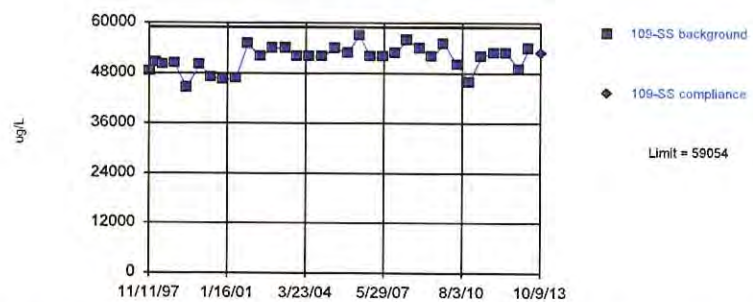
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=51530, Std. Dev.=2997, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9502, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 74000 (8/21/1997).

Constituent: Magnesium Total Analysis Run 12/17/2013 10:58 AM

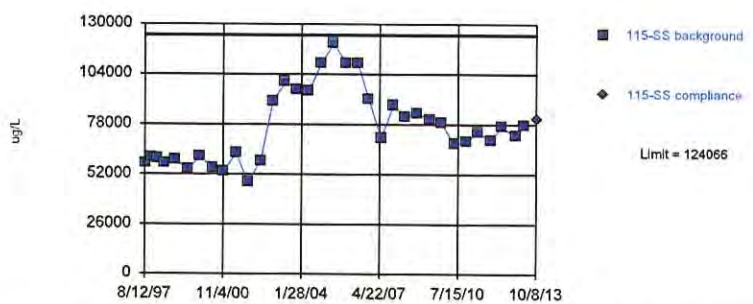
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=76685, Std. Dev.=18945, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9393, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Magnesium Total Analysis Run 12/17/2013 10:58 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

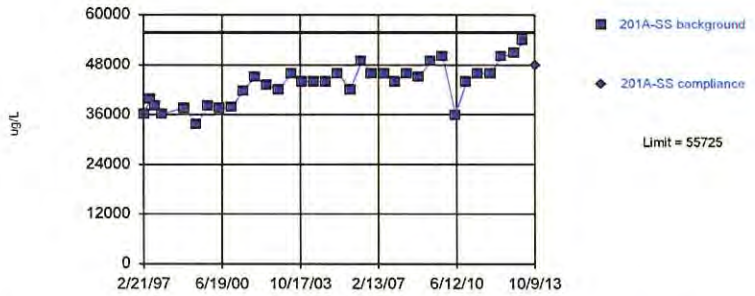
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=43371, Std. Dev.=4940, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9617, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Magnesium Total Analysis Run 12/17/2013 10:58 AM

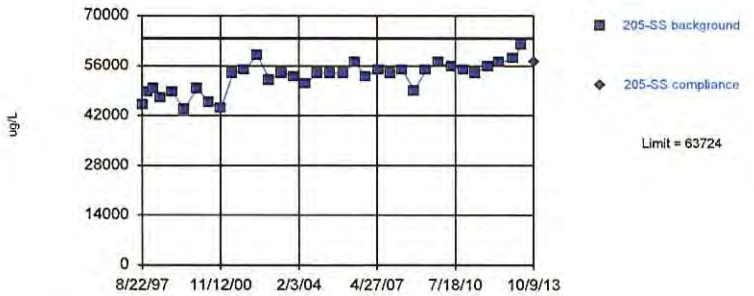
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=52806, Std. Dev.=4366, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9483, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Magnesium Total Analysis Run 12/17/2013 10:58 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

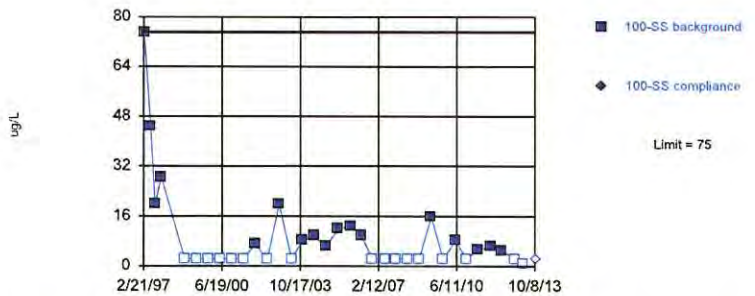
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Hollow symbols indicate censored values.

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 34 background values. 50% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

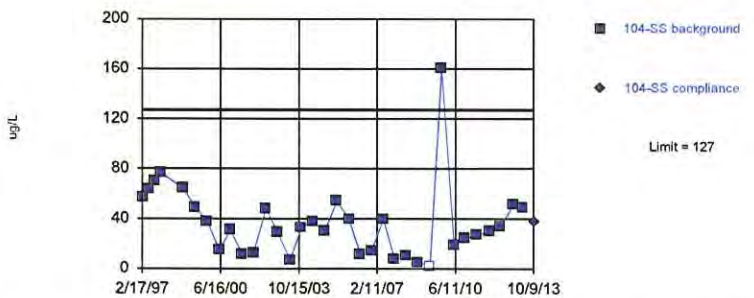
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=5.673, Std. Dev.=2.239, n=34, 2.941% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9617, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

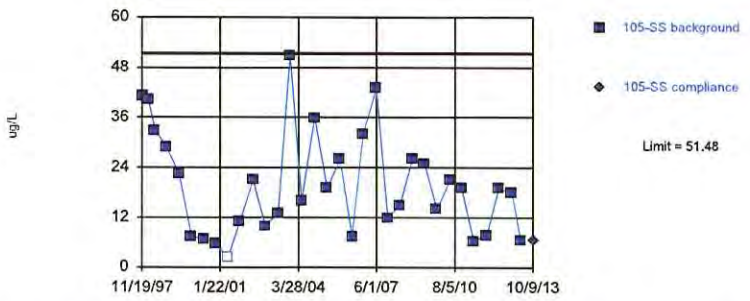
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=20.11, Std. Dev.=12.5, n=33, 3.03% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9326, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 240 (8/25/1997).

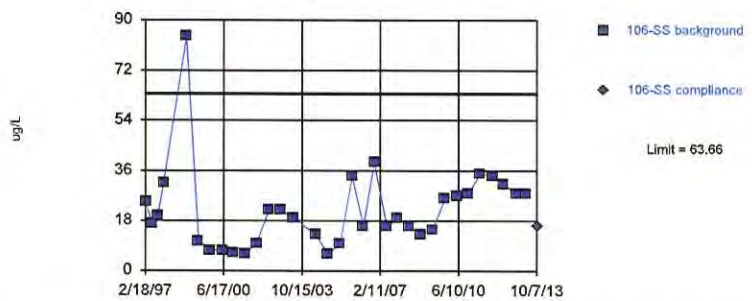
Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=4.473, Std. Dev.=1.396, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.927, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 270 (11/20/2003).

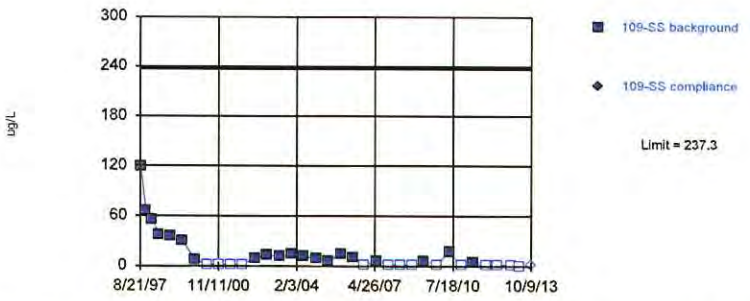
Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Aitchison's Adjustment): Mean=1.629, Std. Dev.=1.535, n=34, 41.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9136, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

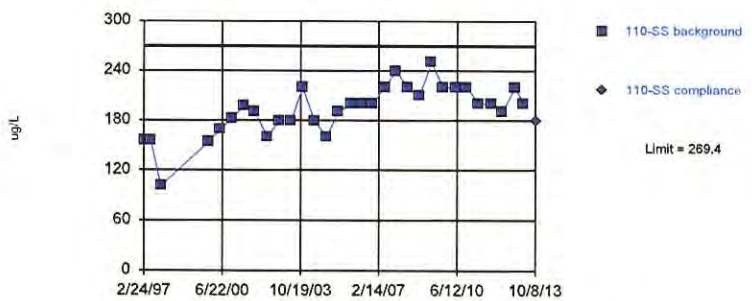
Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=193.1, Std. Dev.=30.14, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9443, critical = 0.902. Kappa = 2.531 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

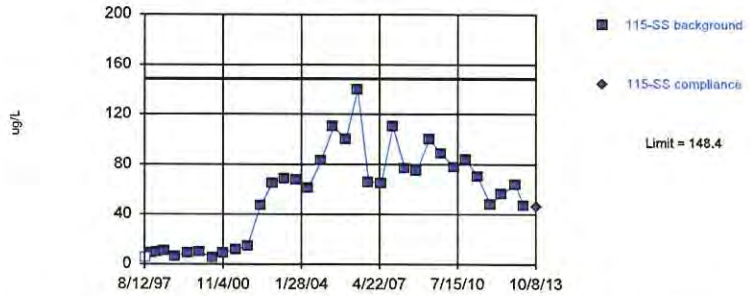
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=54.97, Std. Dev.=37.35, n=34, 2.941% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9102, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

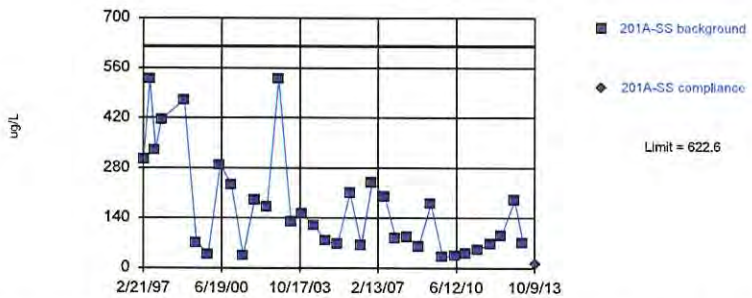
Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=12.09, Std. Dev.=5.142, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9123, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

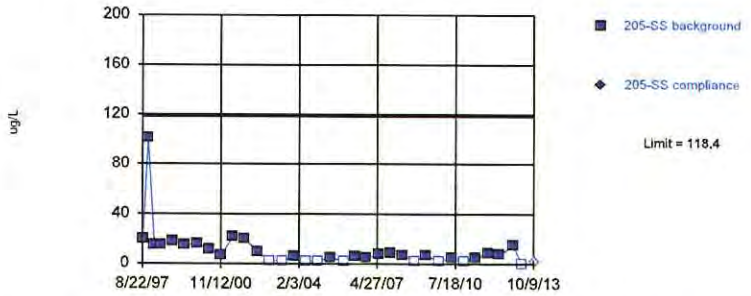
Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Aitchison's Adjustment): Mean=1.746, Std. Dev.=1.211, n=34, 26.47% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9546, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. No background outliers were found.

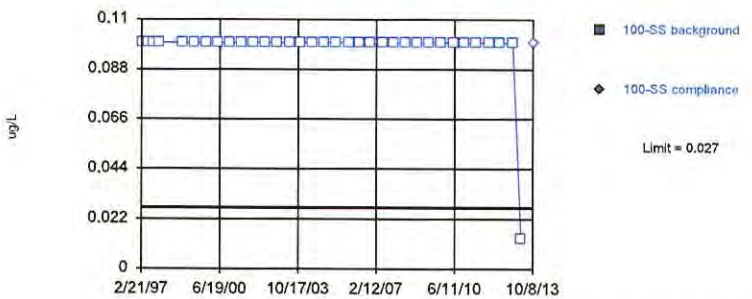
Constituent: Manganese Total Analysis Run 12/17/2013 10:58 AM
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



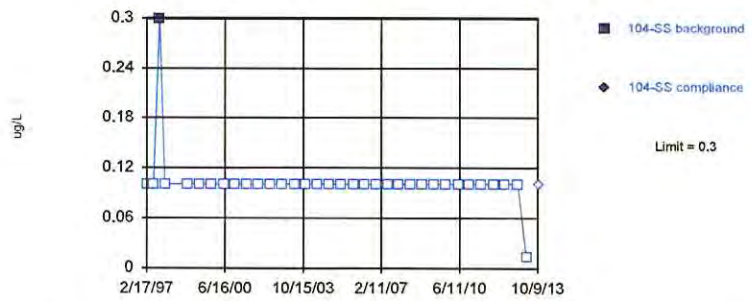
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



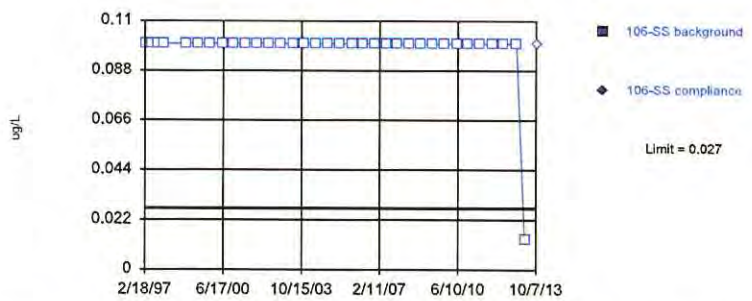
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



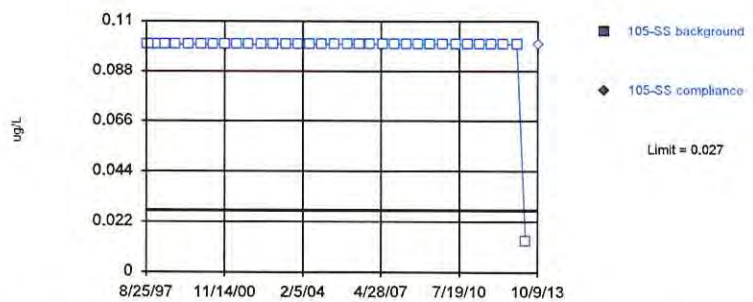
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



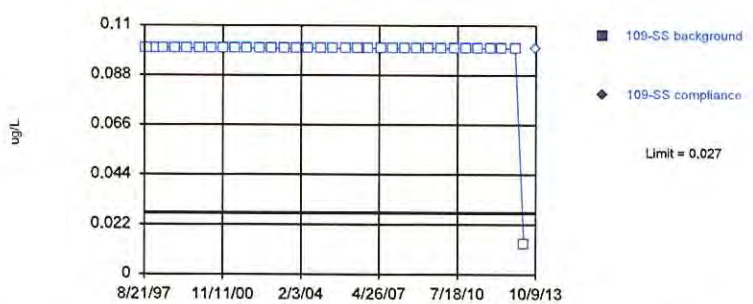
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

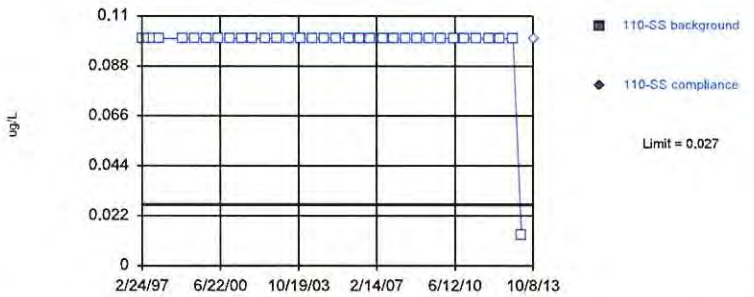
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

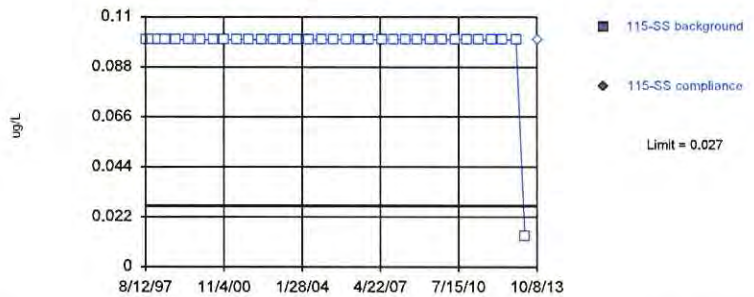
Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

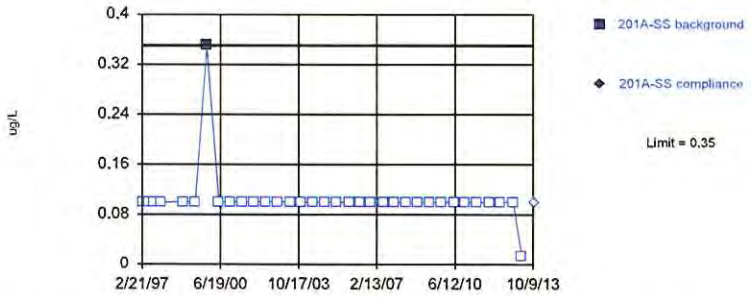
Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

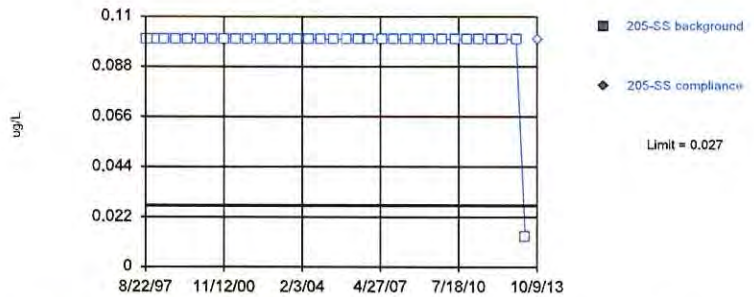
Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric

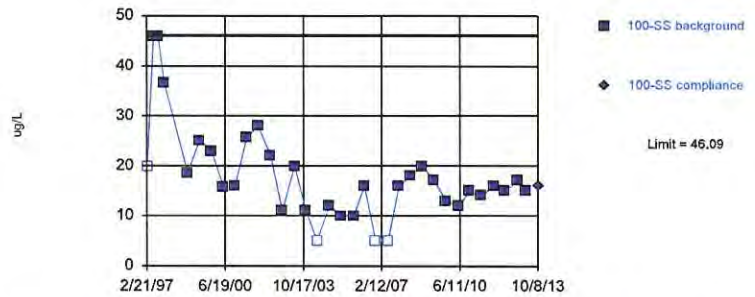


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Mercury Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Parametric

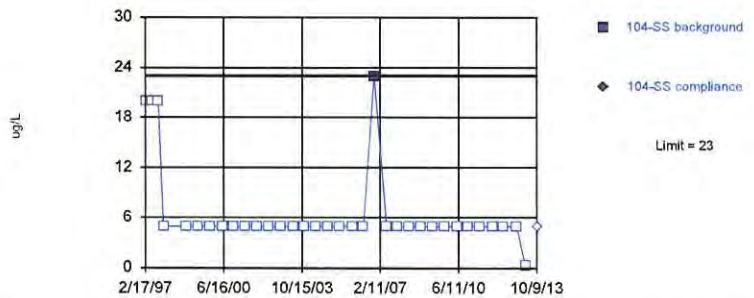


Background Data Summary (based on square root transformation): Mean=4.124, Std. Dev.=1.066, n=34, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9306, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

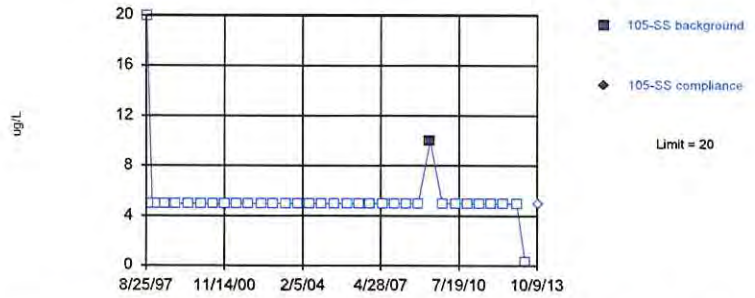


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

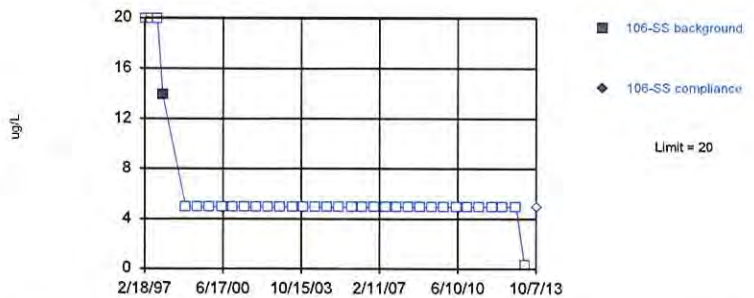


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

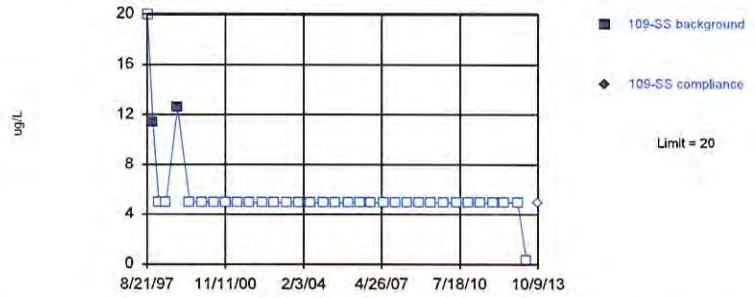
Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

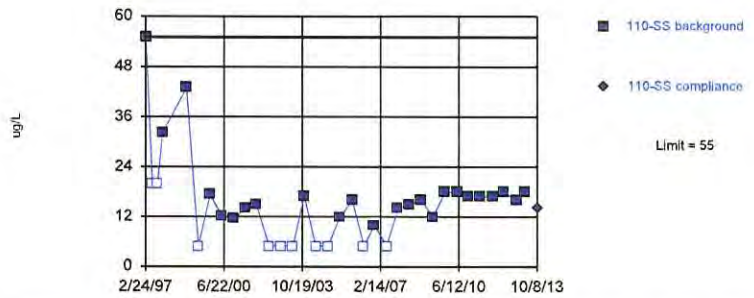
Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 29.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

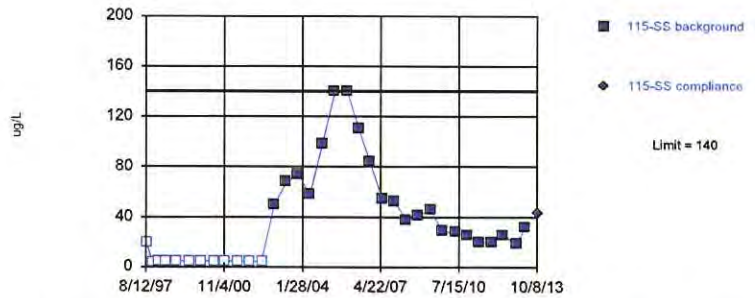
Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 35.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

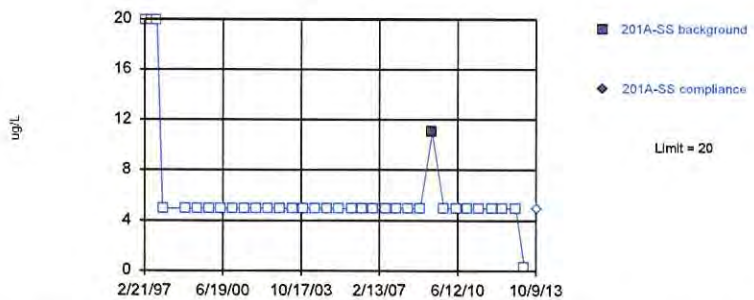
Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

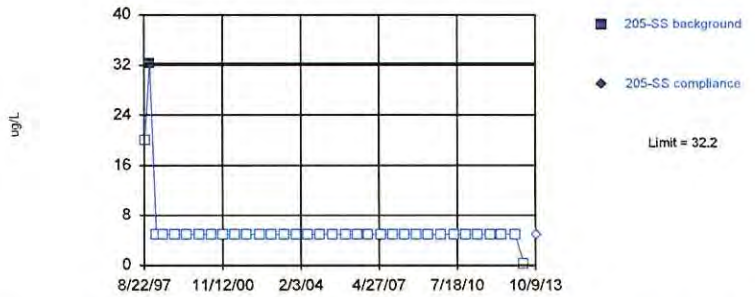
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Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

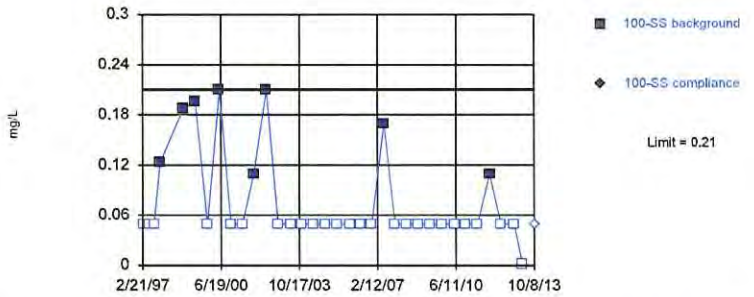
Constituent: Nickel Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

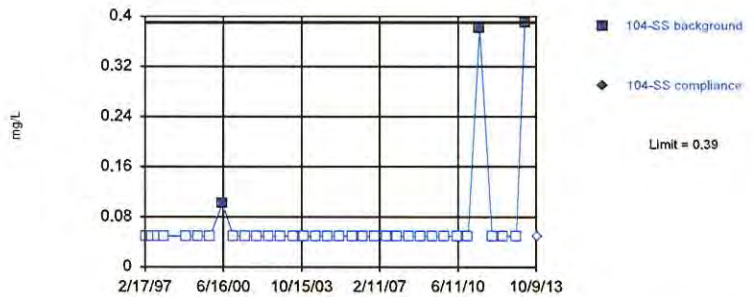
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

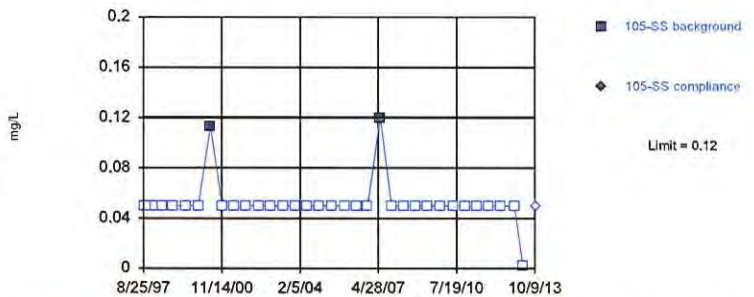
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

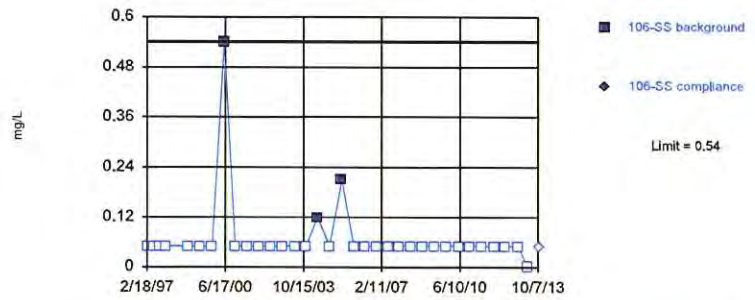
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

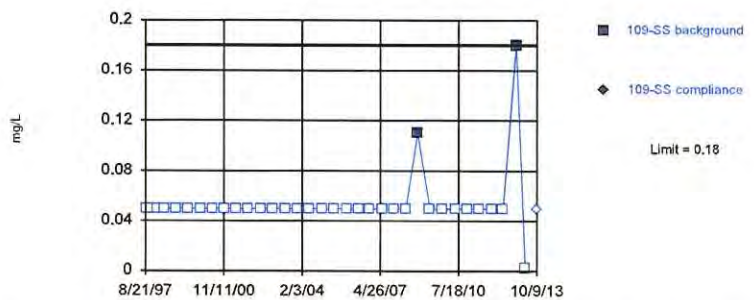
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

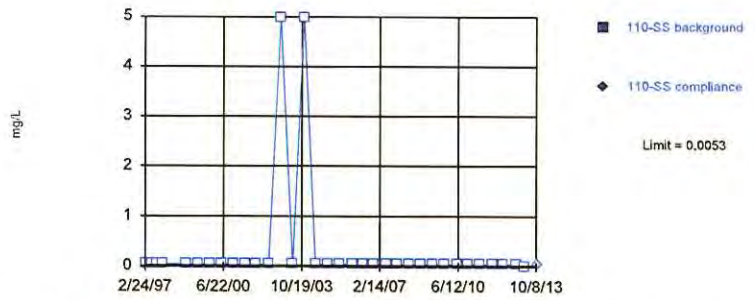
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

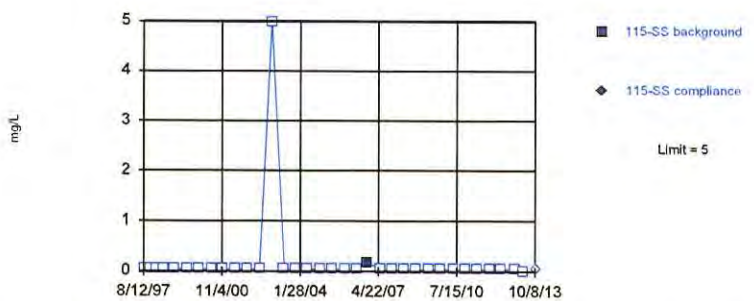
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



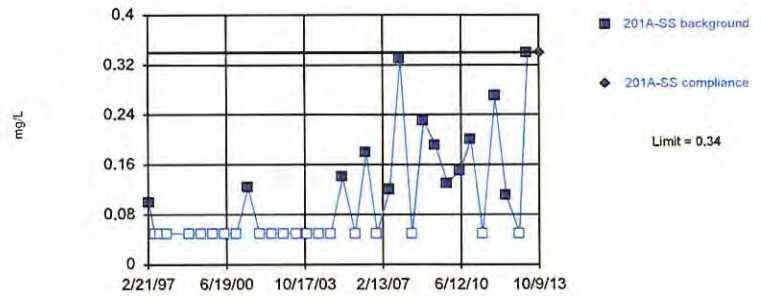
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

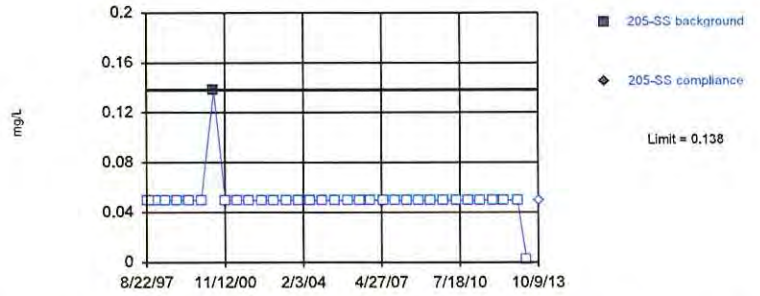


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

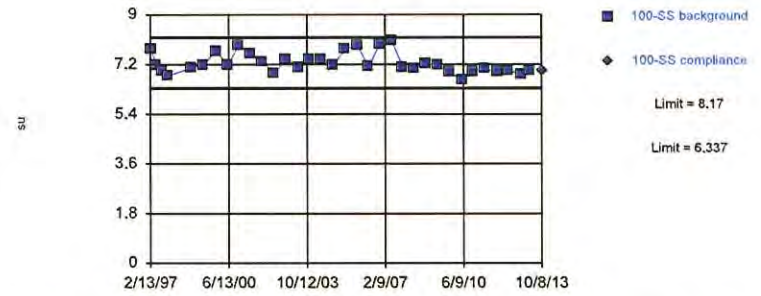


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Within Limits

Prediction Limit
Intrawell Parametric

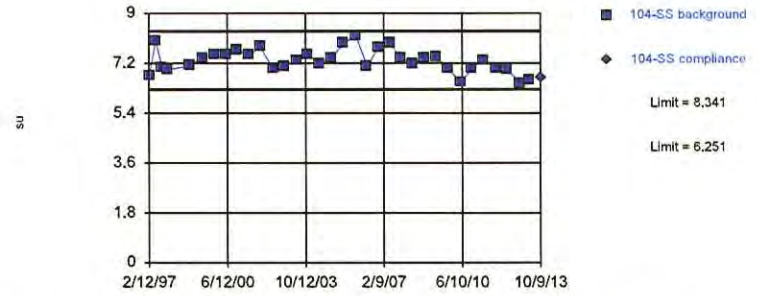


Background Data Summary: Mean=7.254, Std. Dev.=0.3664, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.296, Std. Dev.=0.418, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9735, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

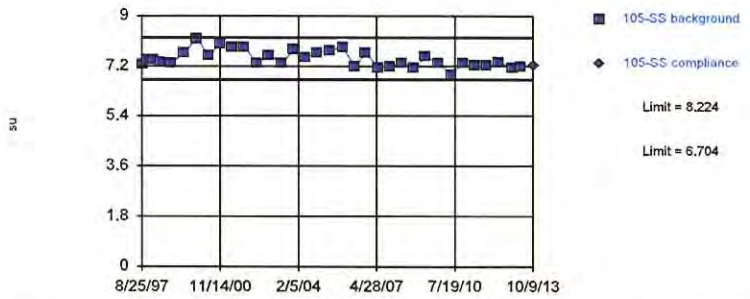
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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.464, Std. Dev.=0.3038, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9471, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:58 AM

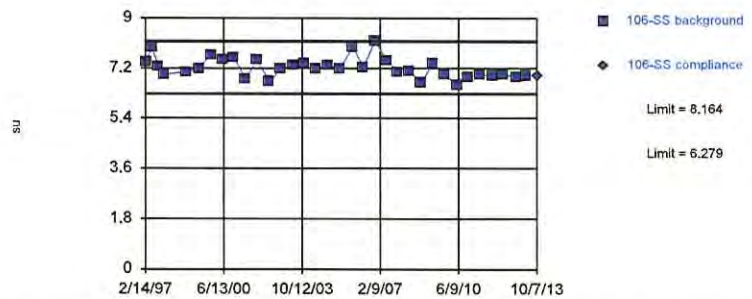
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.221, Std. Dev.=0.3769, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9564, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:58 AM

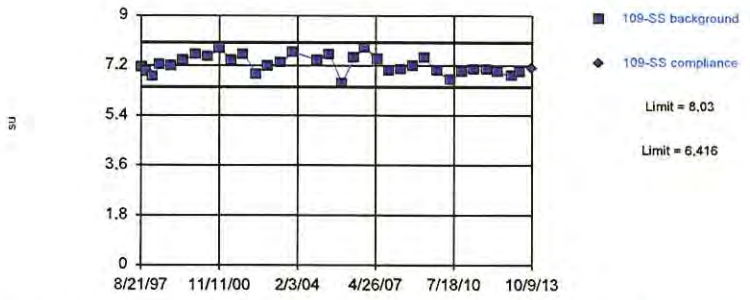
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.223, Std. Dev.=0.3214, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9771, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 10:58 AM

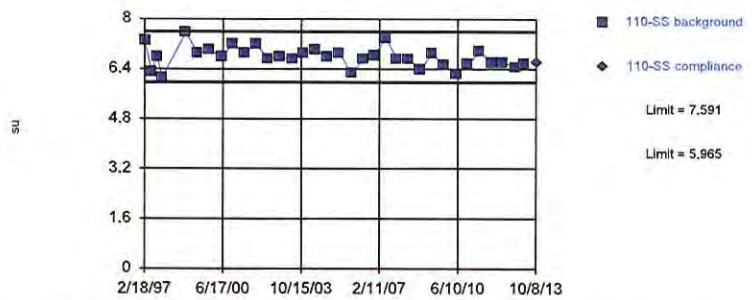
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.778, Std. Dev.=0.3251, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9789, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:58 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

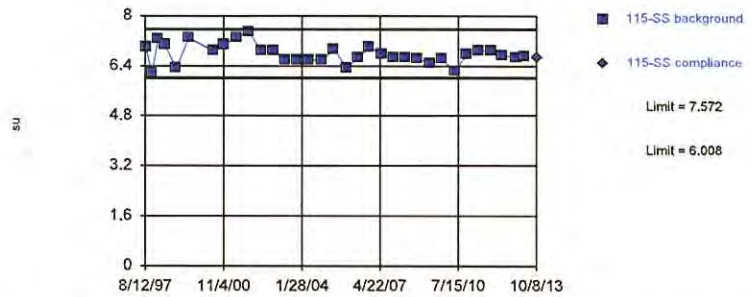
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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.79, Std. Dev.=0.3113, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9749, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 10:58 AM

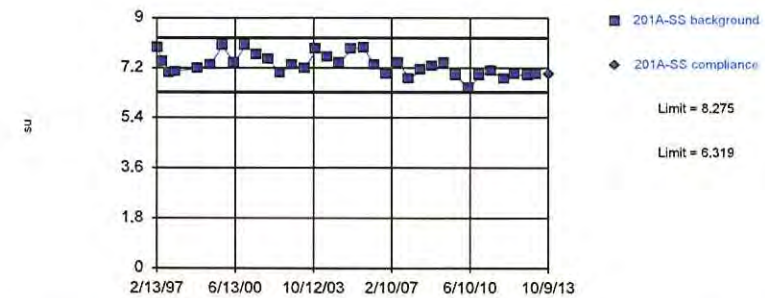
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.297, Std. Dev.=0.3912, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9442, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:58 AM

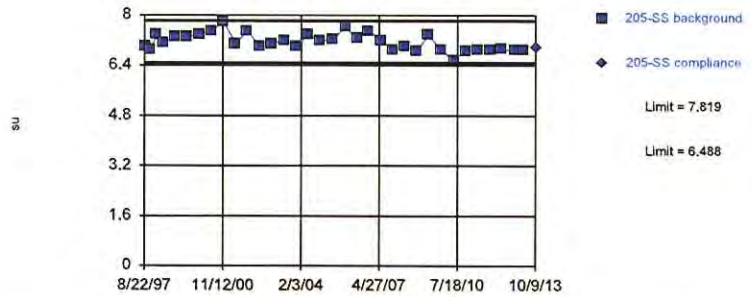
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.154, Std. Dev.=0.2663, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9602, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:58 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

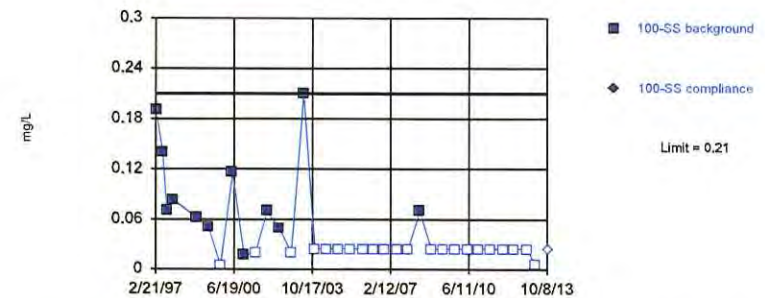
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 34 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 12/17/2013 10:58 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

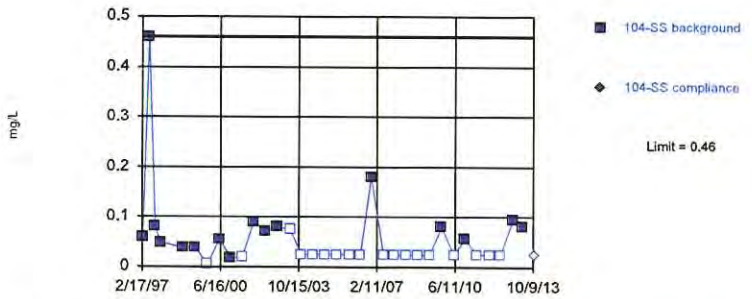
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Hollow symbols indicate censored values.

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 34 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

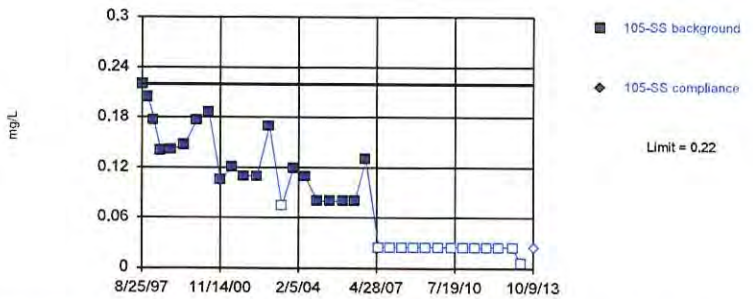
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 41.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

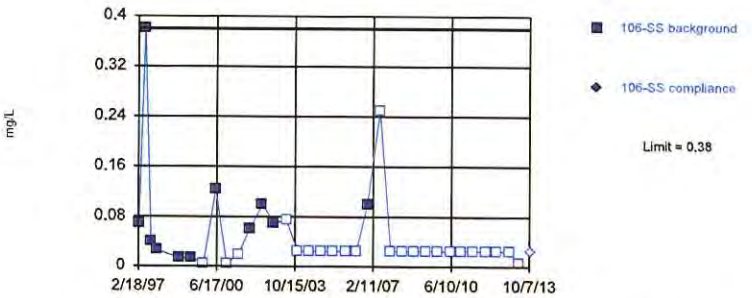
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 67.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

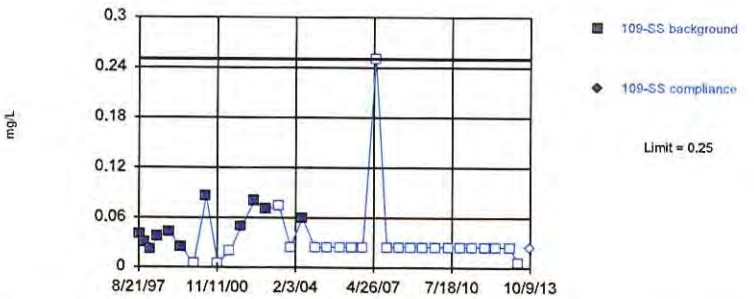
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:58 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 67.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

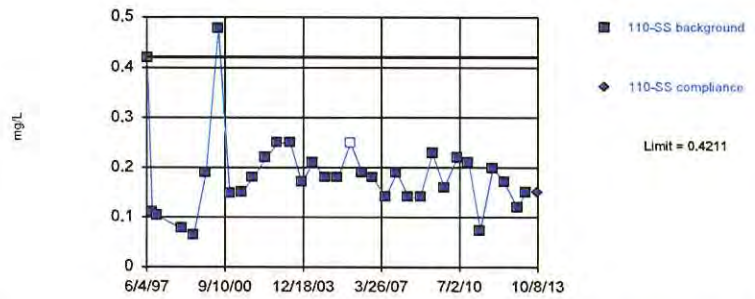
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.4222, Std. Dev.=0.09032, n=33, 3.03% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9229, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 1.4 (2/24/1997).

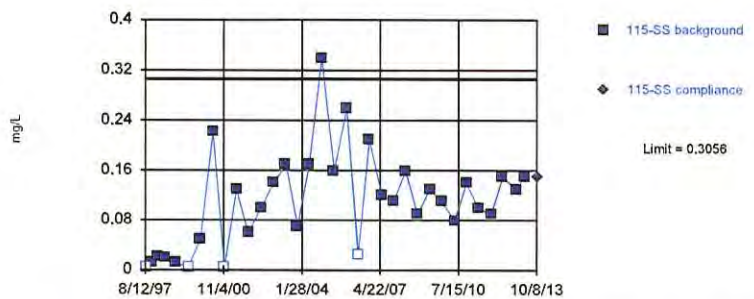
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1102, Std. Dev.=0.07811, n=34, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9381, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

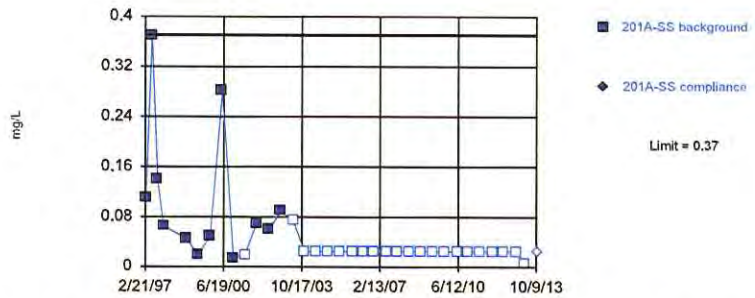
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

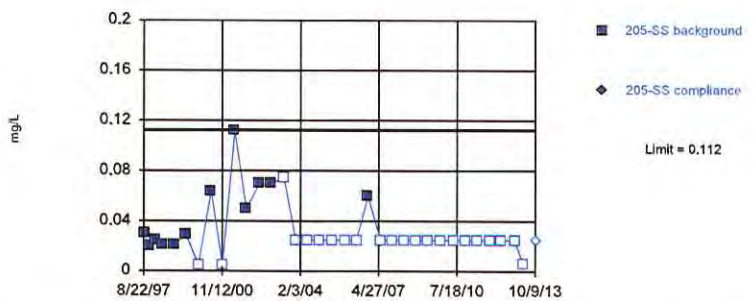
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



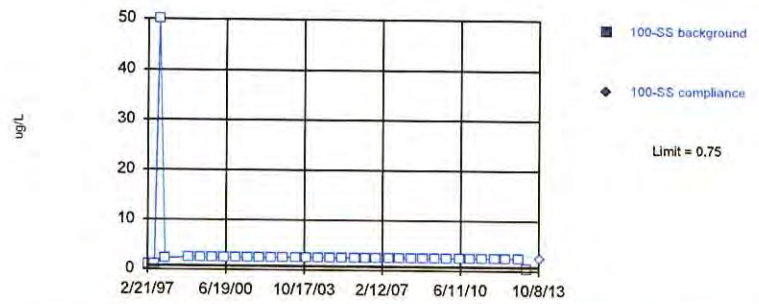
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



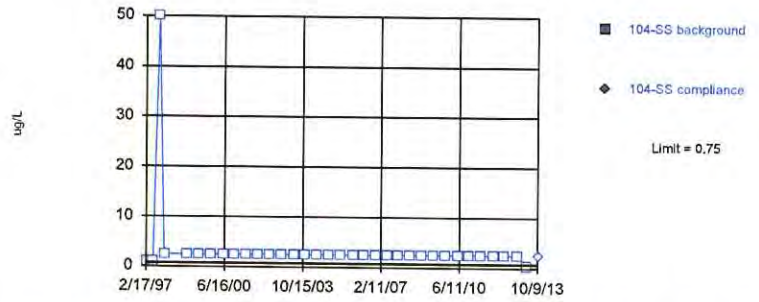
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



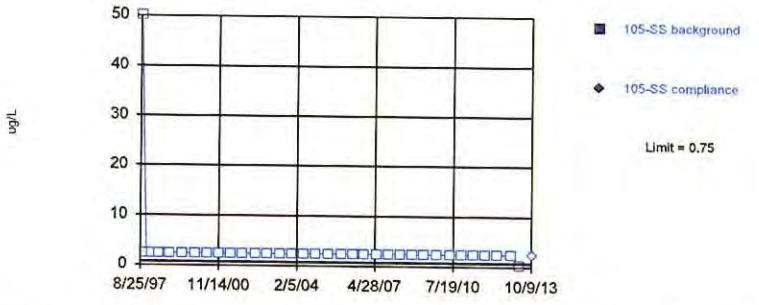
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



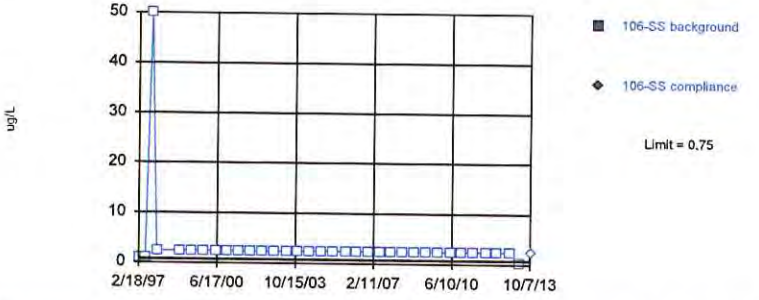
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



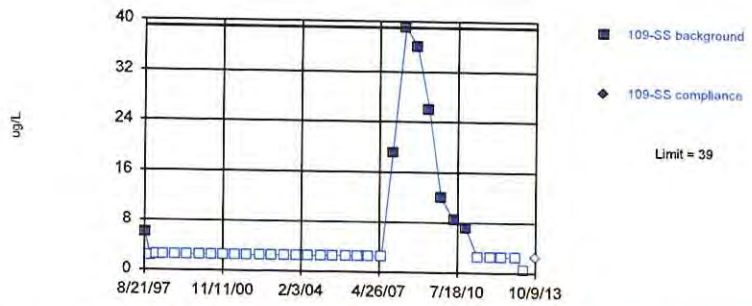
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

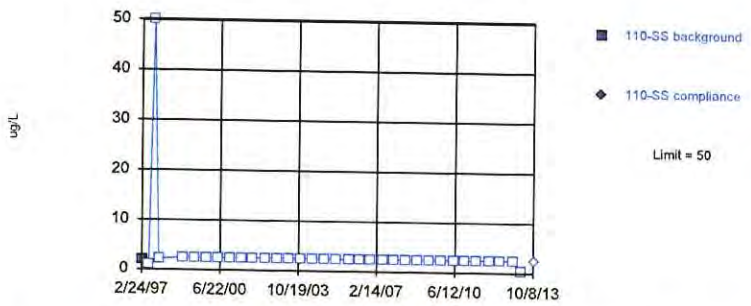


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

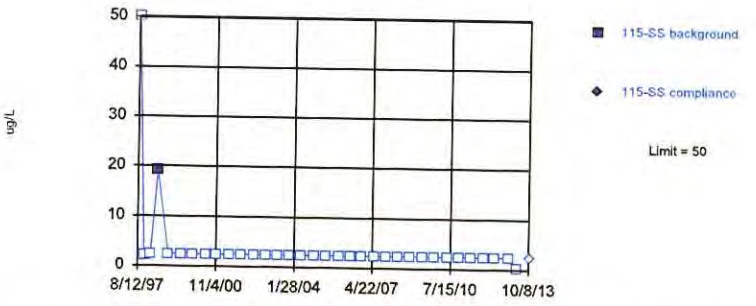


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit
Intrawell Non-parametric

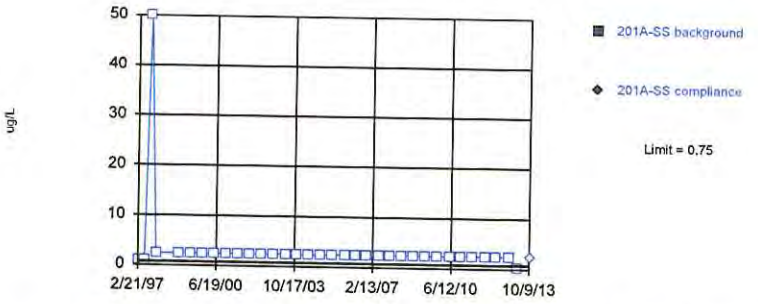


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

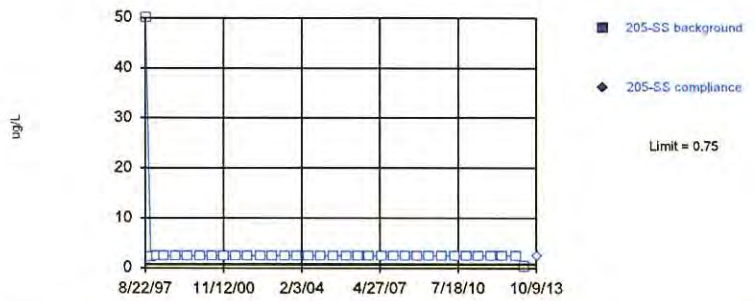
Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

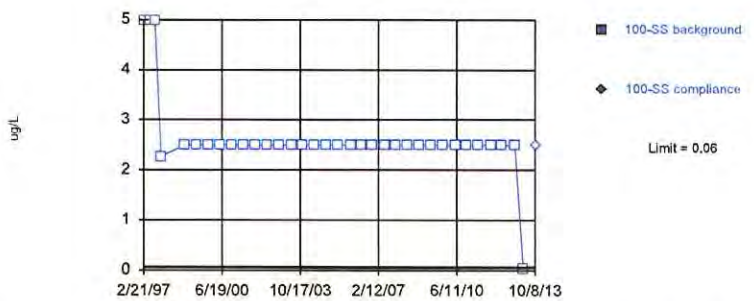
Constituent: Selenium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

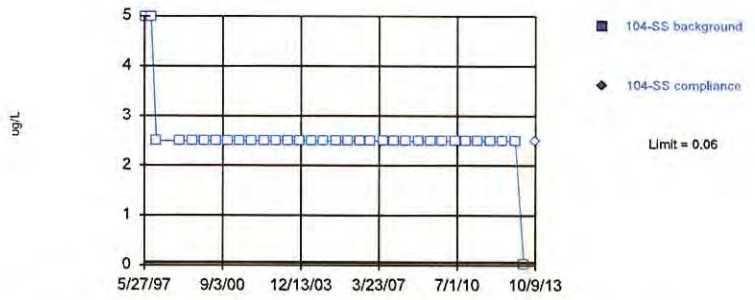
Constituent: Silver Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 33) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

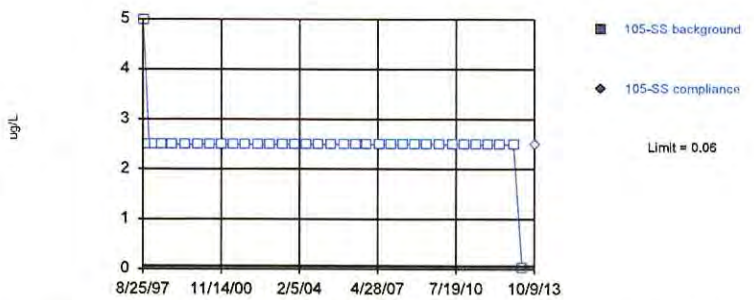
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

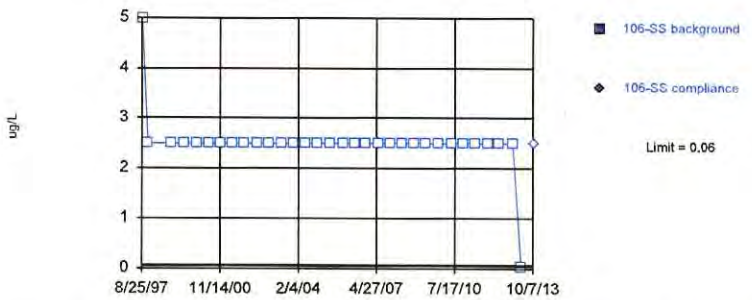
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

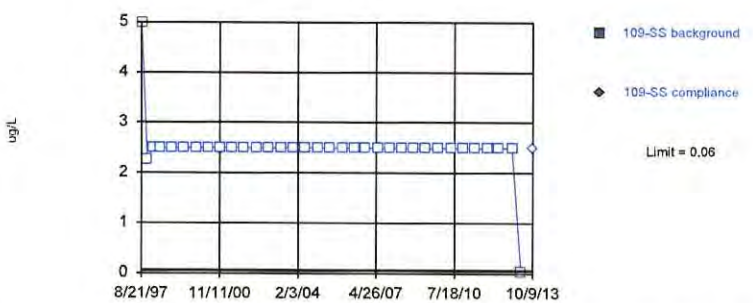
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

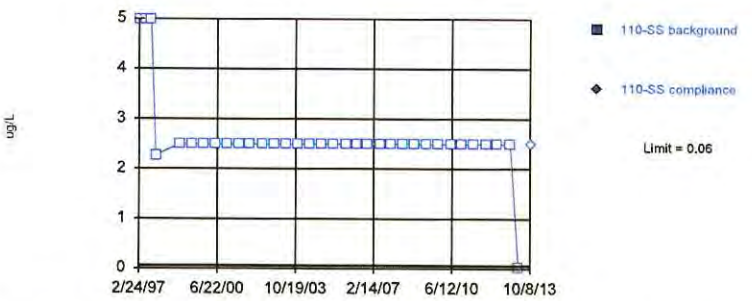
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

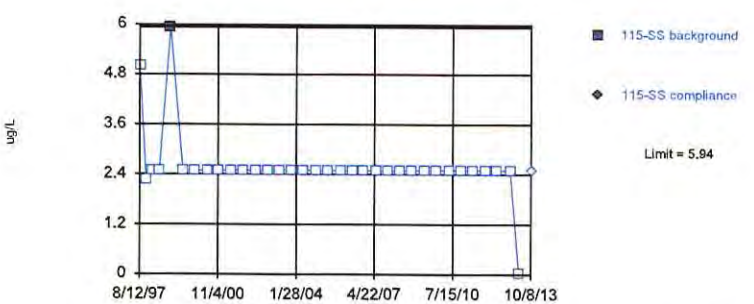
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

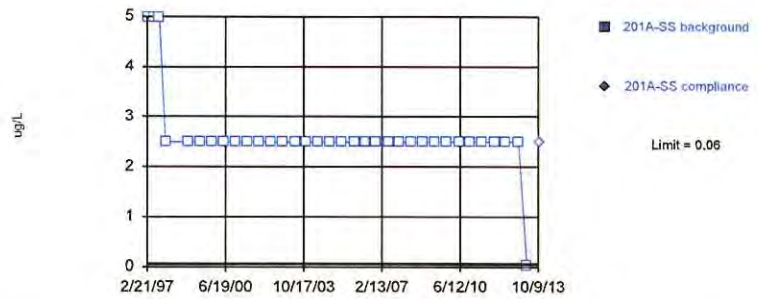
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

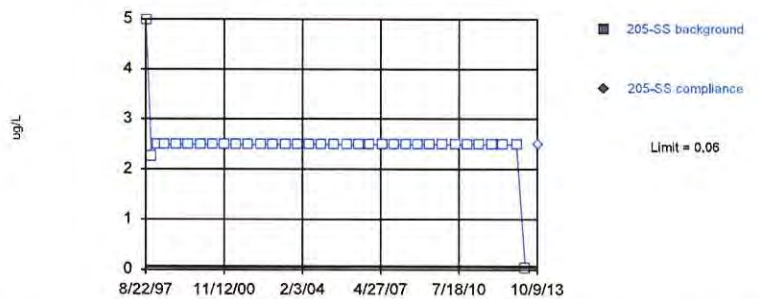
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

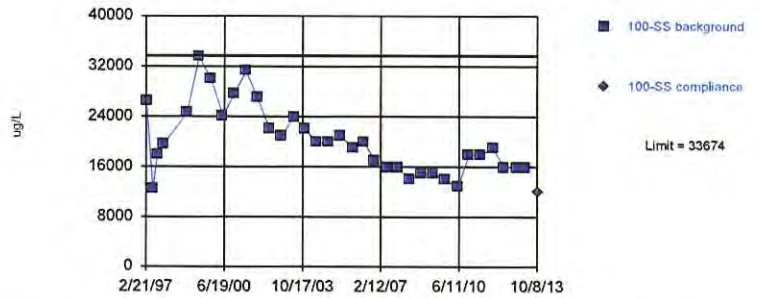
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=20209, Std. Dev.=5384, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.934, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

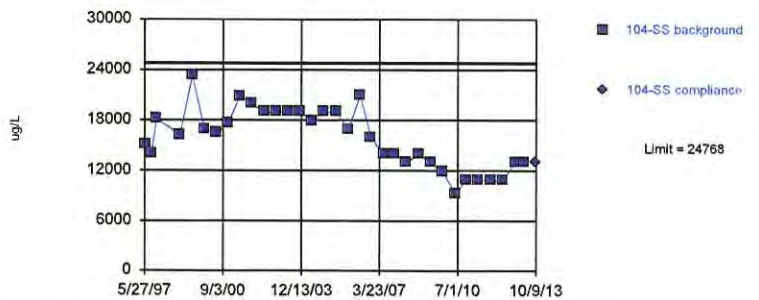
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=15885, Std. Dev.=3538, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9607, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 34800 (2/17/1997).

Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

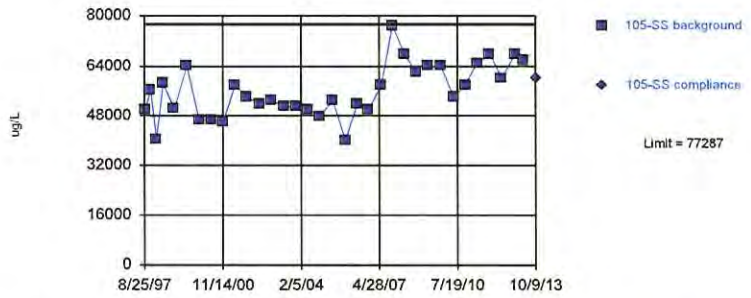
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=55971, Std. Dev.=8523, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9706, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM

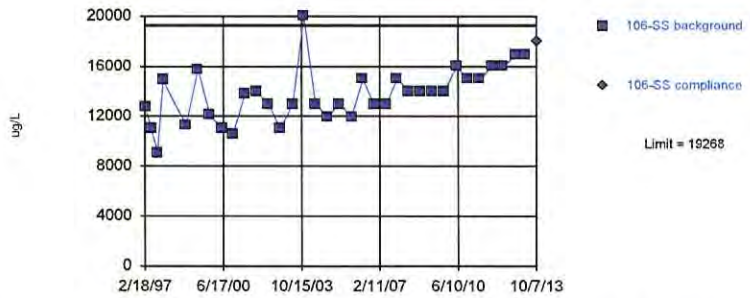
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=13747, Std. Dev.=2208, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9767, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM

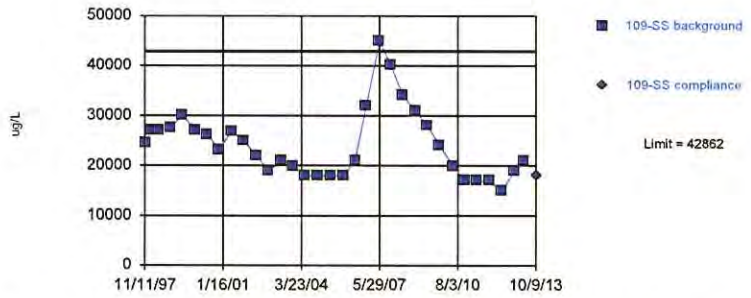
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=154.3, Std. Dev.=21, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9372, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 68000 (8/21/1997).

Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM

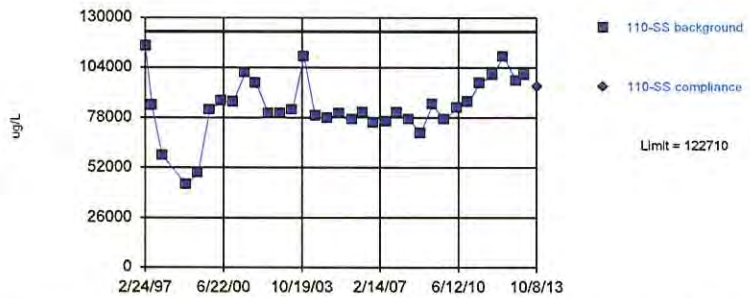
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=83697, Std. Dev.=15538, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9353, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 19000 (8/22/1997).

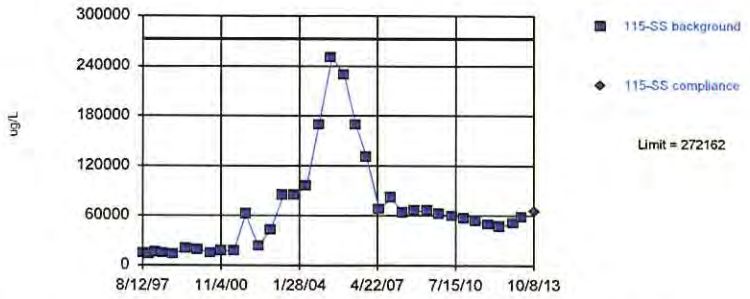
Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=37.73, Std. Dev.=10.83, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9133, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM

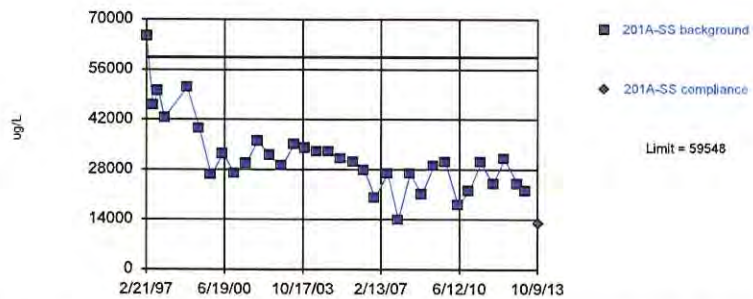
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=175.3, Std. Dev.=27.47, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9562, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM

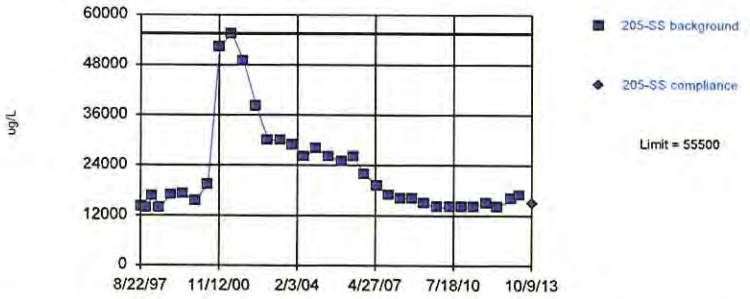
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sodium Total Analysis Run 12/17/2013 10:59 AM

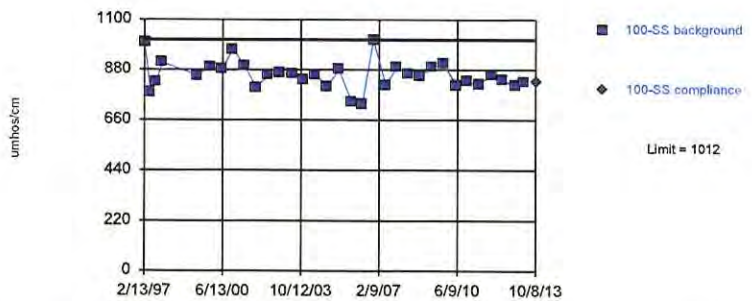
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=856.6, Std. Dev.=61.84, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9491, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 1080 (11/12/1998).

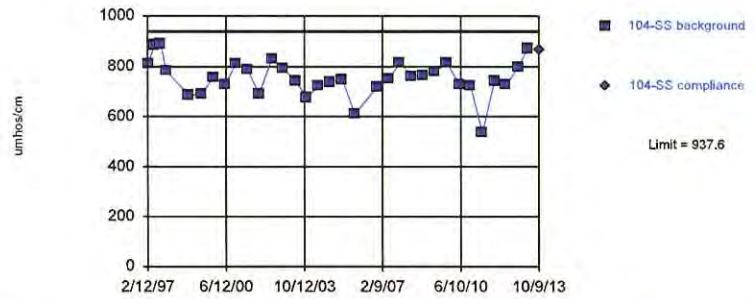
Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=754.5, Std. Dev.=72.89, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9553, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 10:59 AM

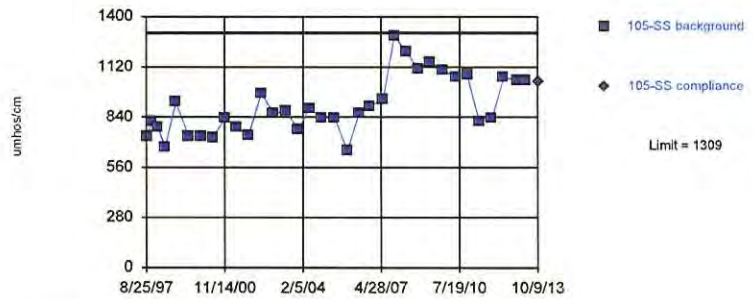
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=903.7, Std. Dev.=161.9, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.944, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:59 AM

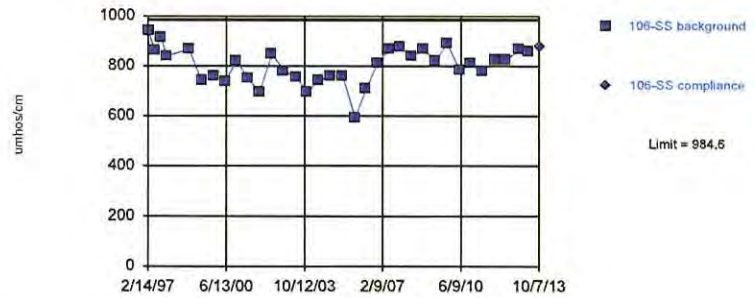
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=803.1, Std. Dev.=72.57, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9687, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:59 AM

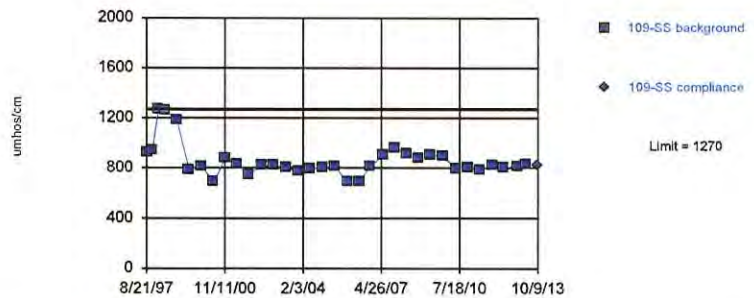
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:59 AM

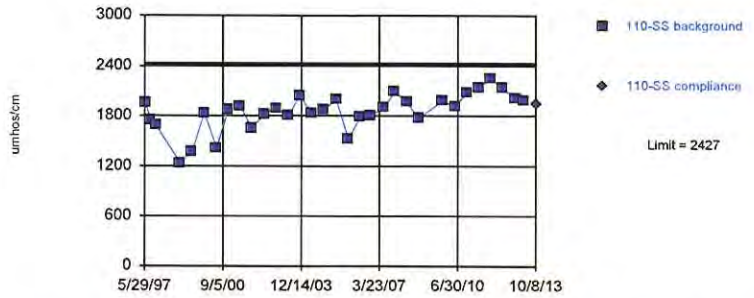
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1856, Std. Dev.=226.3, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9369, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 1010 (2/18/1997); 2930 (5/7/2009).

Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:59 AM

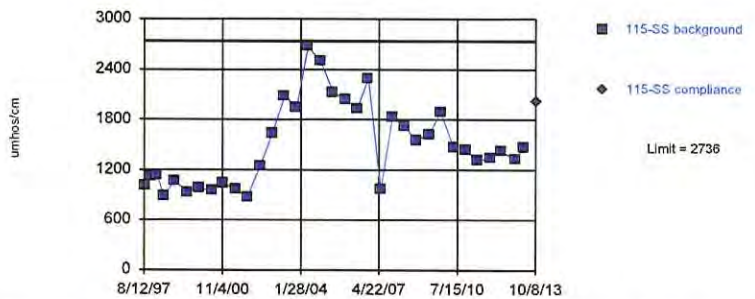
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1496, Std. Dev.=496.1, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9268, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:59 AM

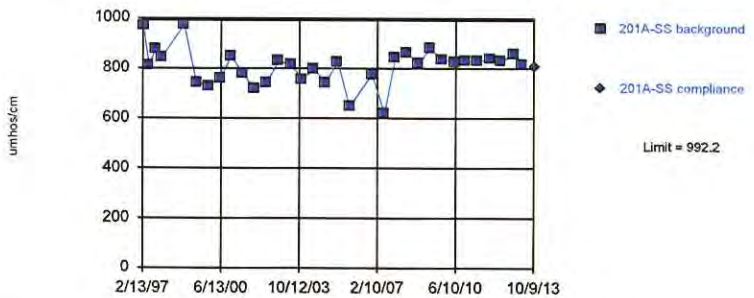
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=808.2, Std. Dev.=73.32, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9412, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 10:59 AM

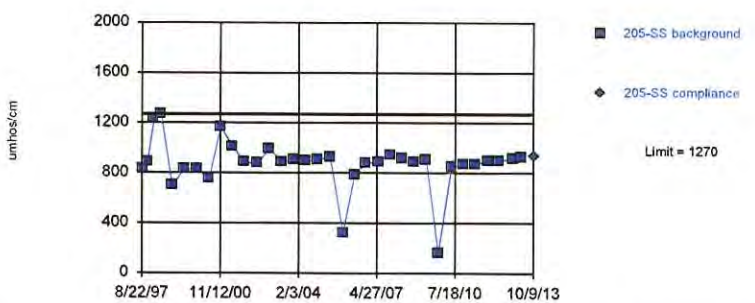
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (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 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

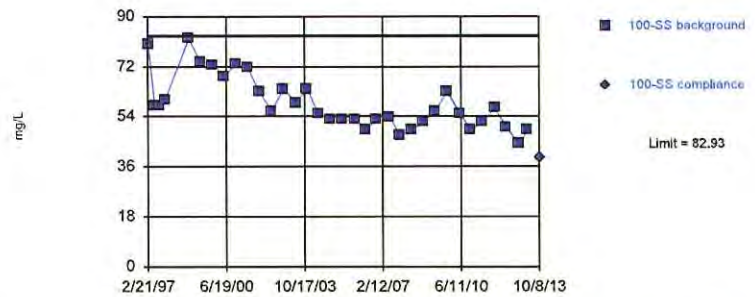
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=58.74, Std. Dev.=9.674, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.918, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

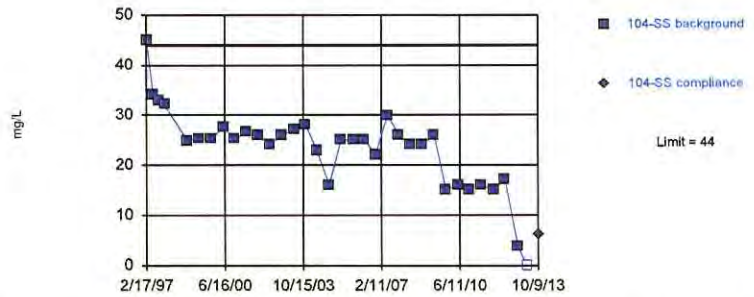
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=23.34, Std. Dev.=8.257, n=34, 2.941% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9103, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

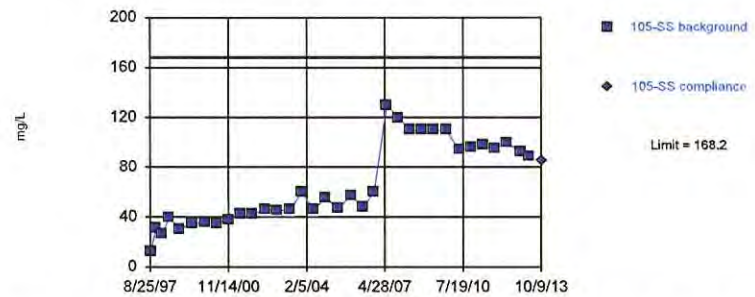
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=7.849, Std. Dev.=2.048, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9206, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

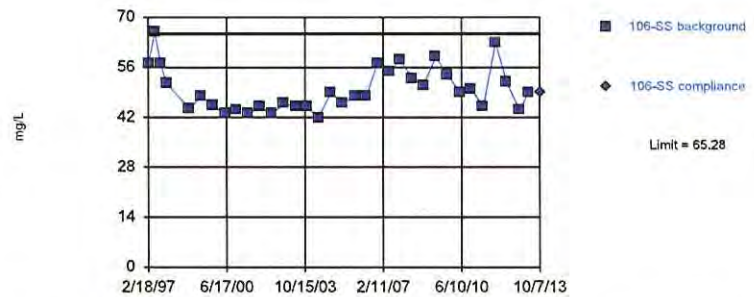
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=49.88, Std. Dev.=6.158, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9114, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

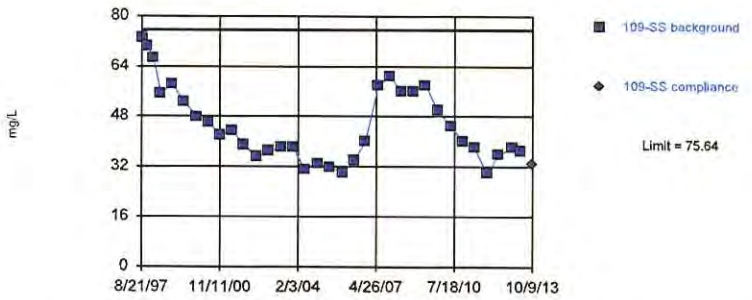
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=45.46, Std. Dev.=12.07, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9135, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

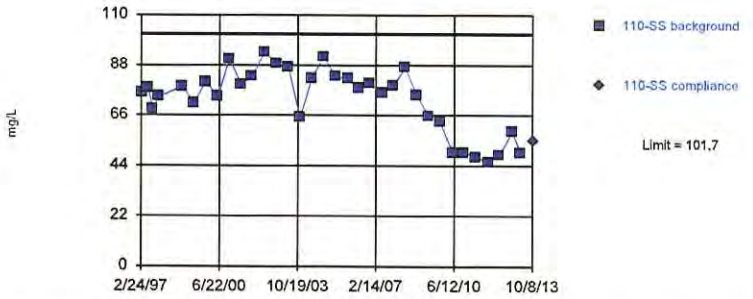
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=5534, Std. Dev.=1920, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9351, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

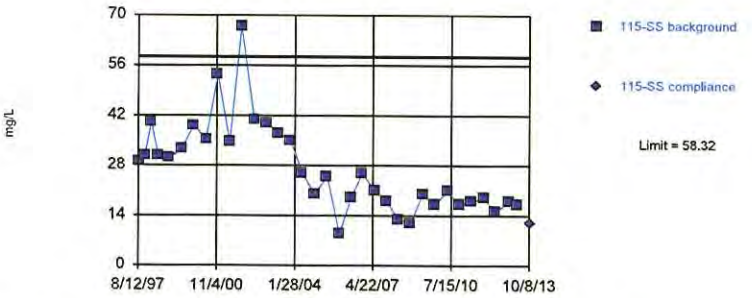
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=27.26, Std. Dev.=12.42, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9148, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

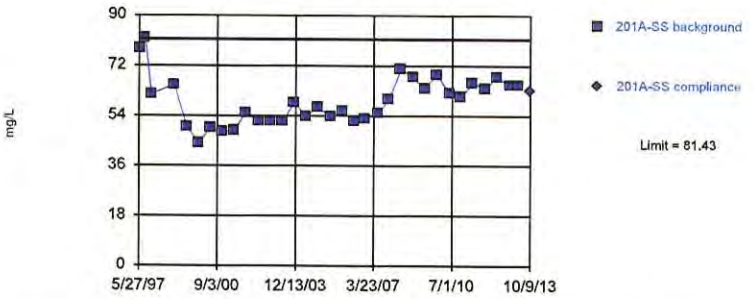
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=59.46, Std. Dev.=8.75, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9591, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 99 (2/21/1997).

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

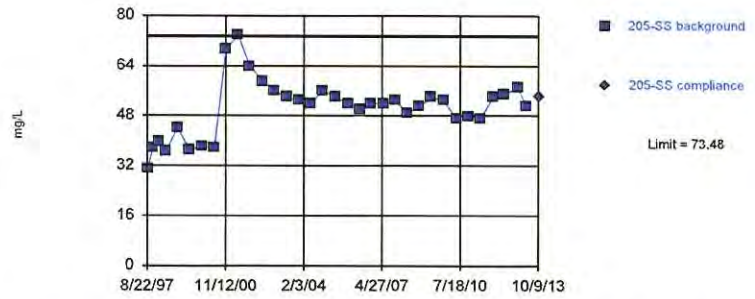
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50.55, Std. Dev.=9.17, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9442, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

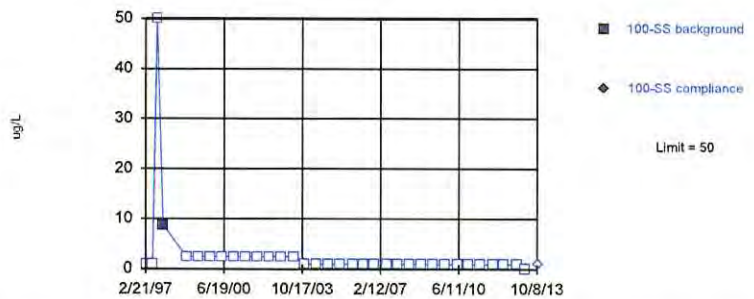
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

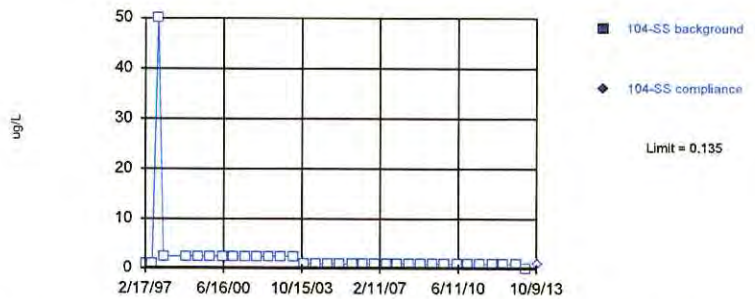
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 12/17/2013 10:59 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

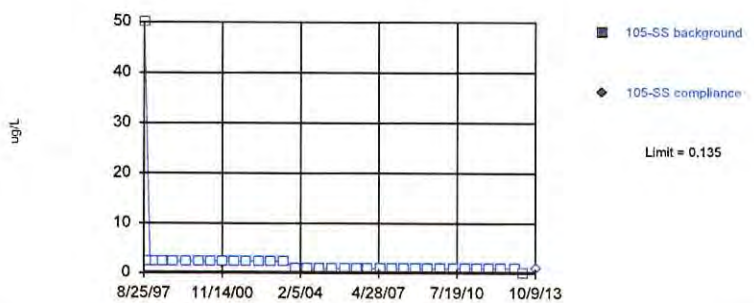
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 12/17/2013 11:00 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

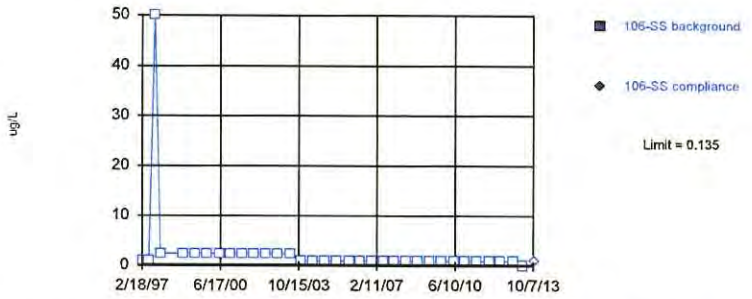
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

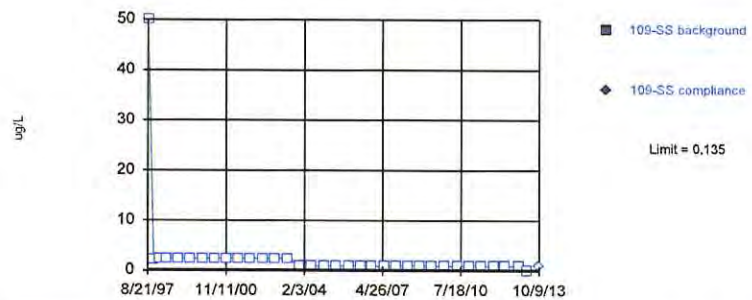
Constituent: Thallium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

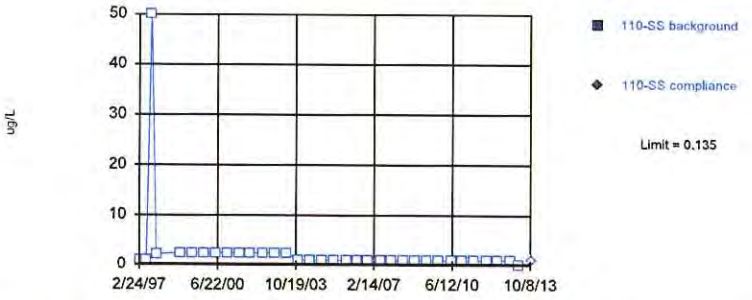
Constituent: Thallium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

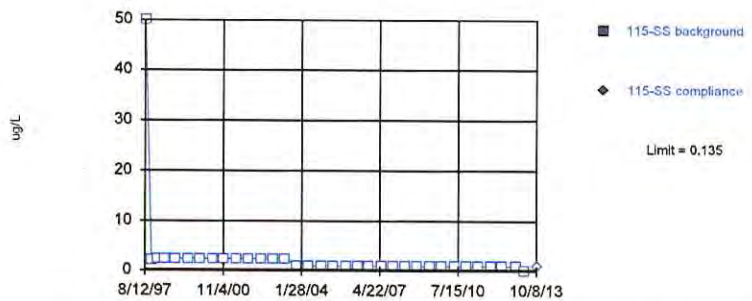
Constituent: Thallium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

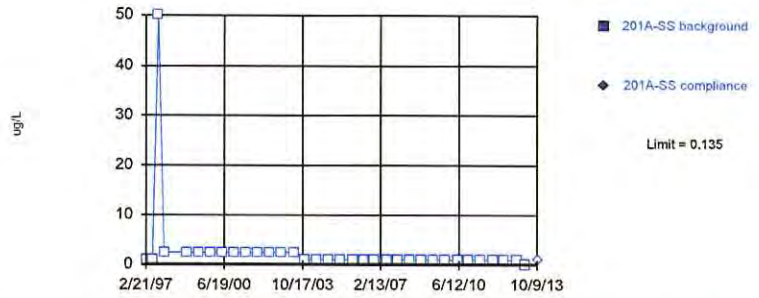
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

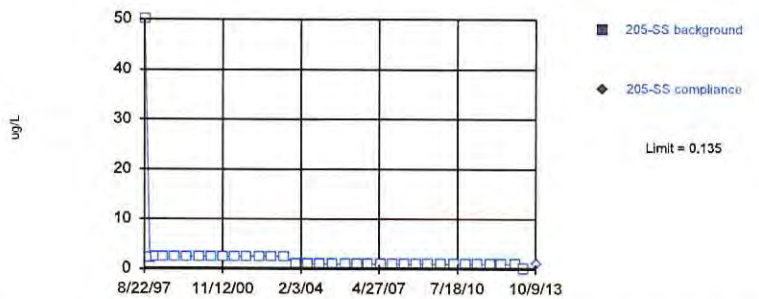
Constituent: Thallium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

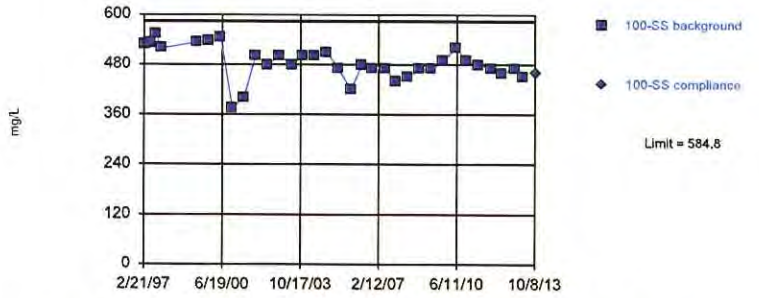
Constituent: Thallium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=483.8, Std. Dev.=40.22, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9597, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 748 (11/12/1998).

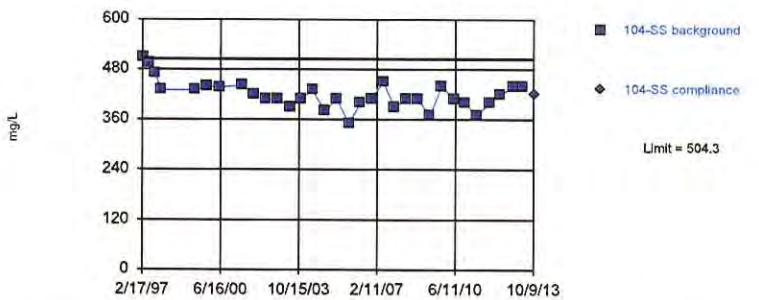
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



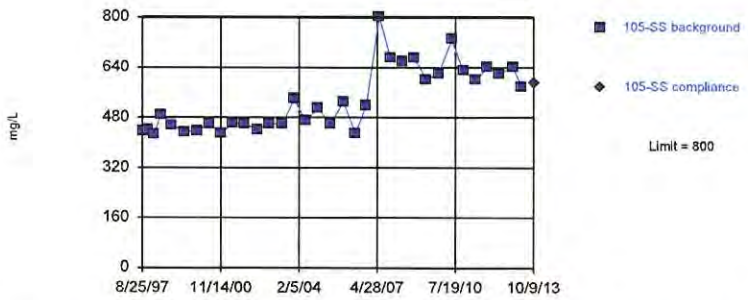
Background Data Summary: Mean=419.6, Std. Dev.=33.63, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9542, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 664 (11/11/1998); 257 (11/13/2000).

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:00 AM

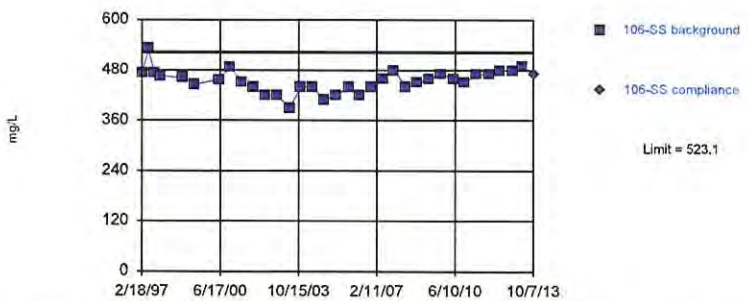
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=454.1, Std. Dev.=27.47, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9744, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 11:00 AM

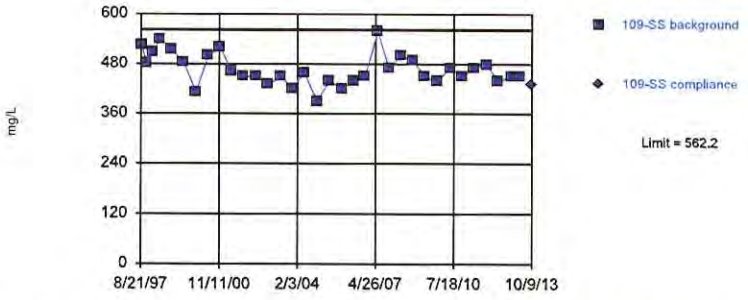
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=466.7, Std. Dev.=38.16, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9652, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:00 AM

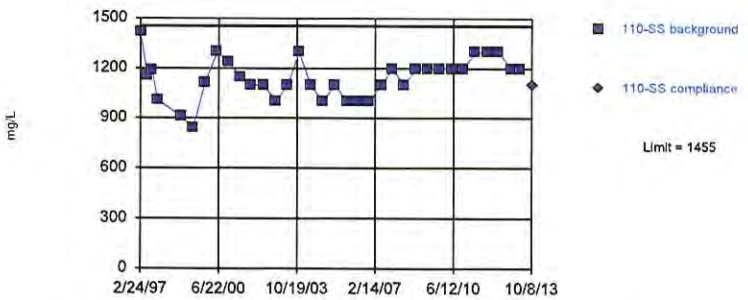
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1142, Std. Dev.=125, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9624, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:00 AM

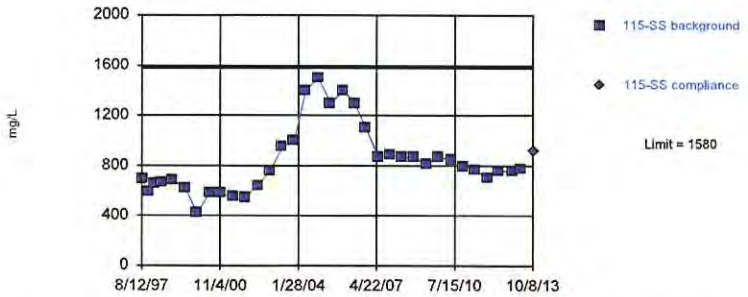
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=28.63, Std. Dev.=4.445, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9306, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:00 AM

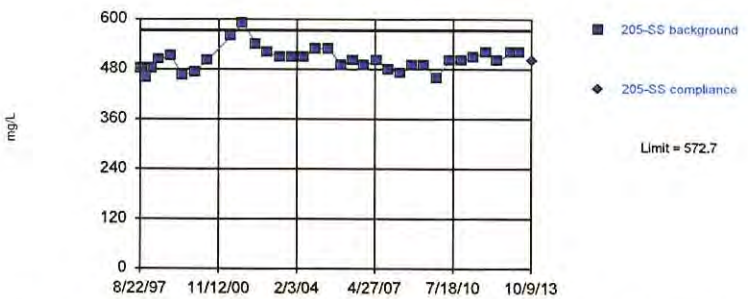
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=503.5, Std. Dev.=27.53, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9424, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 11:00 AM

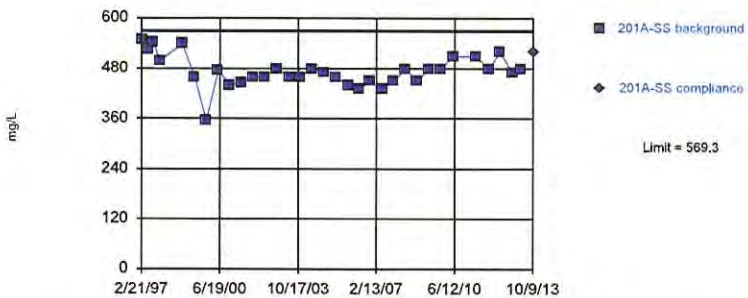
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=473.4, Std. Dev.=38.19, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9365, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 11:00 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

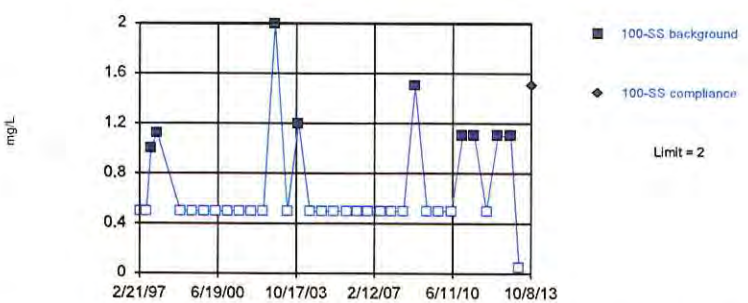
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 34 background values. 73.53% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

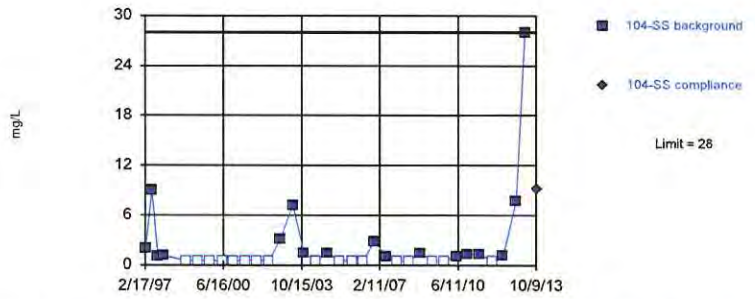
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

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. 50% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

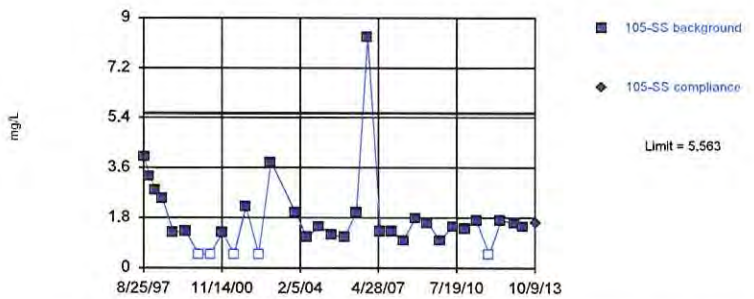
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Aitchison's Adjustment): Mean=0.4832, Std. Dev.=0.491, n=33, 15.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9378, critical = 0.906, Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 14 (5/28/2003).

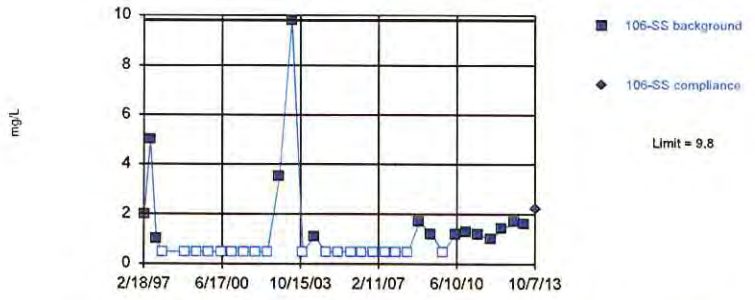
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 55.88% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

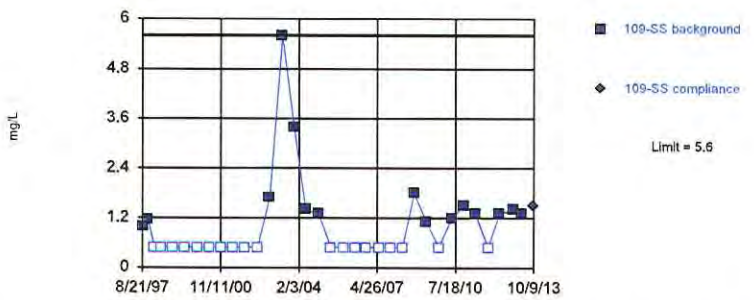
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 55.88% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

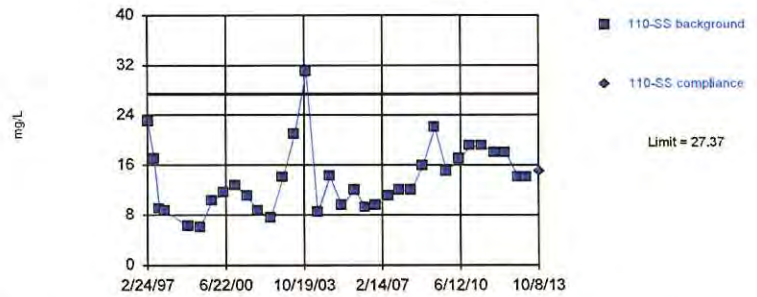
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=13.76, Std. Dev.=5.44, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9309, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

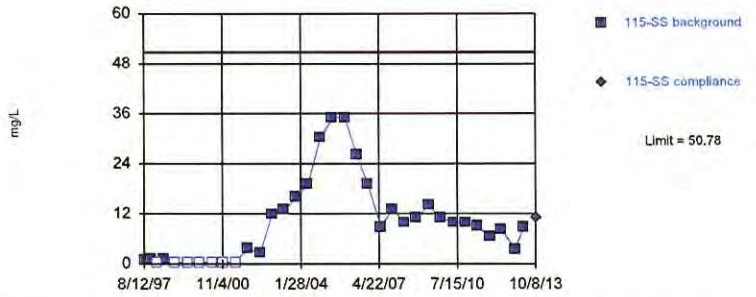
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison`s Adjustment): Mean=2.608, Std. Dev.=1.806, n=34, 20.59% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9129, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

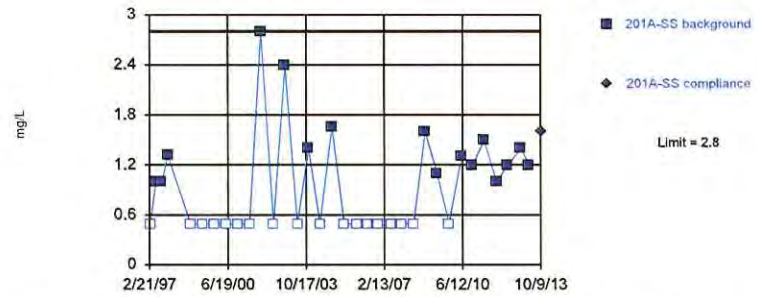
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 34 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

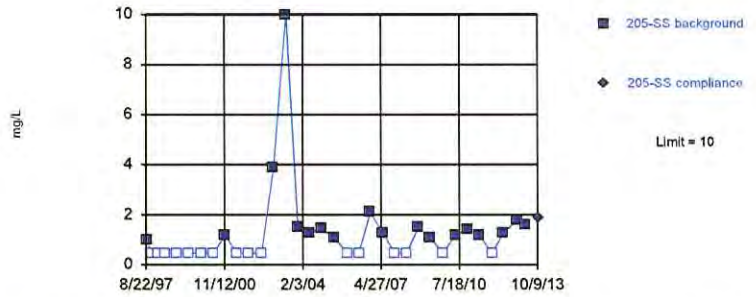
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:00 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

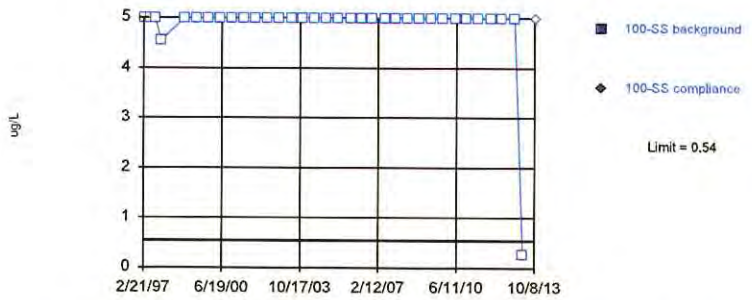
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

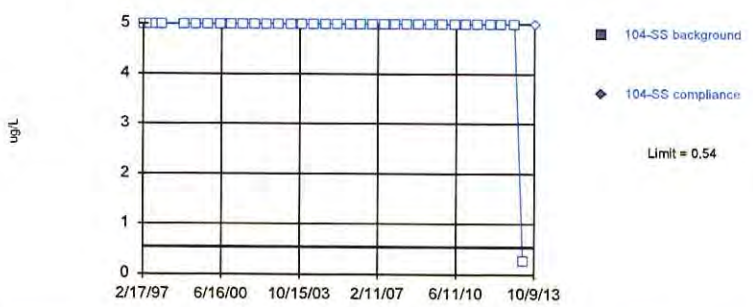
Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

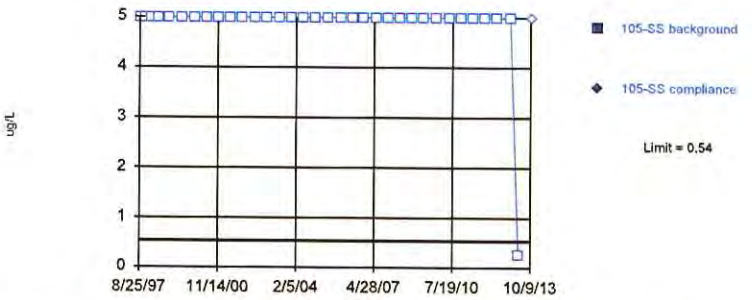
Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

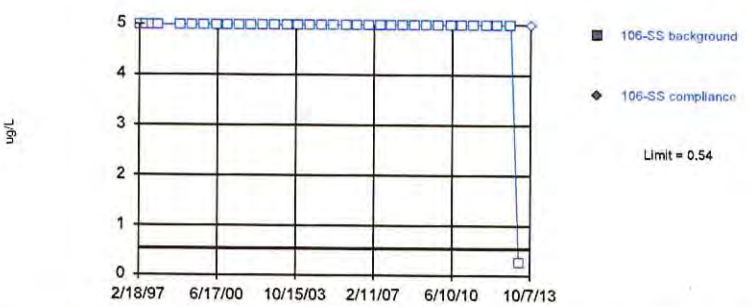
Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

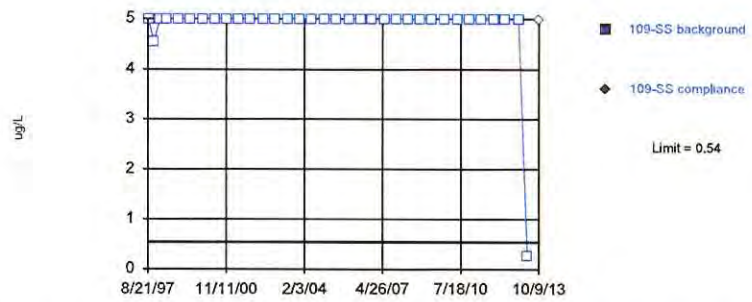
Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

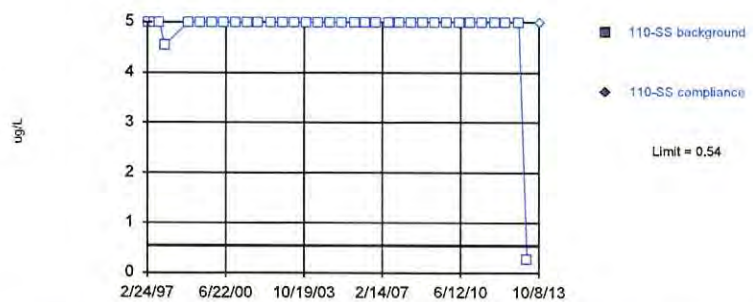
Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

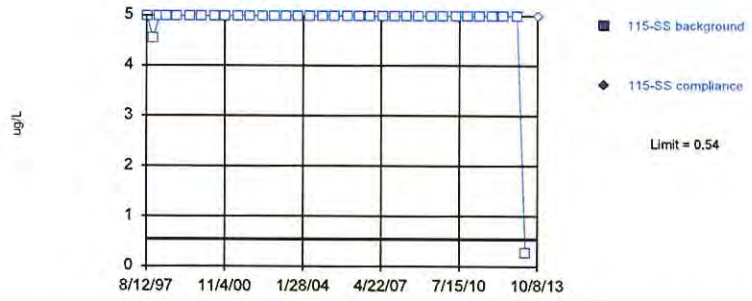
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

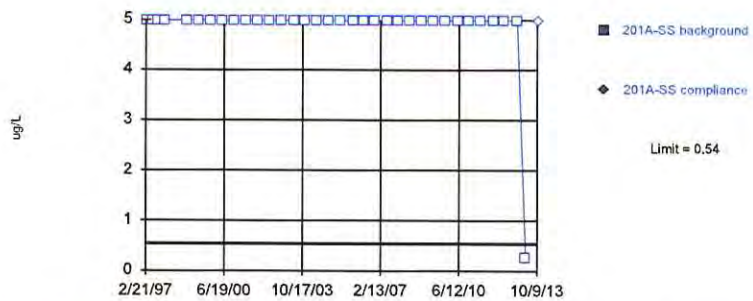
Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

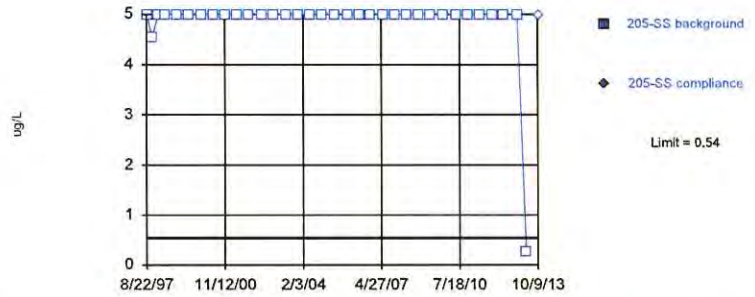
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

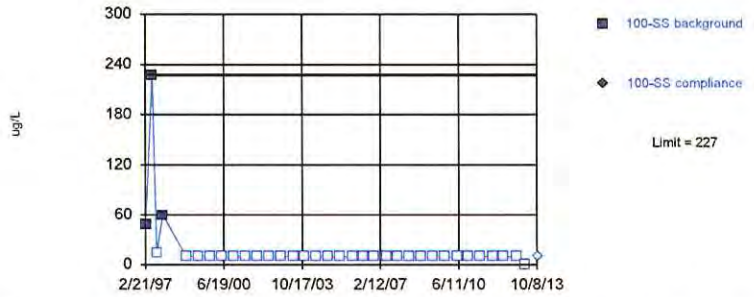
Constituent: Vanadium Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

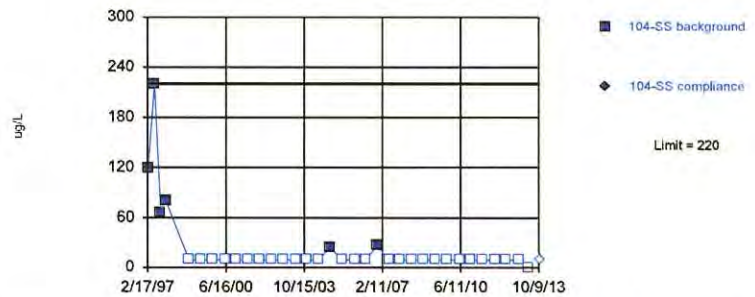
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

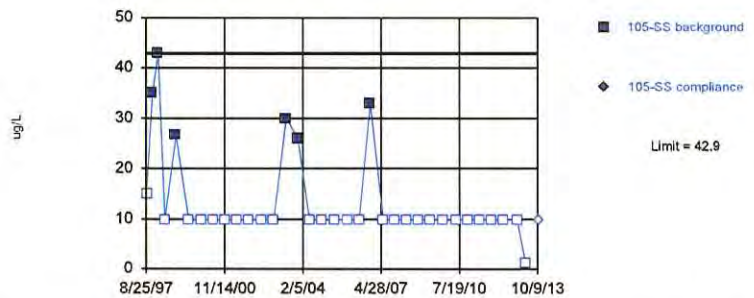
Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



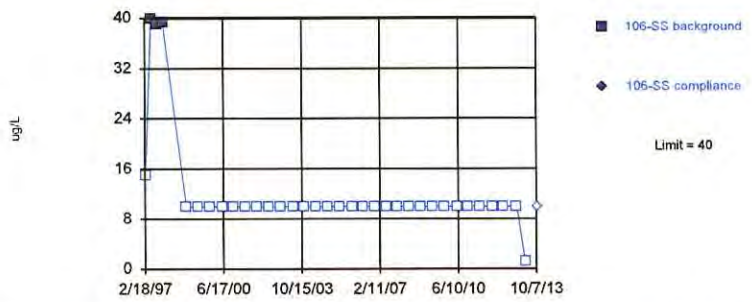
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



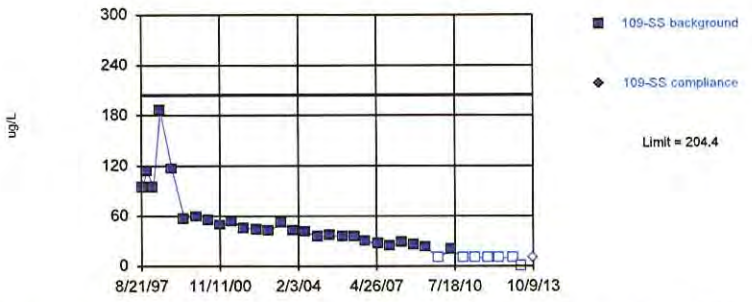
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



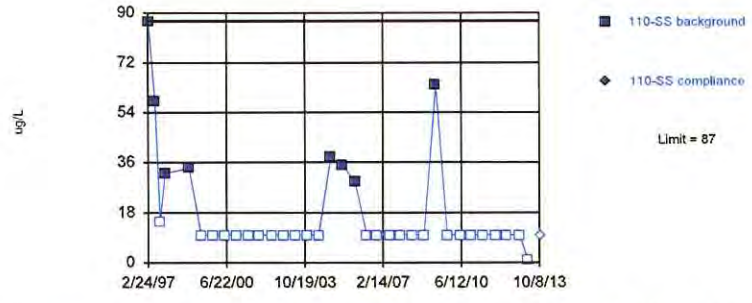
Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=5.612, Std. Dev.=3.472, n=34, 20.59% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9508, critical = 0.908. Kappa = 2.501 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



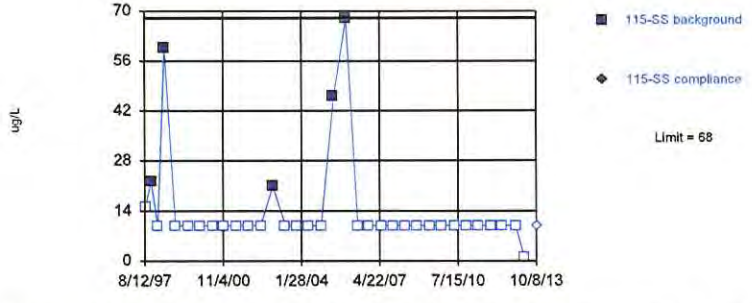
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



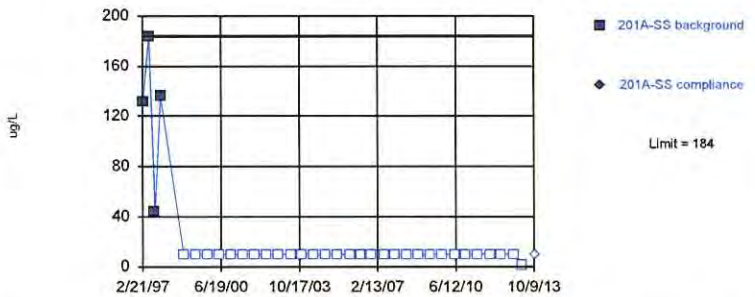
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 85.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



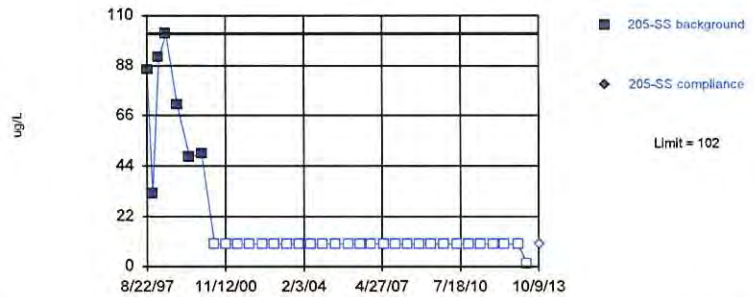
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 79.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Zinc Total Analysis Run 12/17/2013 11:00 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

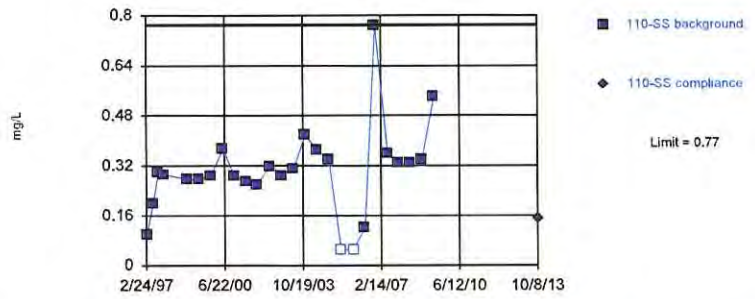
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Hollow symbols indicate censored values.

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 26 background values. 7.692% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

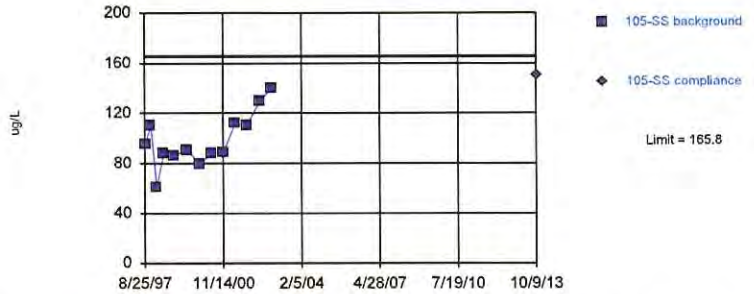
Constituent: Ammonia as N Analysis Run 12/17/2013 12:26 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=98.36, Std. Dev.=21.38, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9448, critical = 0.866. Kappa = 3.153 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

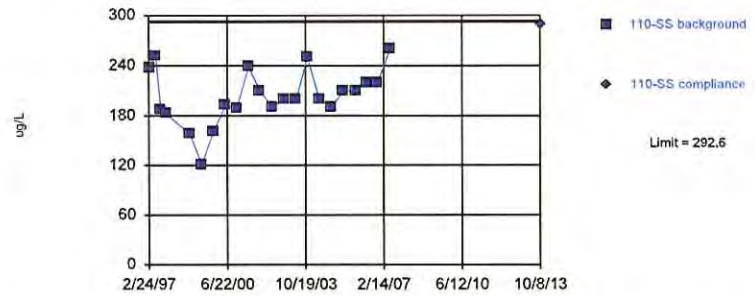
Constituent: Barium Total Analysis Run 12/17/2013 12:26 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=203.7, Std. Dev.=33.04, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9603, critical = 0.878. Kappa = 2.691 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. No background outliers were found.

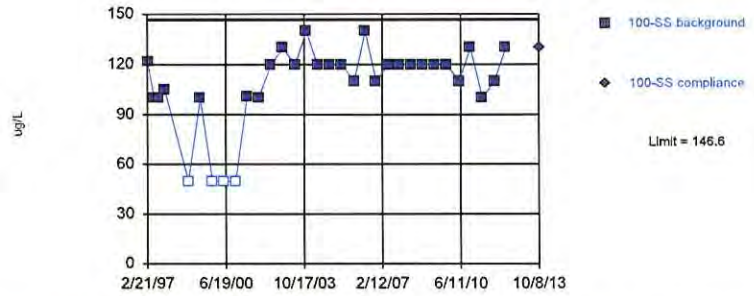
Constituent: Barium Total Analysis Run 12/17/2013 12:27 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=1434837, Std. Dev.=680436, n=32, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9138, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 12/17/2013 12:27 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

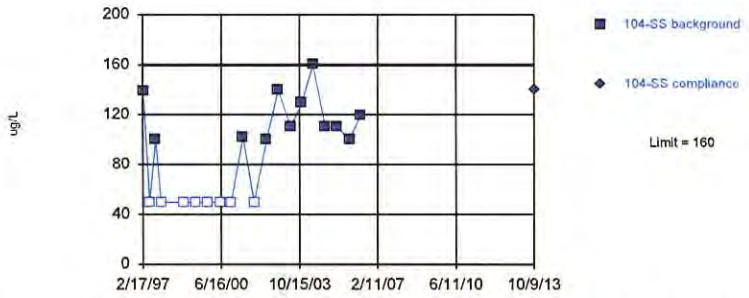
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Hollow symbols indicate censored values.

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 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

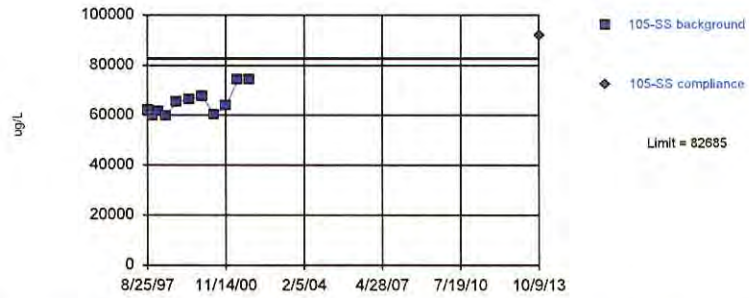
Constituent: Boron Total Analysis Run 12/17/2013 12:27 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=65055, Std. Dev.=5201, n=11. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8651, critical = 0.85. Kappa = 3.39 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

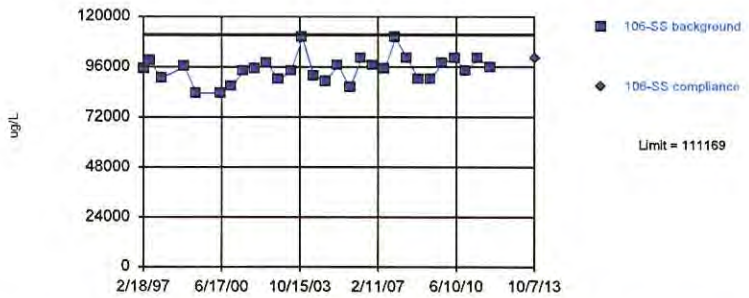
Constituent: Calcium Total Analysis Run 12/17/2013 12:28 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=94807, Std. Dev.=6401, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9465, critical = 0.898. Kappa = 2.556 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 60000 (8/25/1997); 9000 (11/19/1999).

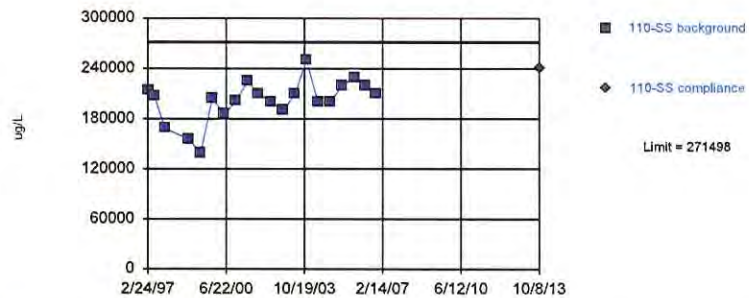
Constituent: Calcium Total Analysis Run 12/17/2013 12:28 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=202050, Std. Dev.=25357, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9342, critical = 0.868. Kappa = 2.739 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 91000 (8/22/1997).

Constituent: Calcium Total Analysis Run 12/17/2013 12:28 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

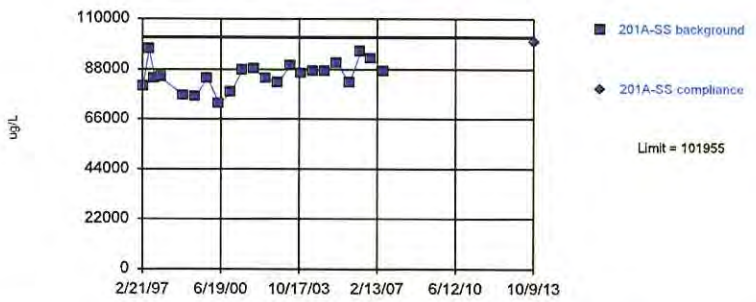
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Within Limit

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 = 2.691 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

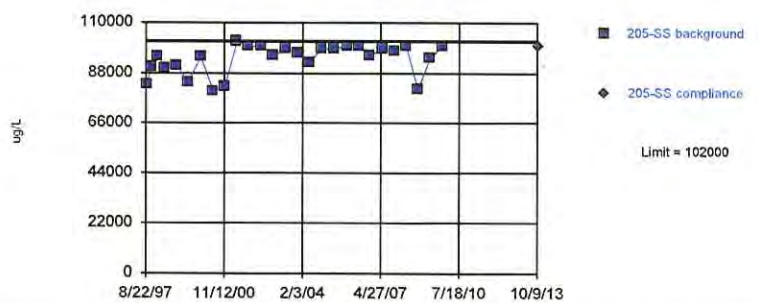
Constituent: Calcium Total Analysis Run 12/17/2013 12:29 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 = 0.004998. Individual comparison alpha = 0.002502 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

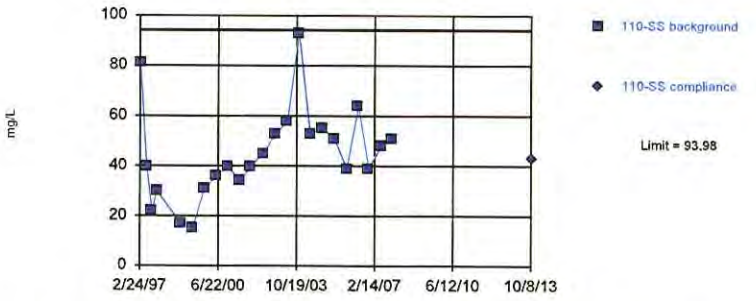
Constituent: Calcium Total Analysis Run 12/17/2013 12:29 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=45, Std. Dev.=18.37, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9456, critical = 0.881. Kappa = 2.666 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

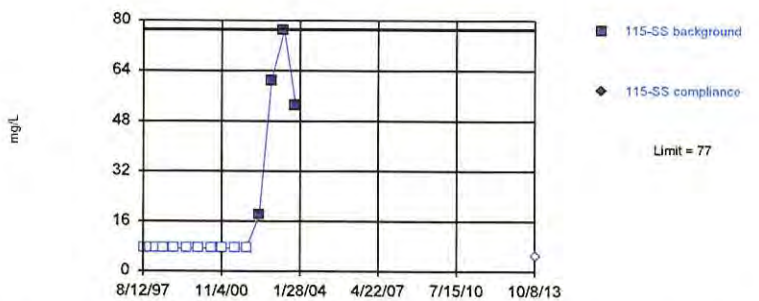
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 12:29 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 15 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 12:30 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

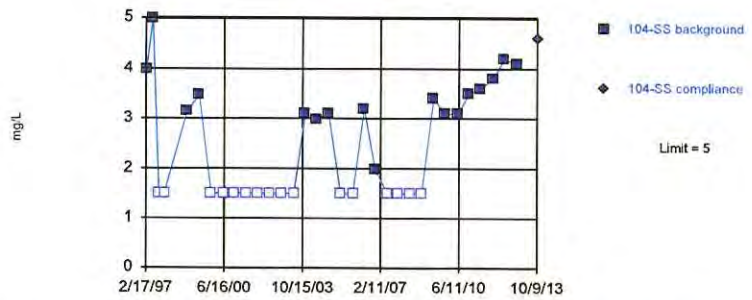
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Hollow symbols indicate censored values.

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 33 background values. 48.48% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

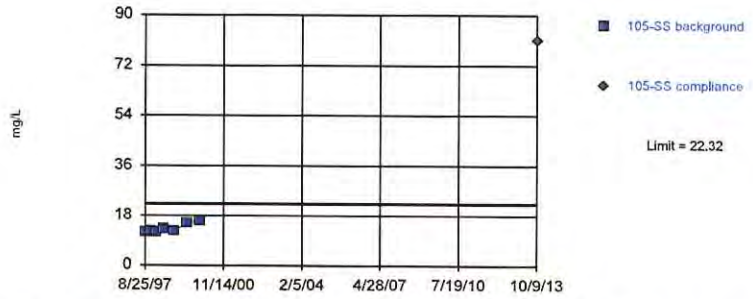
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=3.649, Std. Dev.=0.2253, n=7. Normality test: Shapiro Wilk @alpha = 0.1, calculated = 0.8443, critical = 0.838. Kappa = 4.773 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

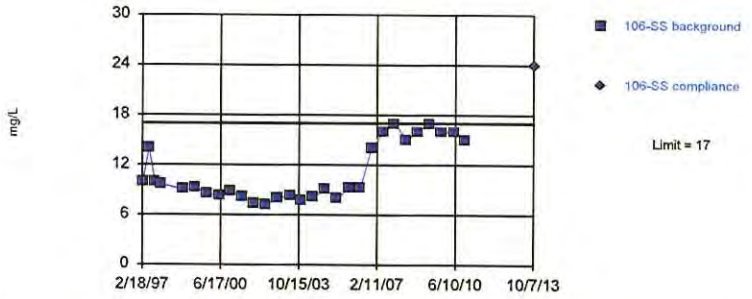
Constituent: Chloride Analysis Run 12/17/2013 12:30 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 = 0.00434. Individual comparison alpha = 0.002172 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

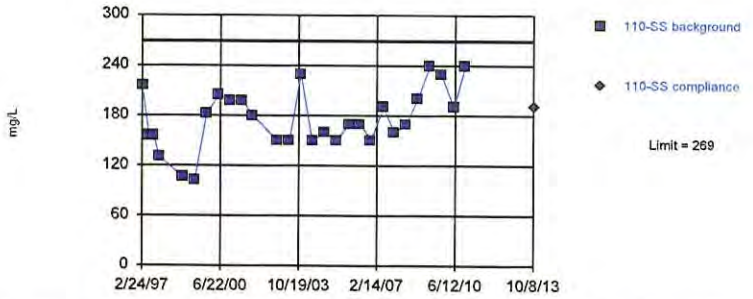
Constituent: Chloride Analysis Run 12/17/2013 12:31 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



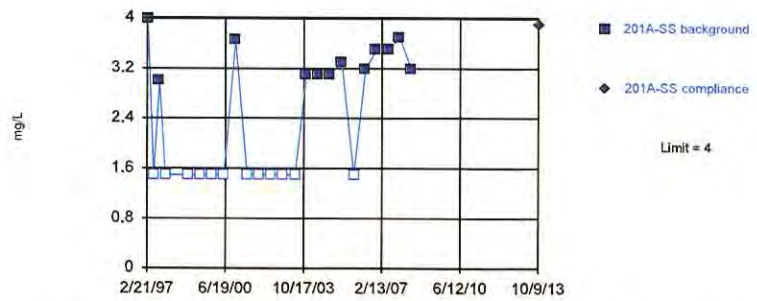
Background Data Summary: Mean=176, Std. Dev.=36.15, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9609, critical = 0.896. Kappa = 2.572 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: <3 (5/21/2002).

Constituent: Chloride Analysis Run 12/17/2013 12:31 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



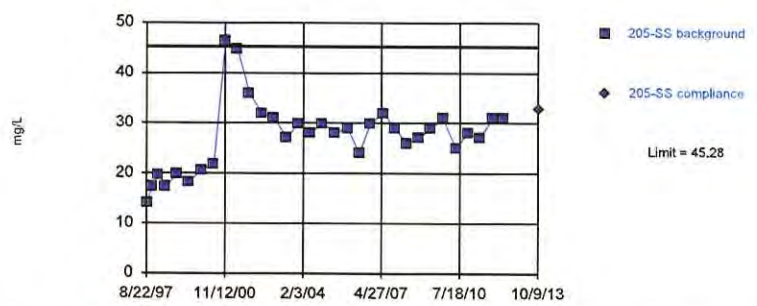
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. 50% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chloride Analysis Run 12/17/2013 12:31 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit
Intrawell Parametric



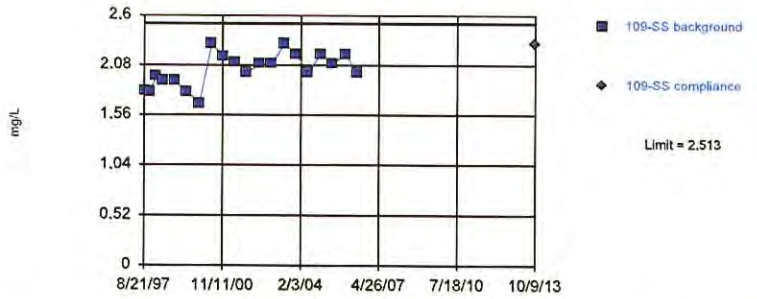
Background Data Summary: Mean=27.53, Std. Dev.=7.044, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9287, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chloride Analysis Run 12/17/2013 12:32 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit
Intrawell Parametric



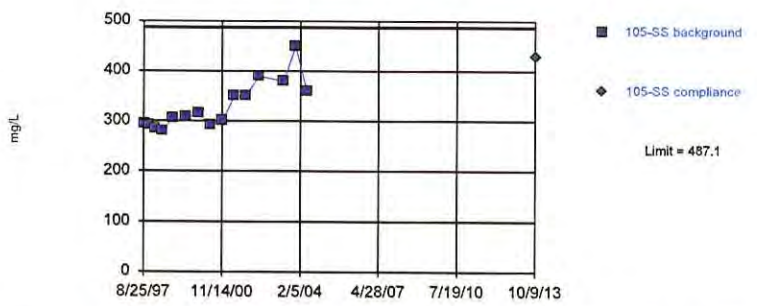
Background Data Summary: Mean=2.034, Std. Dev.=0.1749, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9583, critical = 0.868. Kappa = 2.739 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Fluoride Analysis Run 12/17/2013 12:33 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=6.897, Std. Dev.=0.3248, n=15. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8812, critical = 0.881. Kappa = 2.991 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Dixon's Outlier Test was performed on the background data. One background outlier was removed: 130 (11/19/2002).

Constituent: Hardness Total Analysis Run 12/17/2013 12:33 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

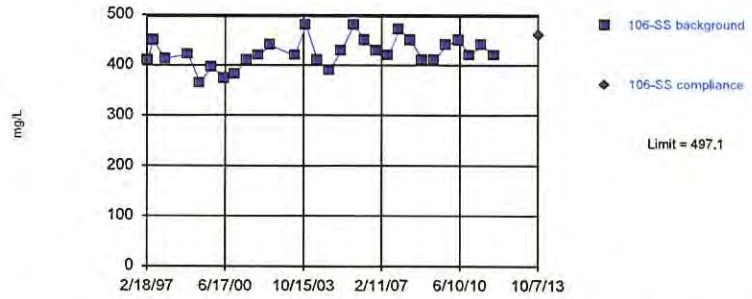
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=424.3, Std. Dev.=28.5, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9671, critical = 0.898. Kappa = 2.556 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 12:33 PM View: 1

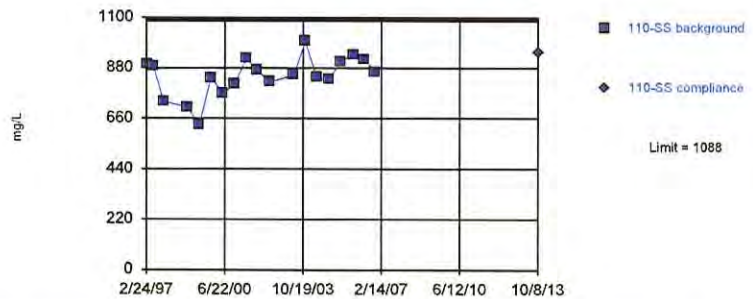
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=844.6, Std. Dev.=87.33, n=19. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9634, critical = 0.901. Kappa = 2.782 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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 12/17/2013 12:34 PM View: 1

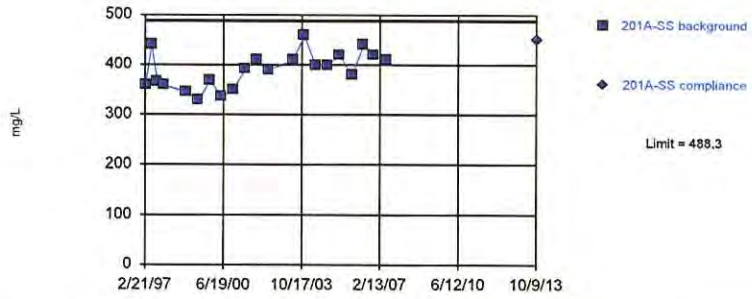
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=389.8, Std. Dev.=36.3, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9761, critical = 0.873. Kappa = 2.715 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 120 (11/19/2002).

Constituent: Hardness Total Analysis Run 12/17/2013 12:34 PM View: 1

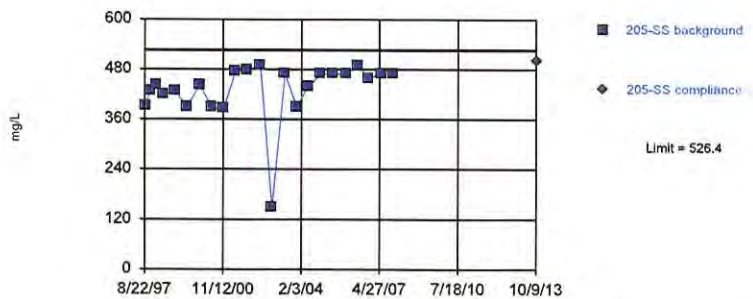
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^4 transformation): Mean=3.8e10, Std. Dev.=1.4e10, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.914, critical = 0.881. Kappa = 2.666 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Hardness Total Analysis Run 12/17/2013 12:34 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

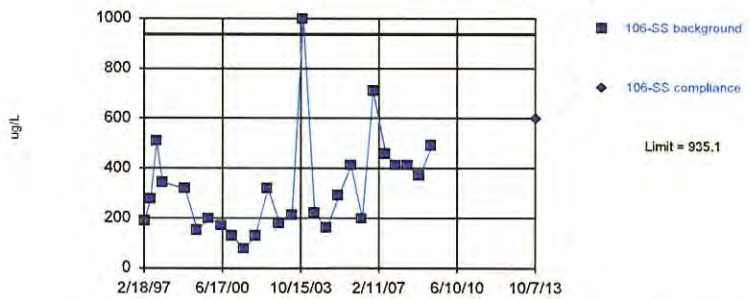
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=17.18, Std. Dev.=5.15, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9451, critical = 0.891. Kappa = 2.603 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

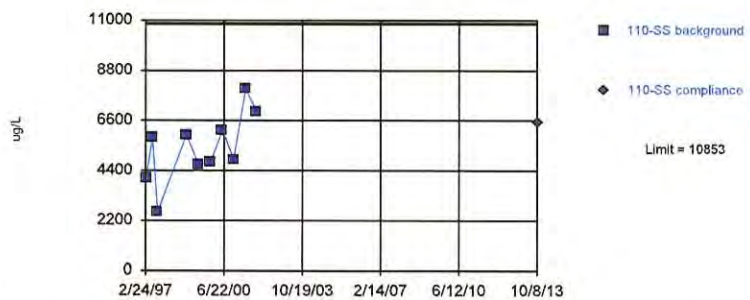
Constituent: Iron Total Analysis Run 12/17/2013 12:35 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5406, Std. Dev.=1536, n=10. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9827, critical = 0.842. Kappa = 3.546 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Dixon's Outlier Test was performed on the background data. One background outlier was removed: <18.2 (11/8/1997).

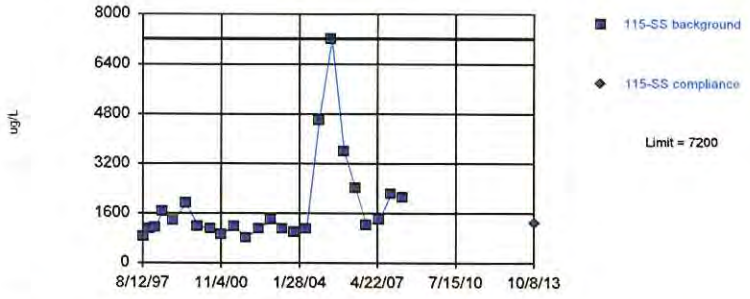
Constituent: Iron Total Analysis Run 12/17/2013 12:35 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 24 background values. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified.

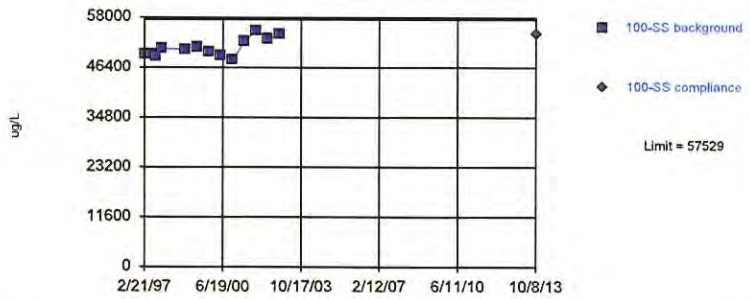
Constituent: Iron Total Analysis Run 12/17/2013 12:35 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50954, Std. Dev.=2085, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9349, critical = 0.866. Kappa = 3.153 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

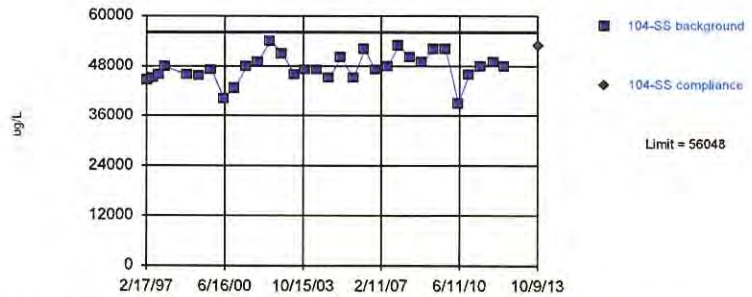
Constituent: Magnesium Total Analysis Run 12/17/2013 12:36 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=47478, Std. Dev.=3400, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9667, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

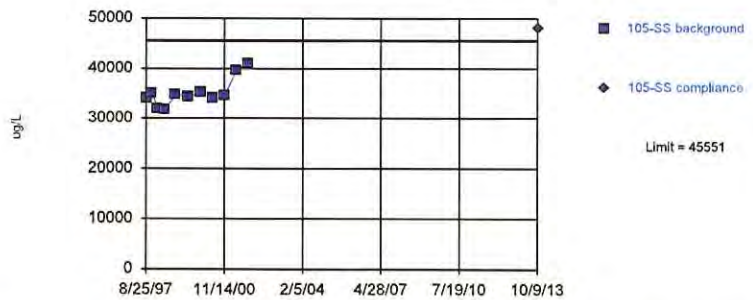
Constituent: Magnesium Total Analysis Run 12/17/2013 12:36 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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 = 3.39 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

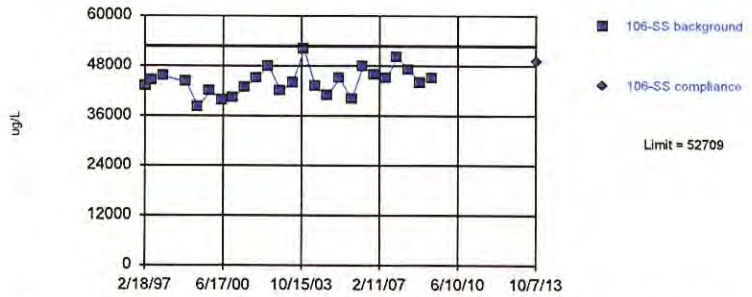
Constituent: Magnesium Total Analysis Run 12/17/2013 12:36 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=44220, Std. Dev.=3242, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9781, critical = 0.888. Kappa = 2.618 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 28000 (8/25/1997).

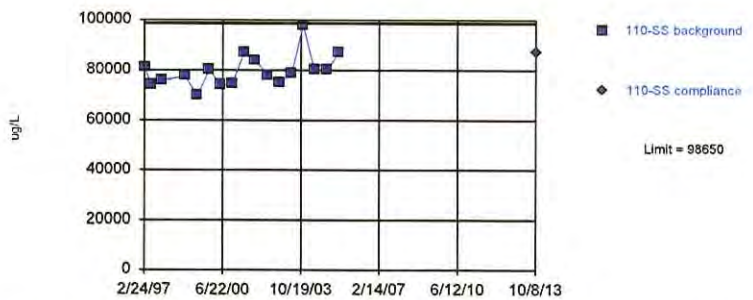
Constituent: Magnesium Total Analysis Run 12/17/2013 12:37 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=79741, Std. Dev.=6595, n=17. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9023, critical = 0.892. Kappa = 2.867 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Dixon's Outlier Test was performed on the background data. One background outlier was removed: 51000 (8/22/1997).

Constituent: Magnesium Total Analysis Run 12/17/2013 12:37 PM View: 1

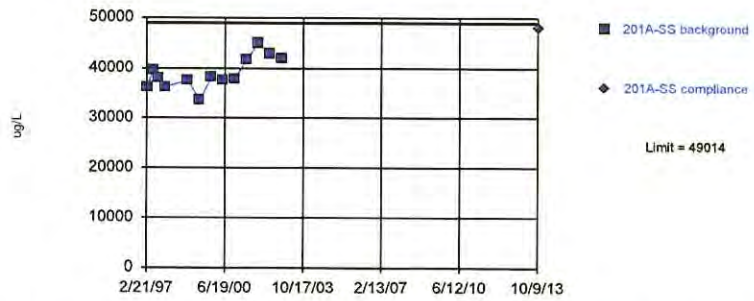
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=38969, Std. Dev.=3186, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9548, critical = 0.866. Kappa = 3.153 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

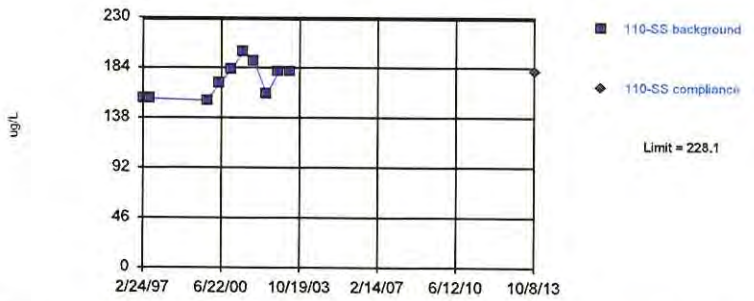
Constituent: Magnesium Total Analysis Run 12/17/2013 12:37 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=172.6, Std. Dev.=15.66, n=10. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.911, critical = 0.842. Kappa = 3.546 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. 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).

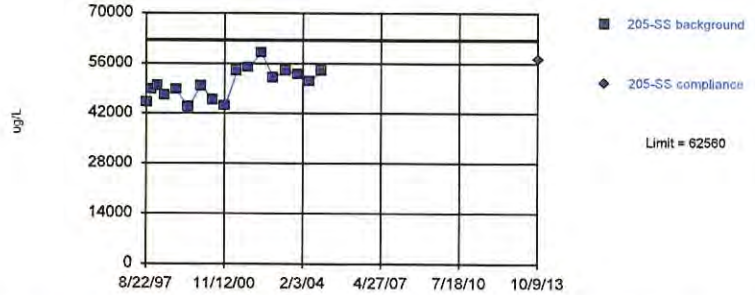
Constituent: Manganese Total Analysis Run 12/17/2013 12:38 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50259, Std. Dev.=4290, n=17. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9651, critical = 0.892. Kappa = 2.867 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

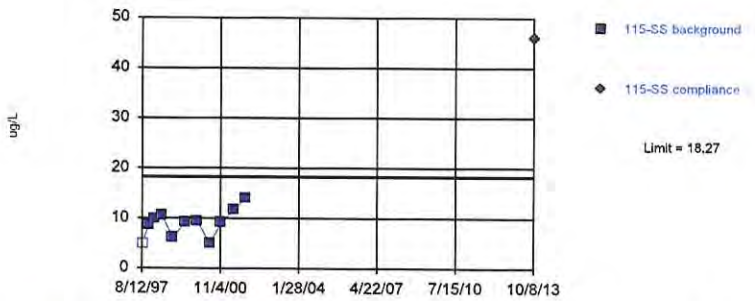
Constituent: Magnesium Total Analysis Run 12/17/2013 12:37 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 = 3.39 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Dixon's Outlier Test was performed on the background data. One background outlier was removed: 47 (5/21/2002).

Constituent: Manganese Total Analysis Run 12/17/2013 12:38 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

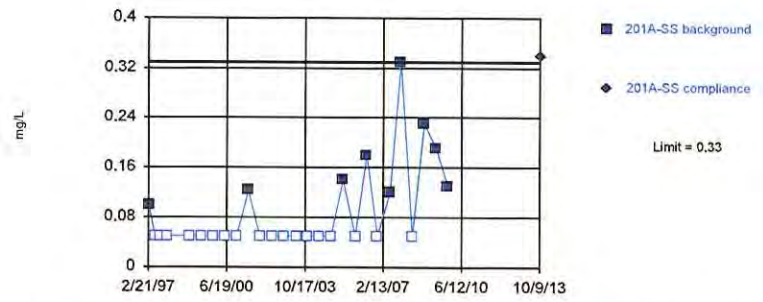
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Hollow symbols indicate censored values.

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 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

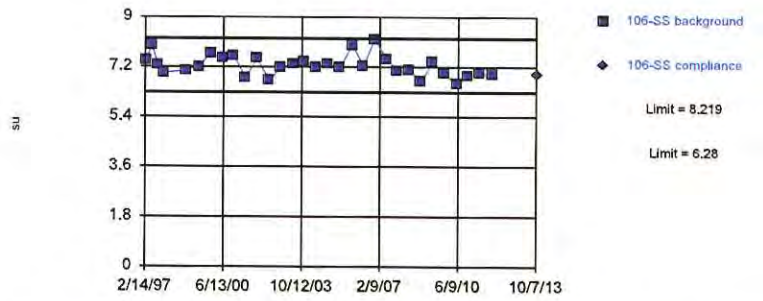
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 12:38 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.25, Std. Dev.=0.3831, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9667, critical = 0.902. Kappa = 2.531 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

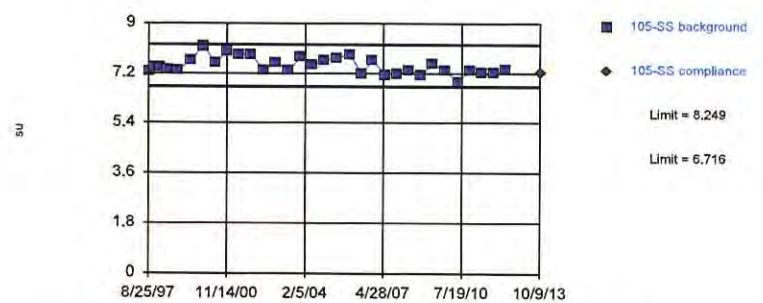
Constituent: pH [Field] Analysis Run 12/17/2013 12:39 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.482, Std. Dev.=0.3041, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9568, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

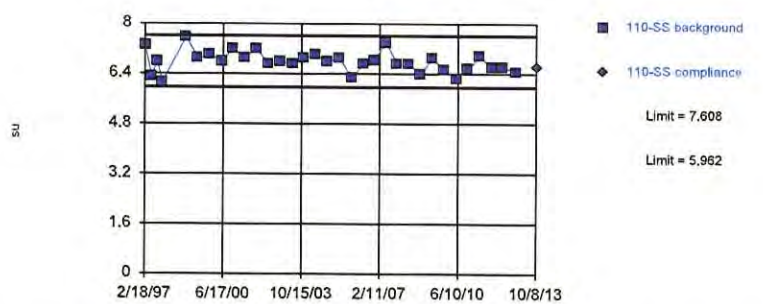
Constituent: pH [Field] Analysis Run 12/17/2013 12:39 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.785, Std. Dev.=0.3278, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9777, critical = 0.906. Kappa = 2.511 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

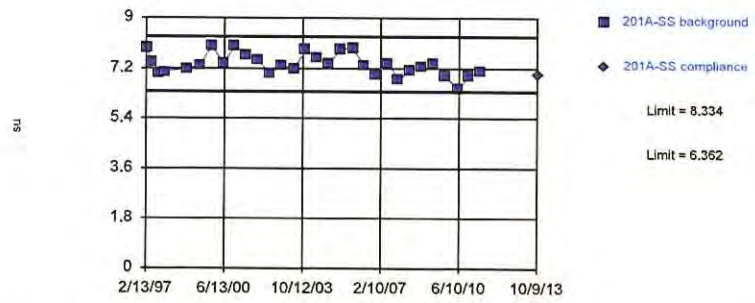
Constituent: pH [Field] Analysis Run 12/17/2013 12:39 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.348, Std. Dev.=0.3882, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9537, critical = 0.9. Kappa = 2.541 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

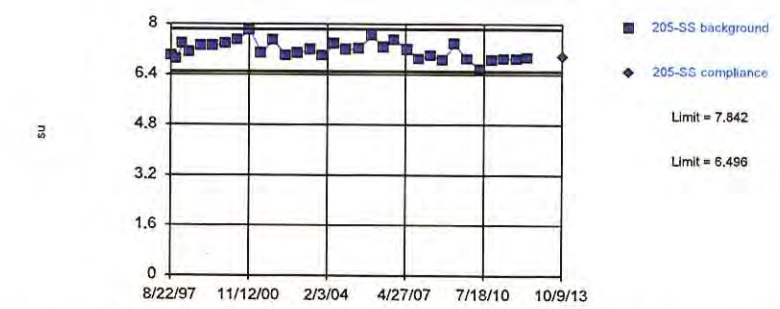
Constituent: pH [Field] Analysis Run 12/17/2013 12:39 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.169, Std. Dev.=0.2669, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9726, critical = 0.904. Kappa = 2.521 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

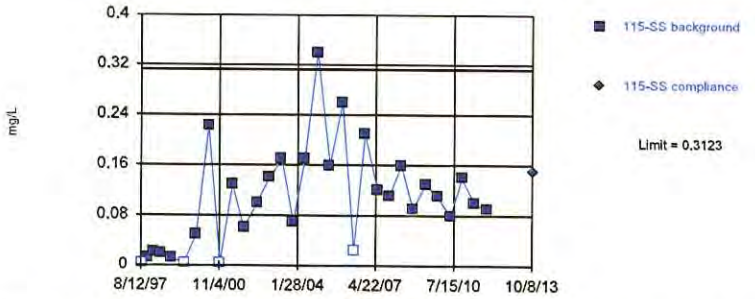
Constituent: pH [Field] Analysis Run 12/17/2013 12:40 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.107, Std. Dev.=0.08113, n=31, 12.9% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9317, critical = 0.902. Kappa = 2.531 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

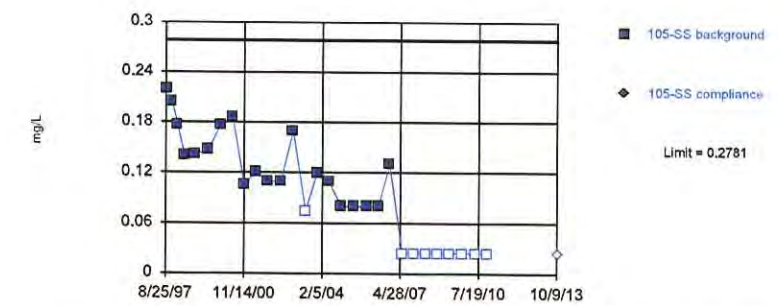
Constituent: Phosphorus Total Analysis Run 12/17/2013 12:40 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.09276, Std. Dev.=0.0725, n=29, 31.03% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9155, critical = 0.898. Kappa = 2.556 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Phosphorus Total Analysis Run 12/17/2013 12:40 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

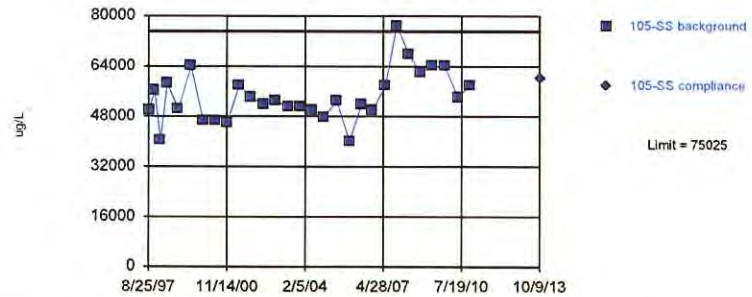
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=54345, Std. Dev.=8091, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9568, critical = 0.898. Kappa = 2.556 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

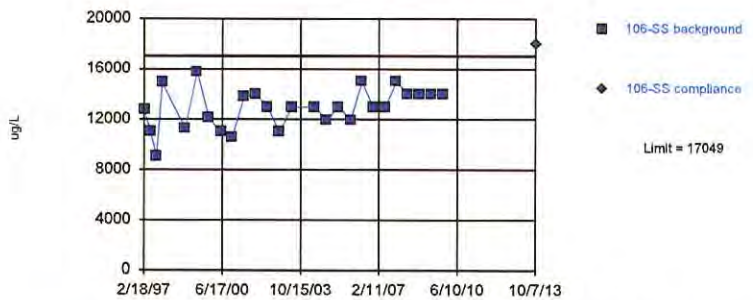
Constituent: Sodium Total Analysis Run 12/17/2013 12:41 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=12900, Std. Dev.=1594, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9652, critical = 0.891. Kappa = 2.603 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 20000 (11/20/2003).

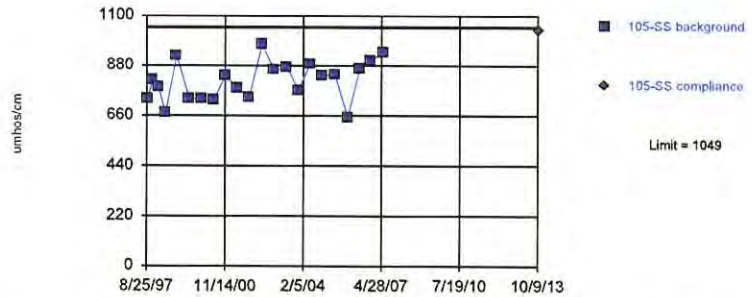
Constituent: Sodium Total Analysis Run 12/17/2013 12:41 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 = 2.691 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

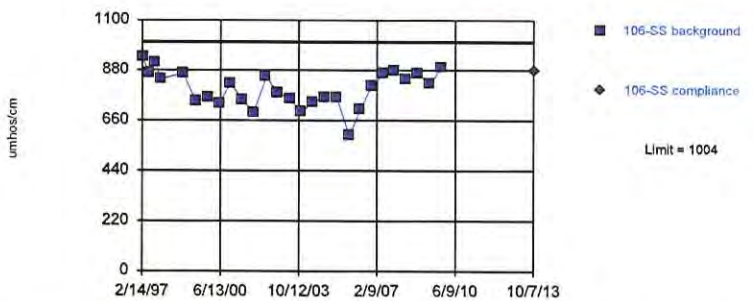
Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 12:41 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=798.4, Std. Dev.=79.43, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9663, critical = 0.894. Kappa = 2.587 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Rosner's Outlier Test was performed on the background data. No background outliers were found.

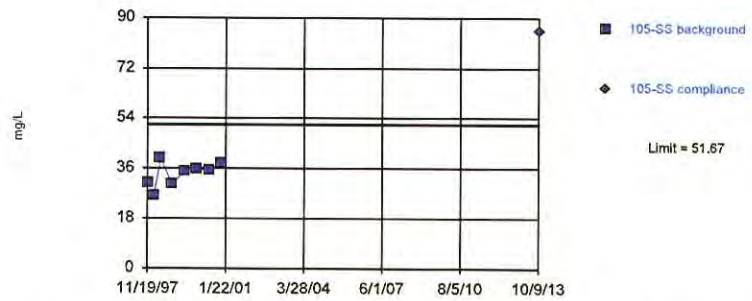
Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 12:42 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



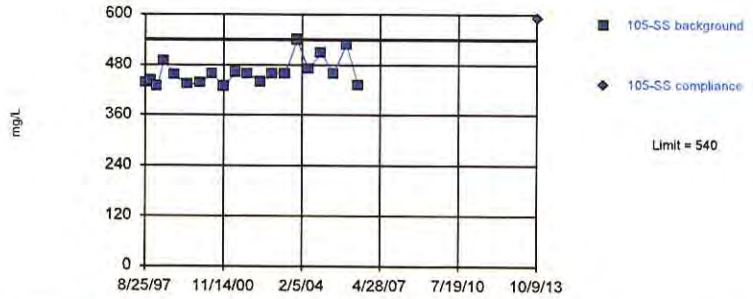
Background Data Summary: Mean=33.83, Std. Dev.=4.344, n=8. Normality test: Shapiro Wilk @alpha = 0.1, calculated = 0.9502, critical = 0.851. Kappa = 4.107 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. Dixon's Outlier Test was performed on the background data. One background outlier was removed: 13 (8/25/1997).

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 12:42 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



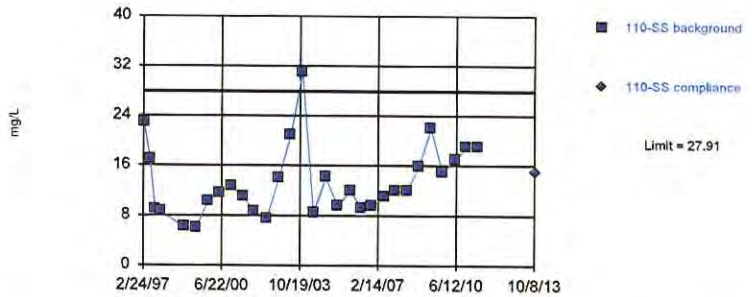
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 12:43 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=13.46, Std. Dev.=5.687, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9076, critical = 0.9. Kappa = 2.541 (c=34, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001721. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 12:43 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

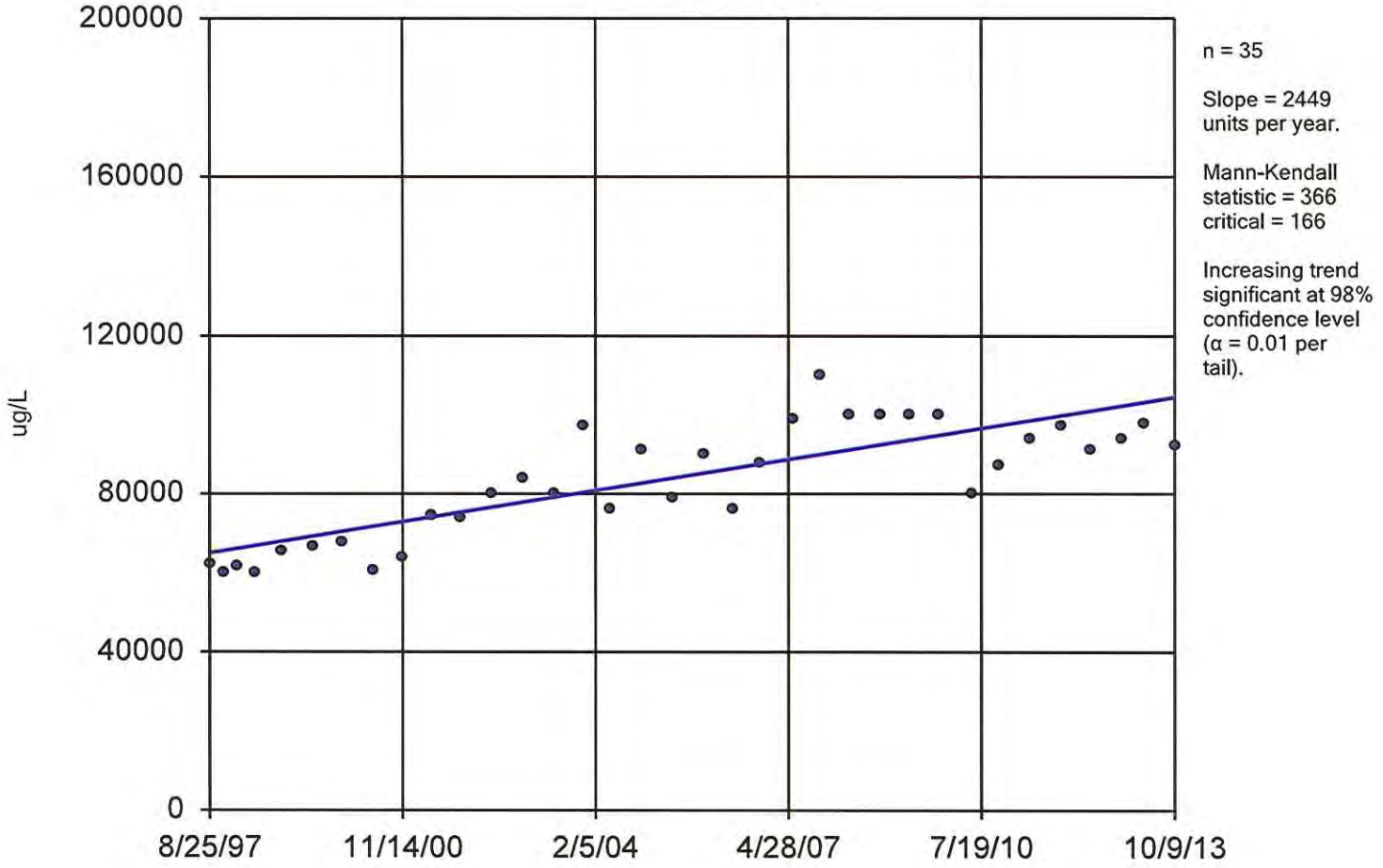
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TREND EVALUATION OF EXCEEDING CONSTITUENTS
ST. LOUIS FORMATION

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Sen's Slope Estimator

105-SS (bg)



Constituent: Calcium Total Analysis Run 12/17/2013 3:36 PM View: 1

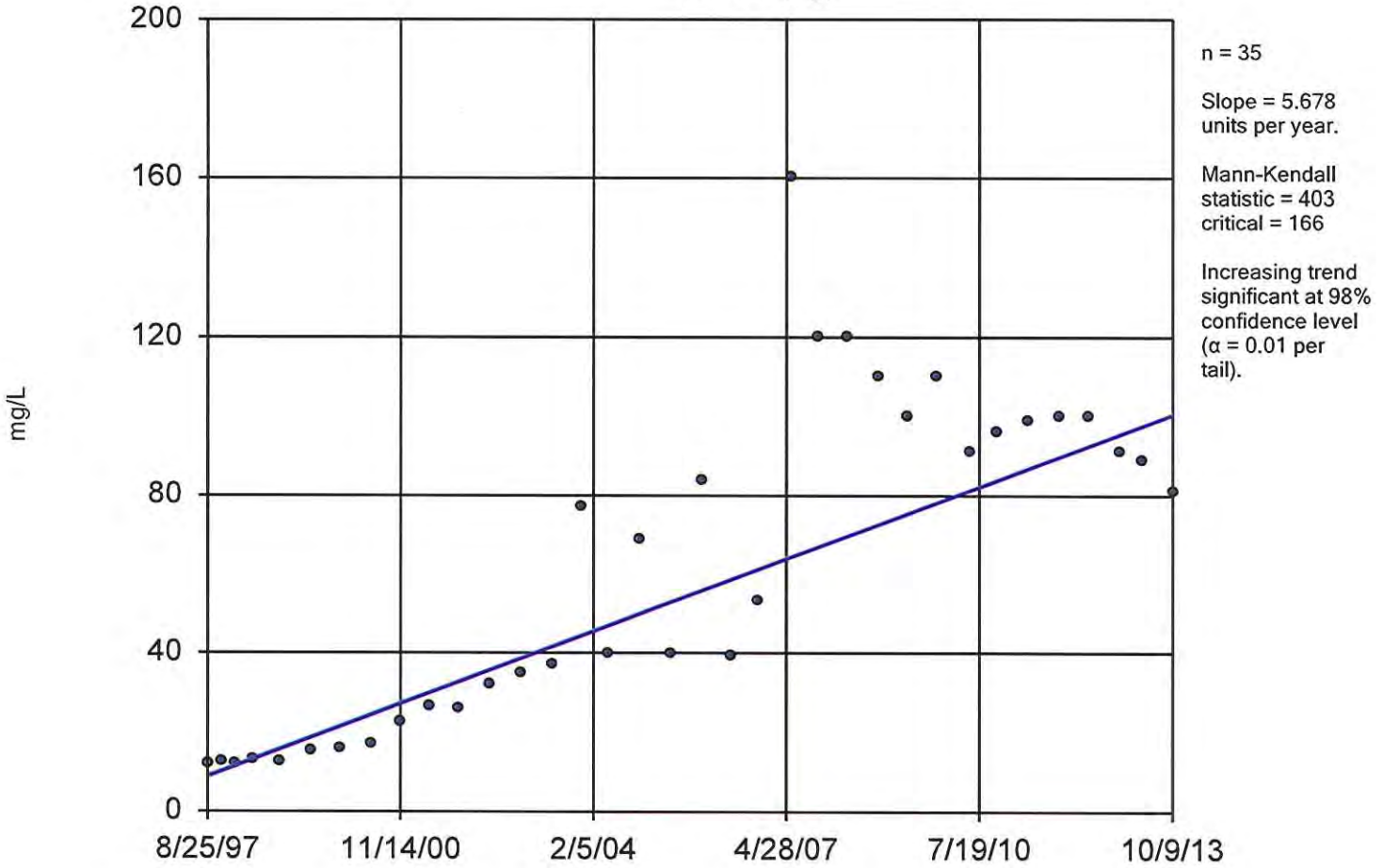
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

105-SS (bg)



Constituent: Chloride Analysis Run 12/17/2013 3:37 PM View: 1

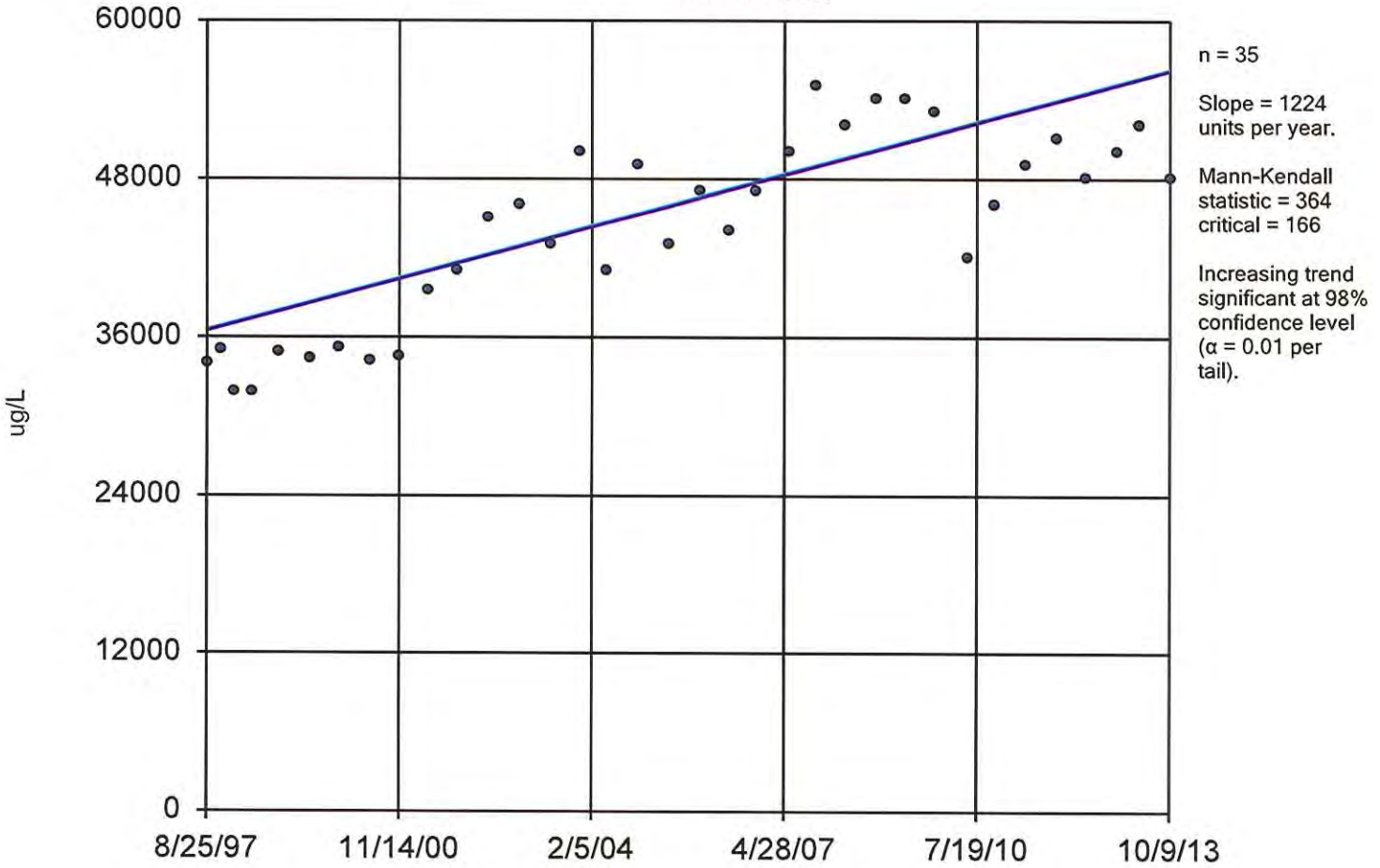
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates. UG

Sen's Slope Estimator

105-SS (bg)



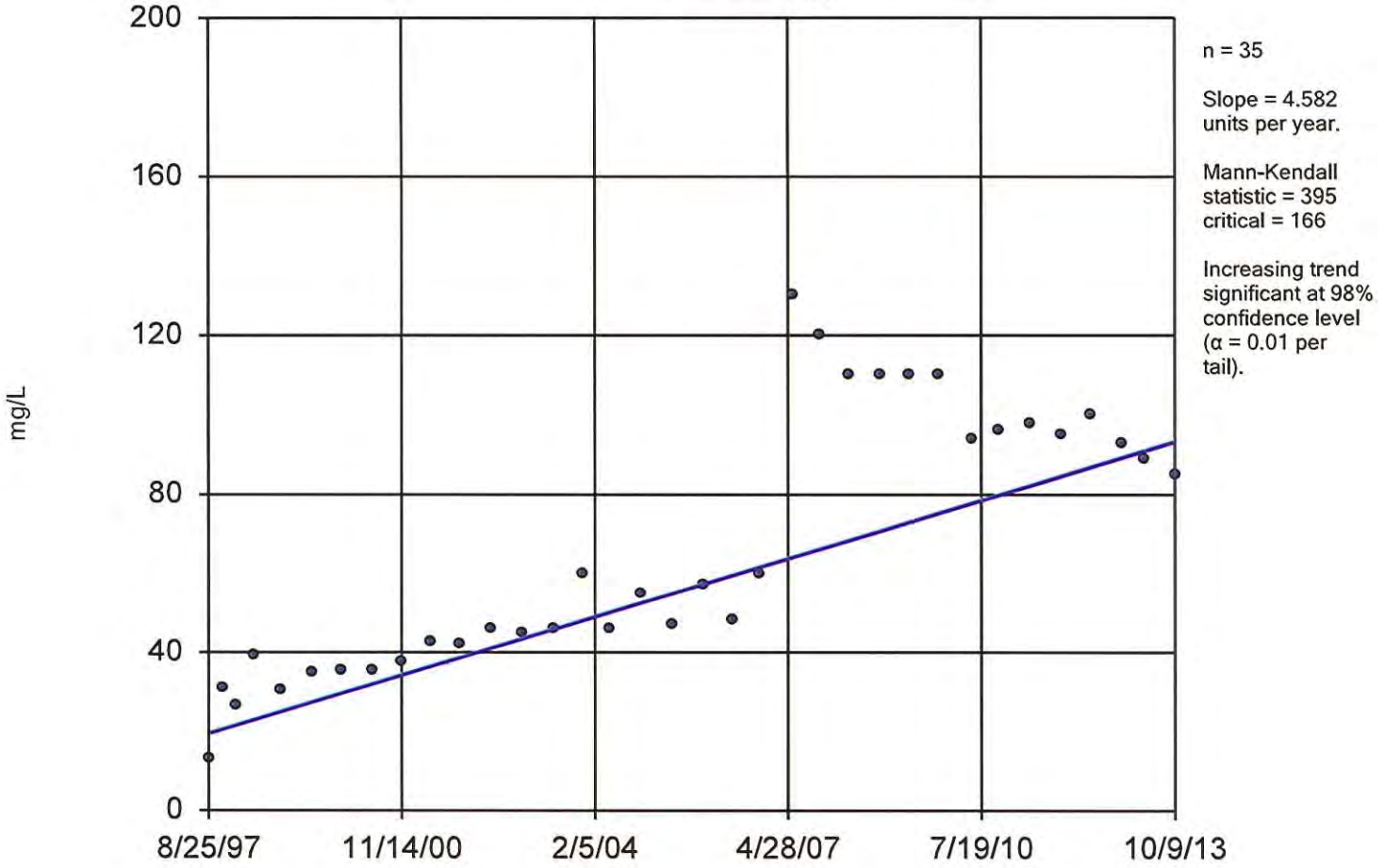
Constituent: Magnesium Total Analysis Run 12/17/2013 3:37 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

105-SS (bg)

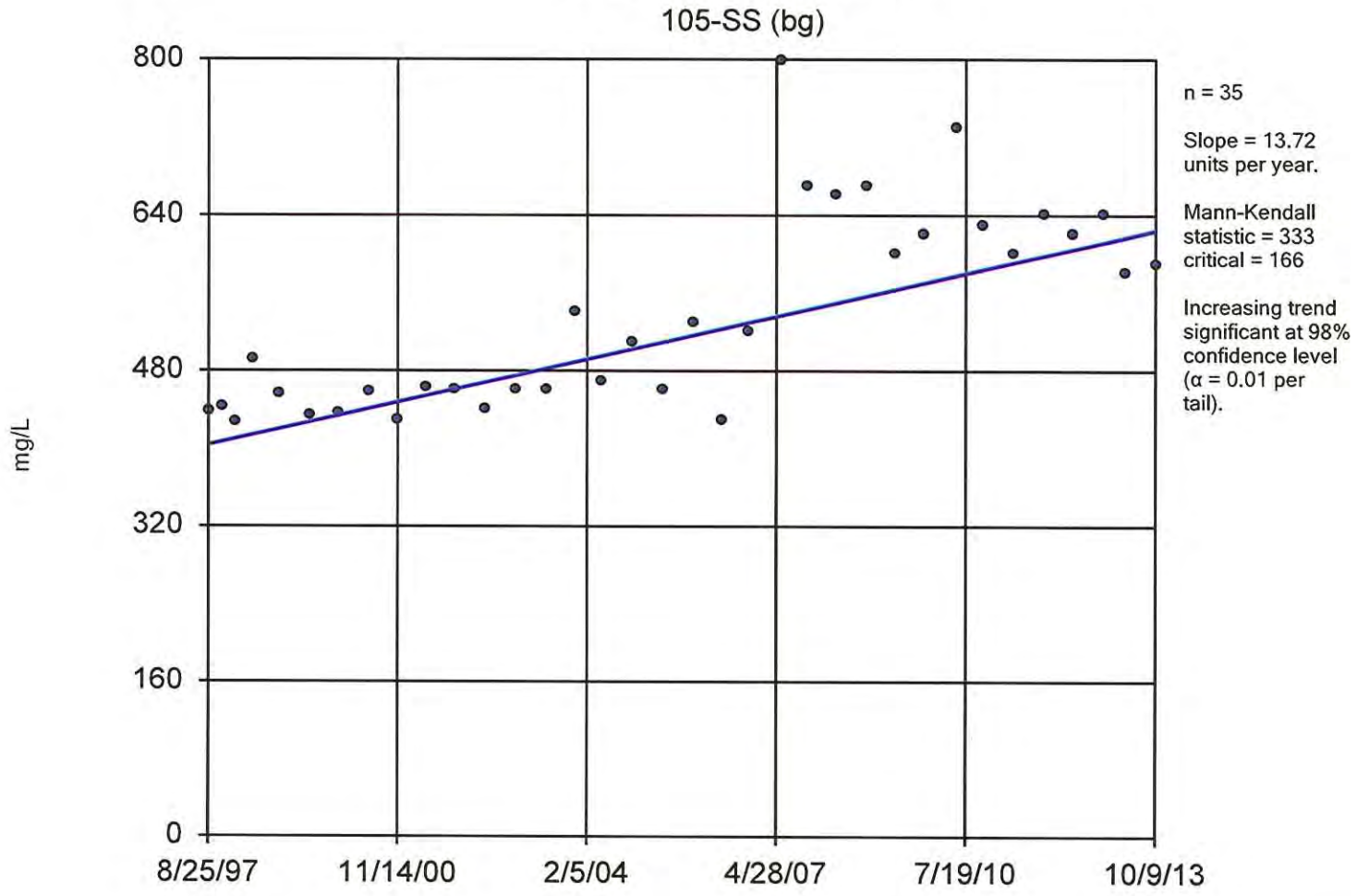


Constituent: Sulfate as SO4 Analysis Run 12/17/2013 3:37 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

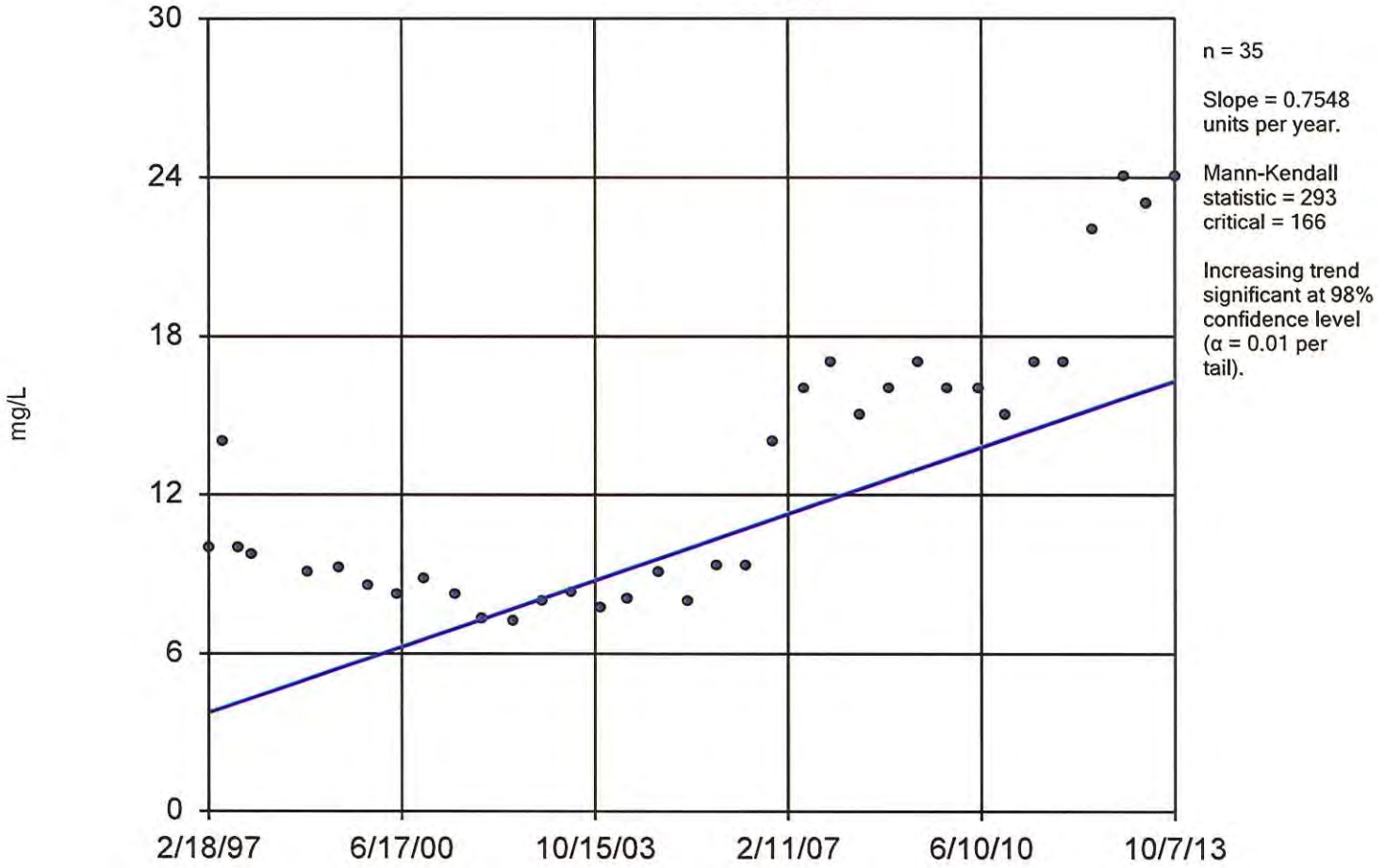


Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 3:37 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sen's Slope Estimator

106-SS (bg)



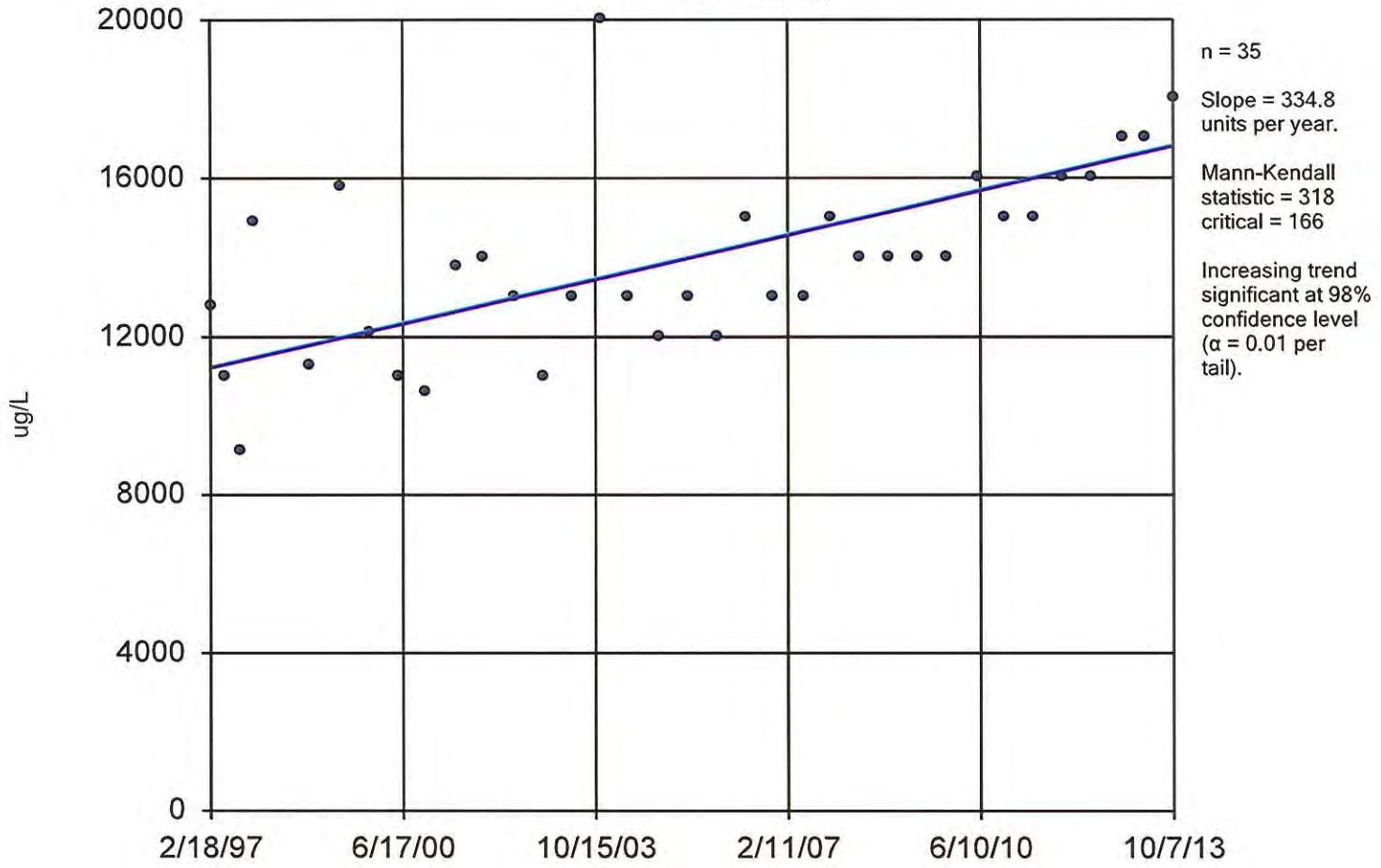
Constituent: Chloride Analysis Run 12/17/2013 3:38 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

106-SS (bg)



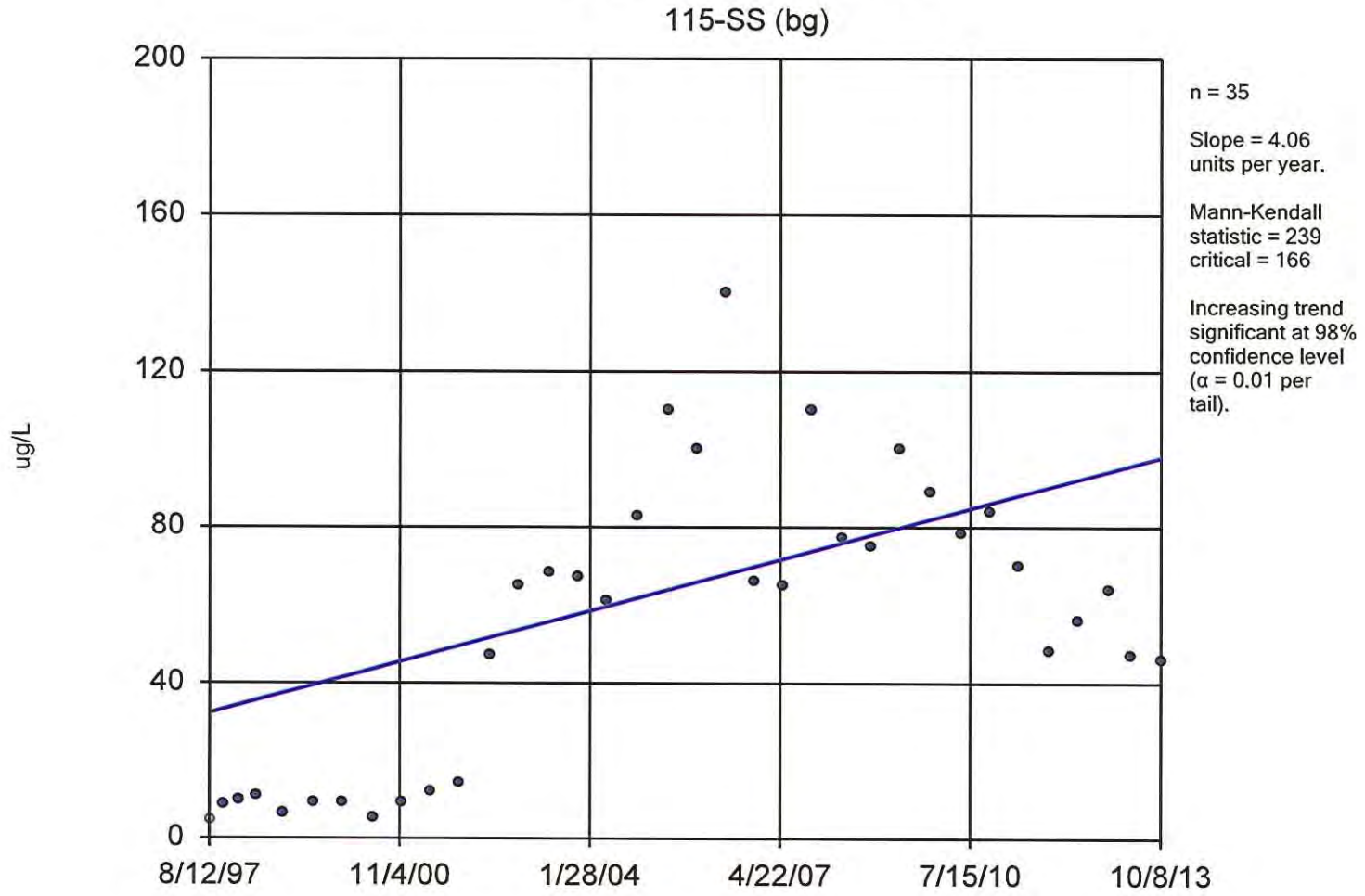
Constituent: Sodium Total Analysis Run 12/17/2013 3:38 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator



Constituent: Manganese Total Analysis Run 12/17/2013 3:38 PM View: 1

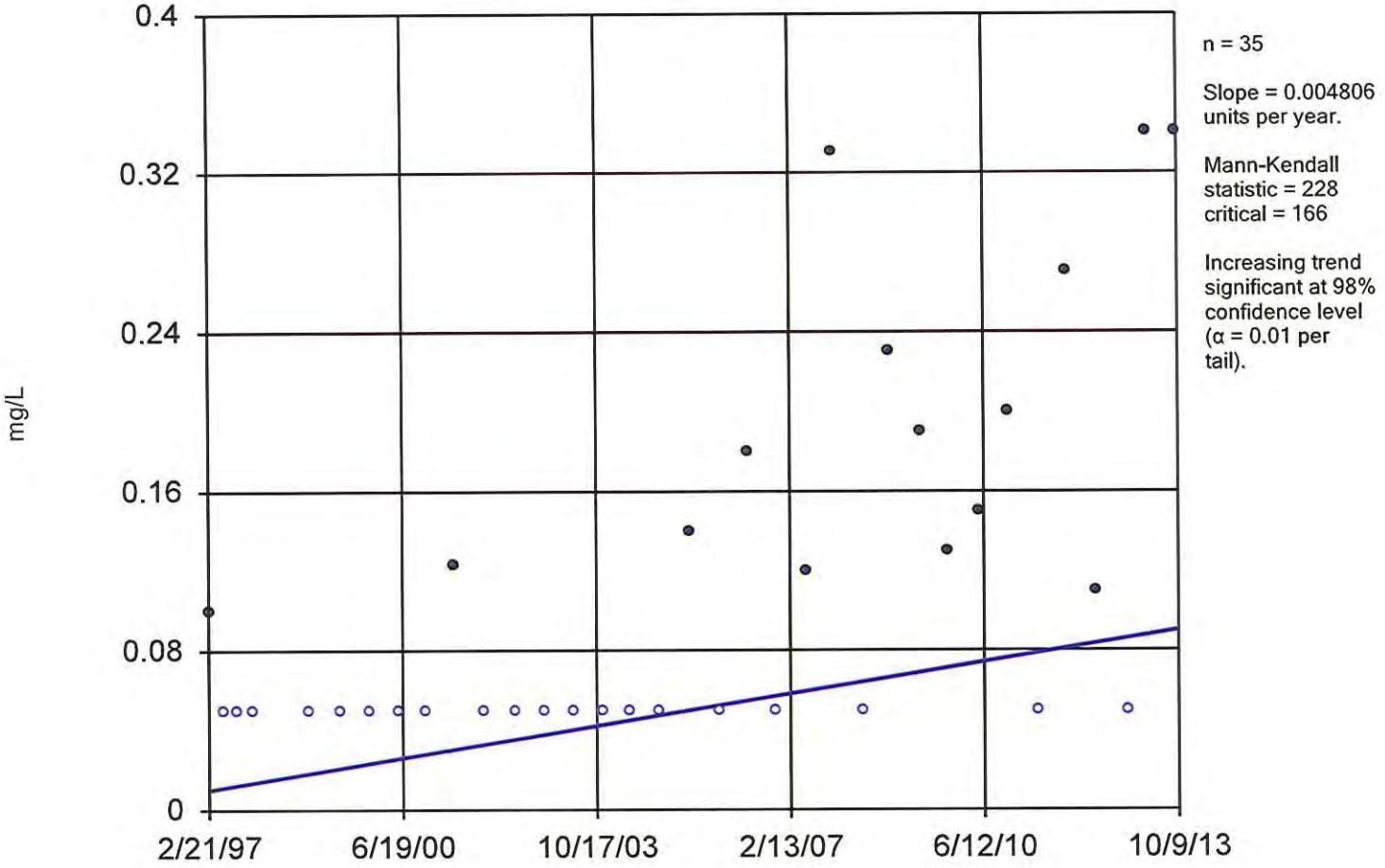
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

201A-SS (bg)



Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 3:38 PM View: 1

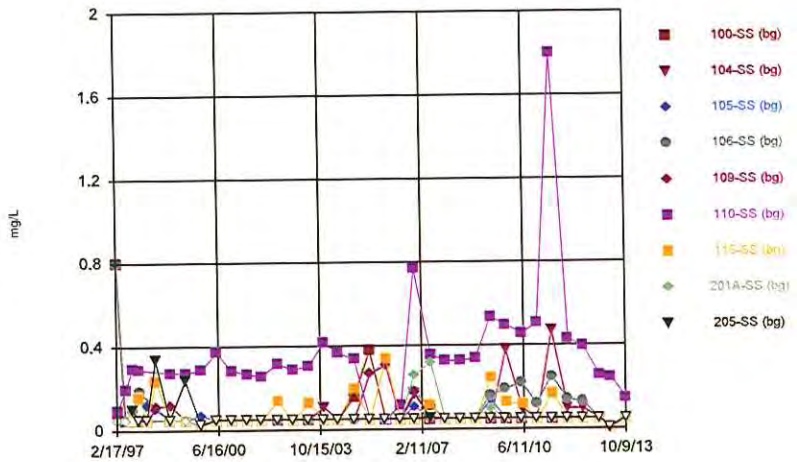
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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TIME SERIES TREND ANALYSIS
ST. LOUIS FORMATION

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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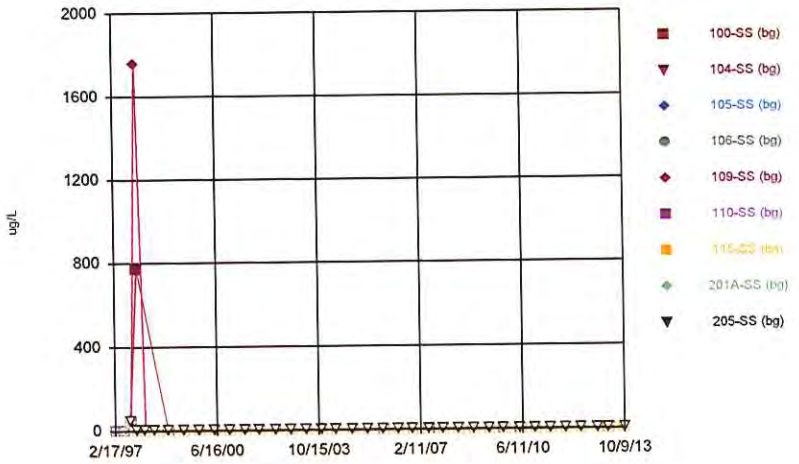
Time Series



Constituent: Ammonia as N Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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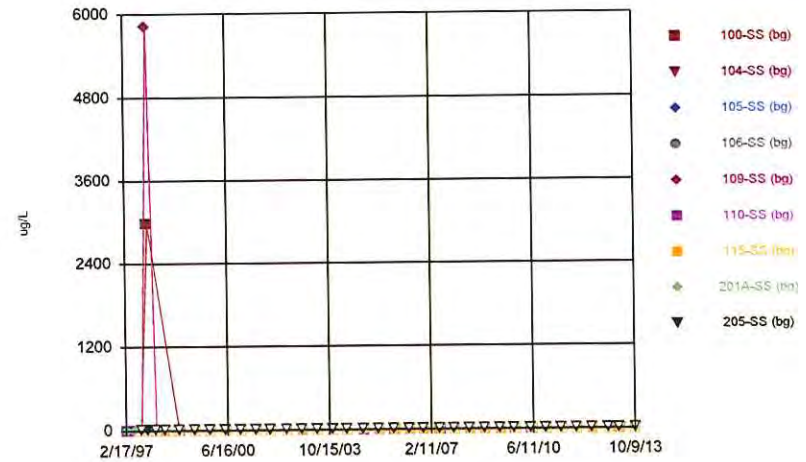
Time Series



Constituent: Antimony Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

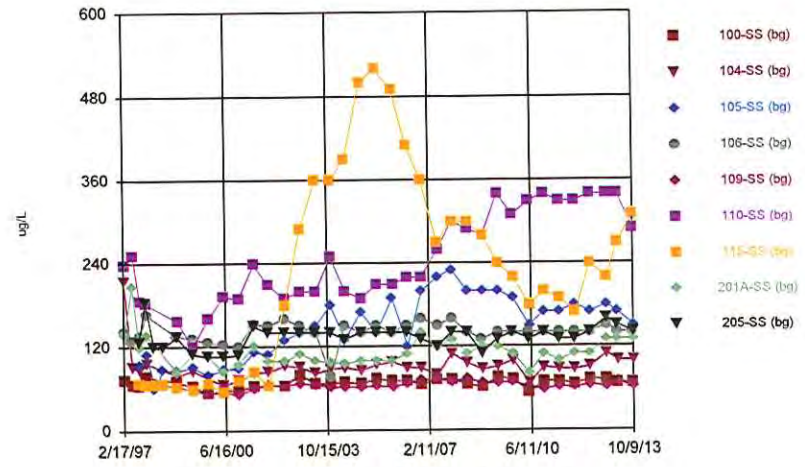
Time Series



Constituent: Arsenic Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Time Series

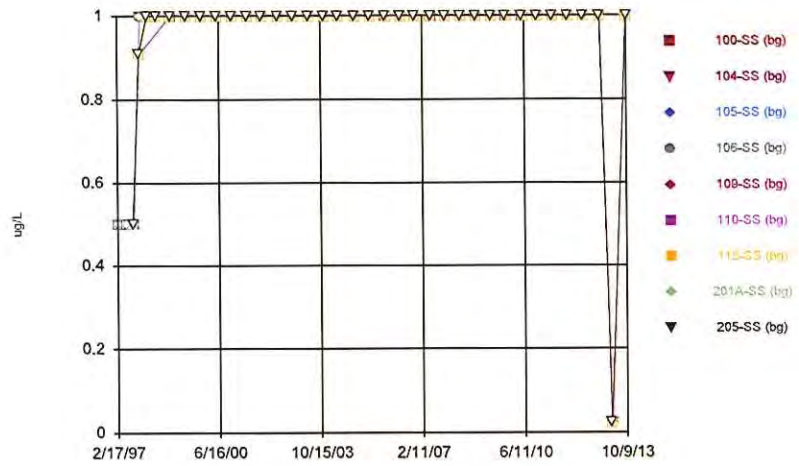


Constituent: Barium Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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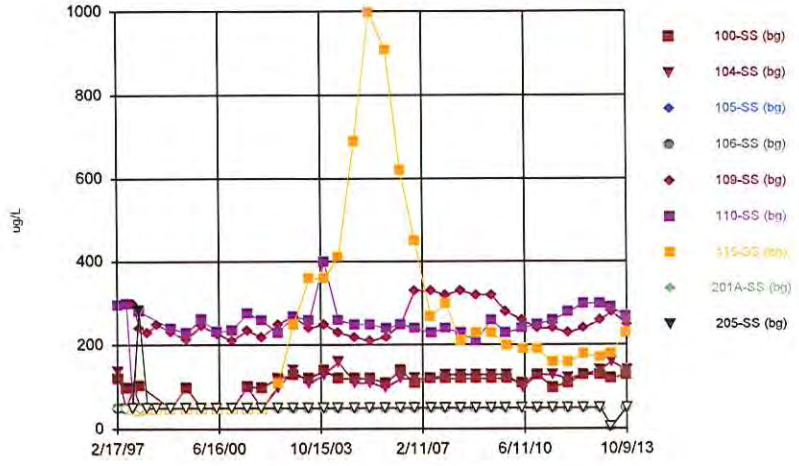
Time Series



Constituent: Beryllium Total Analysis Run 12/17/2013 11:50 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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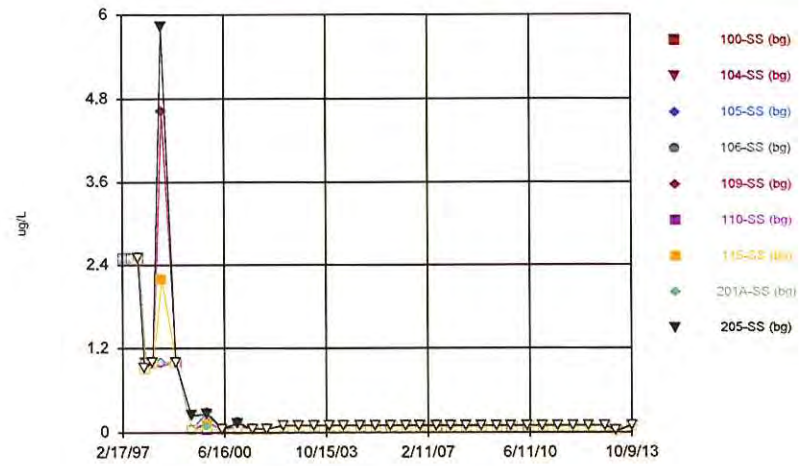
Time Series



Constituent: Boron Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

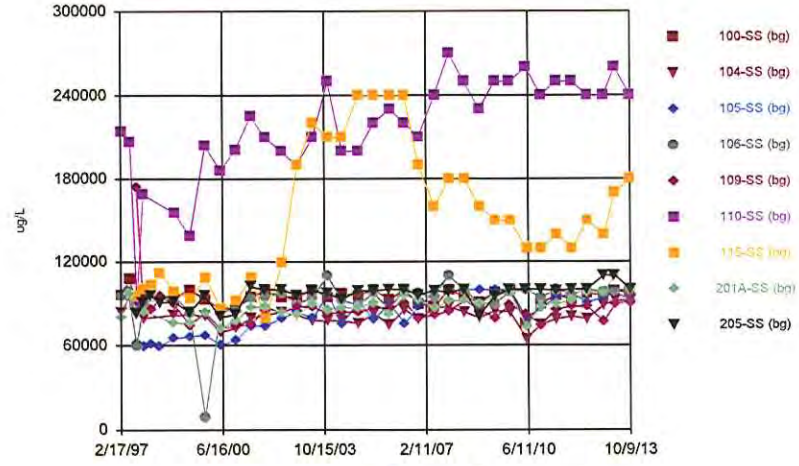
Time Series



Constituent: Cadmium Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Time Series

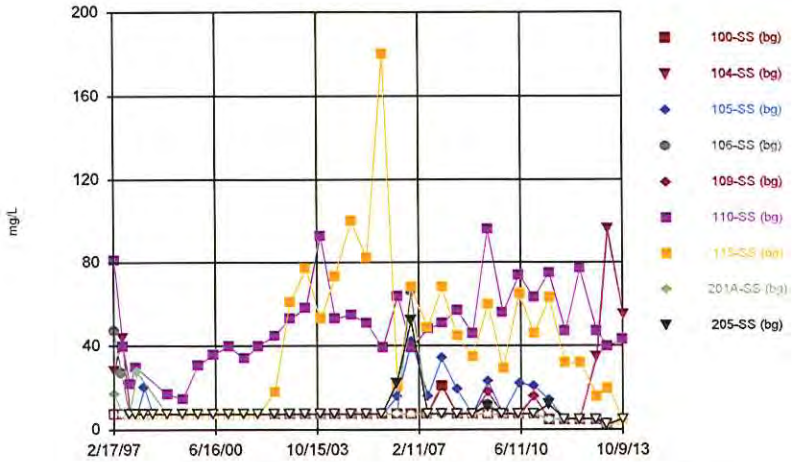


Constituent: Calcium Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

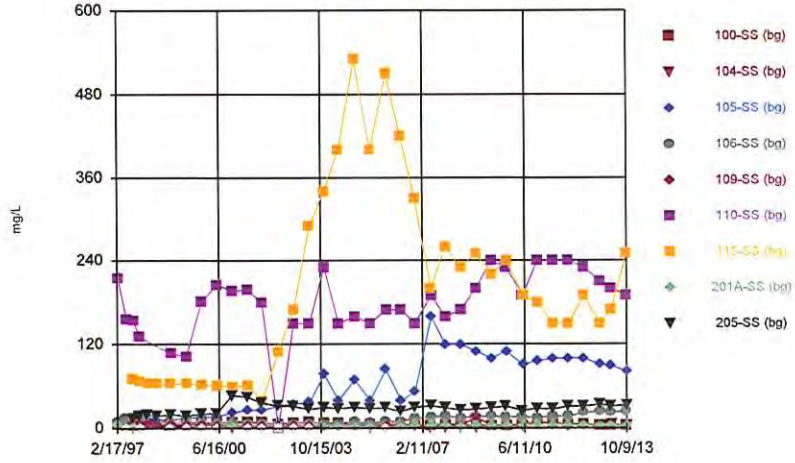
Time Series



Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

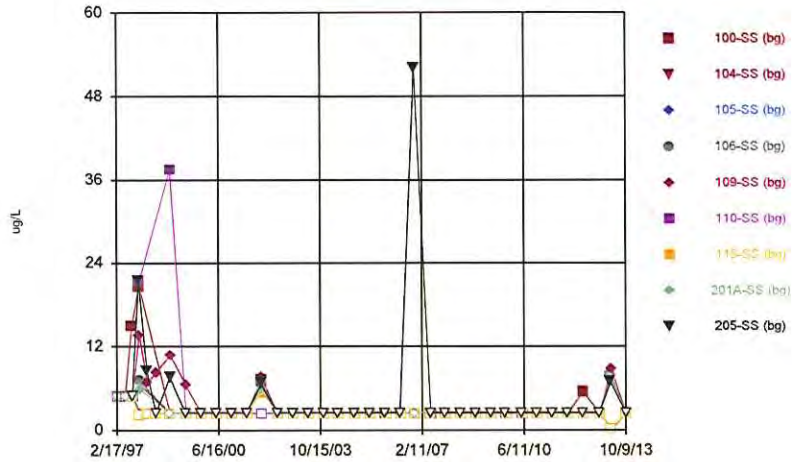
Time Series



Constituent: Chloride Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

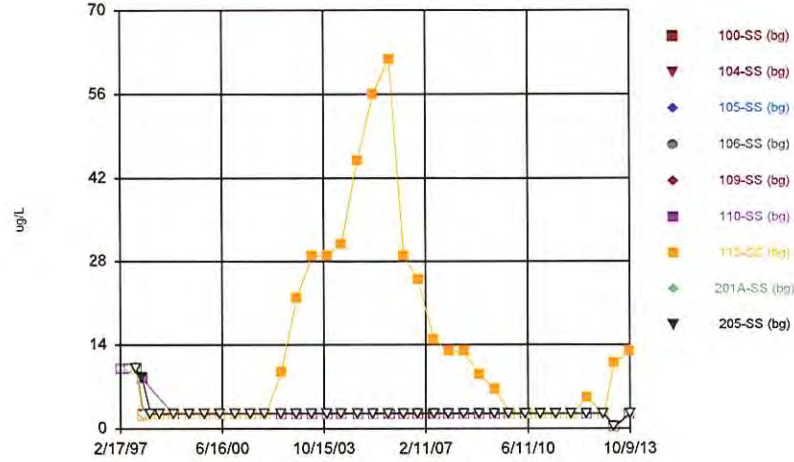
Time Series



Constituent: Chromium Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

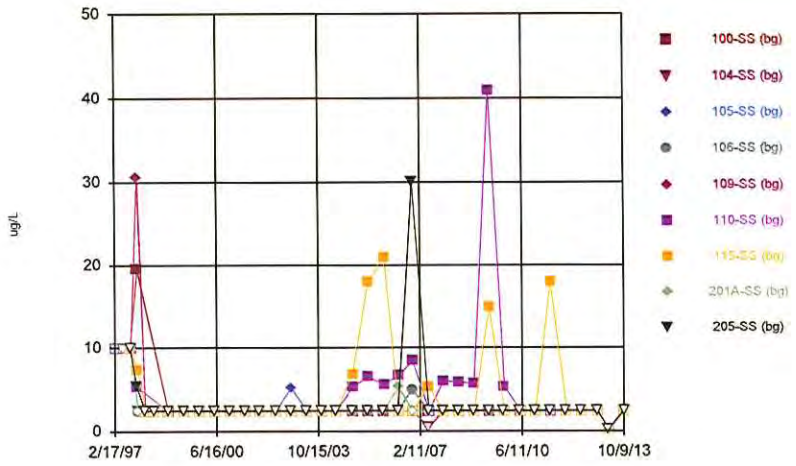
Time Series



Constituent: Cobalt Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

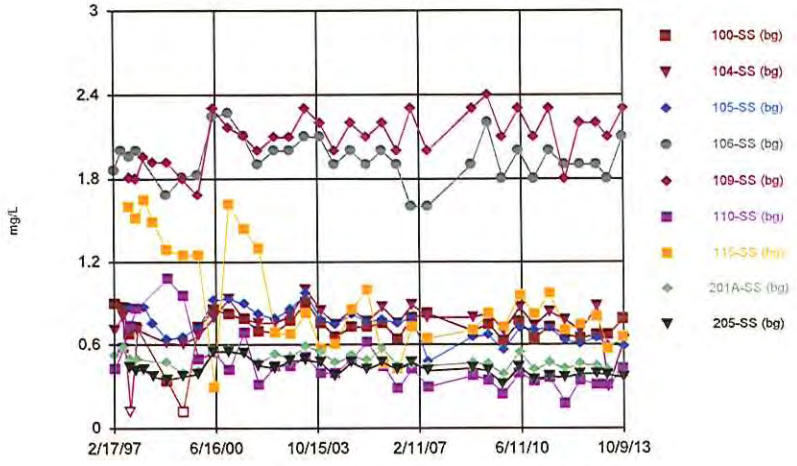
Time Series



Constituent: Copper Total Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

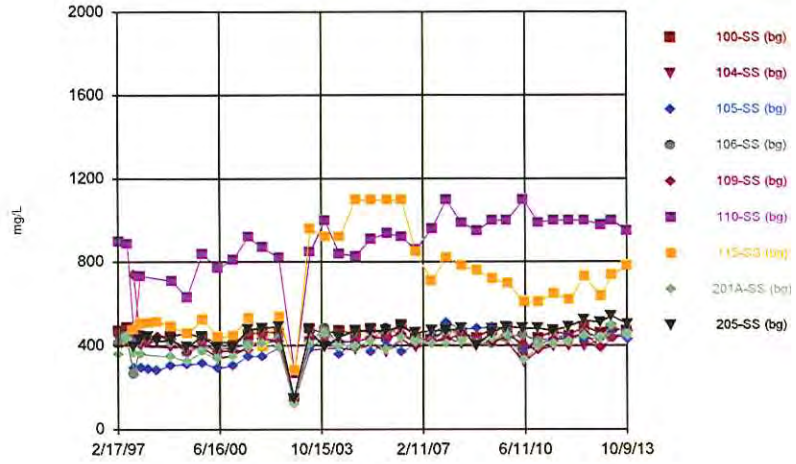
Time Series



Constituent: Fluoride Analysis Run 12/17/2013 11:50 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

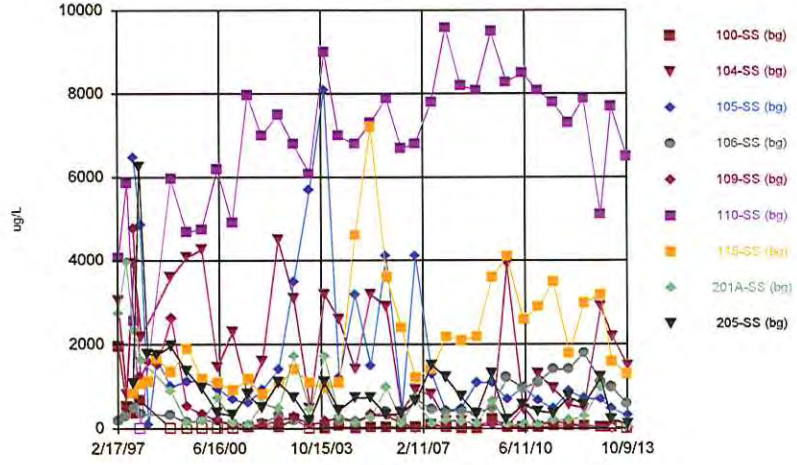
Time Series



Constituent: Hardness Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Time Series

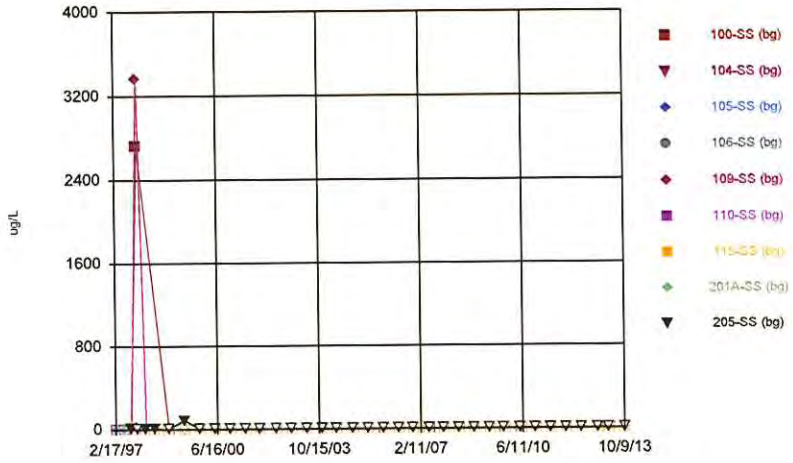


Constituent: Iron Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

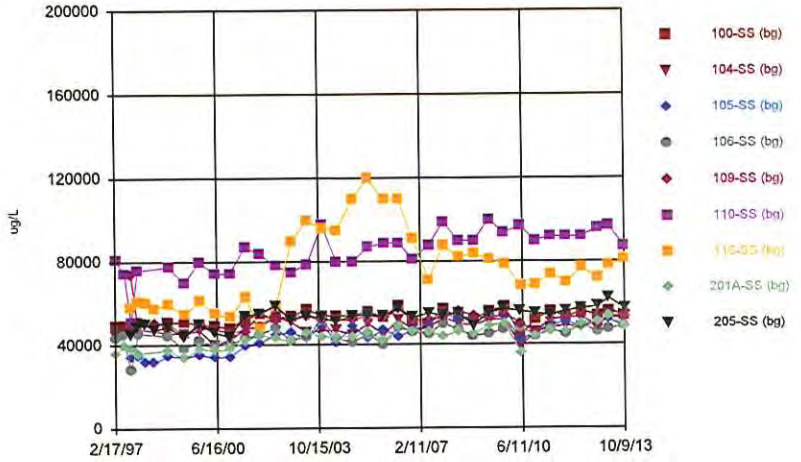
Time Series



Constituent: Lead Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

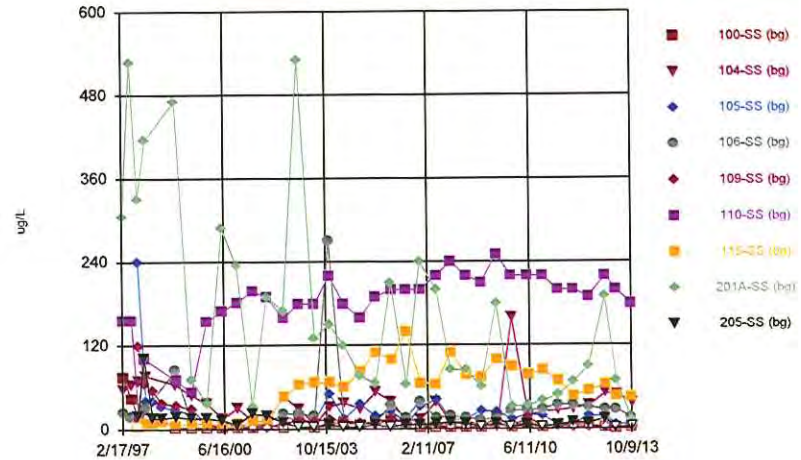
Time Series



Constituent: Magnesium Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

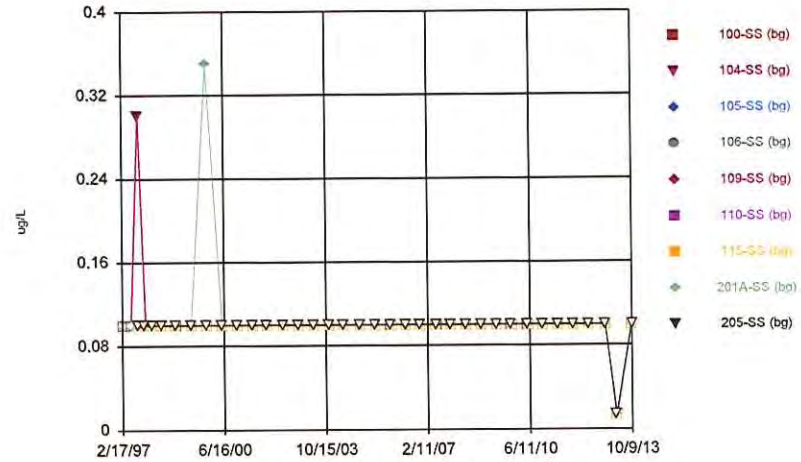
Time Series



Constituent: Manganese Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Time Series

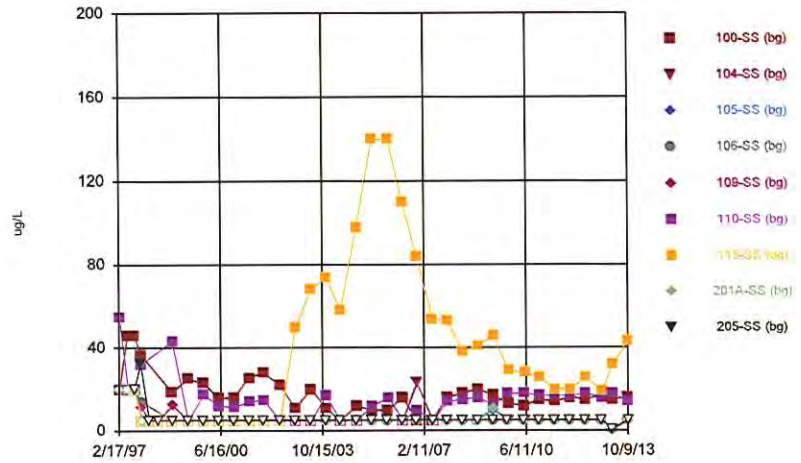


Constituent: Mercury Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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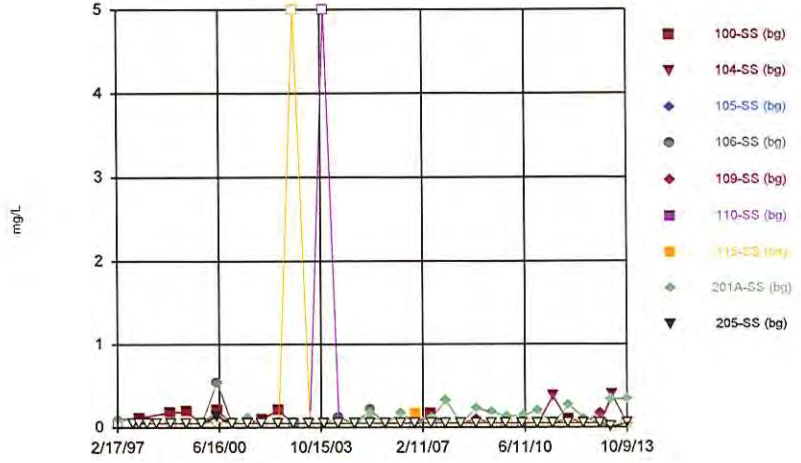
Time Series



Constituent: Nickel Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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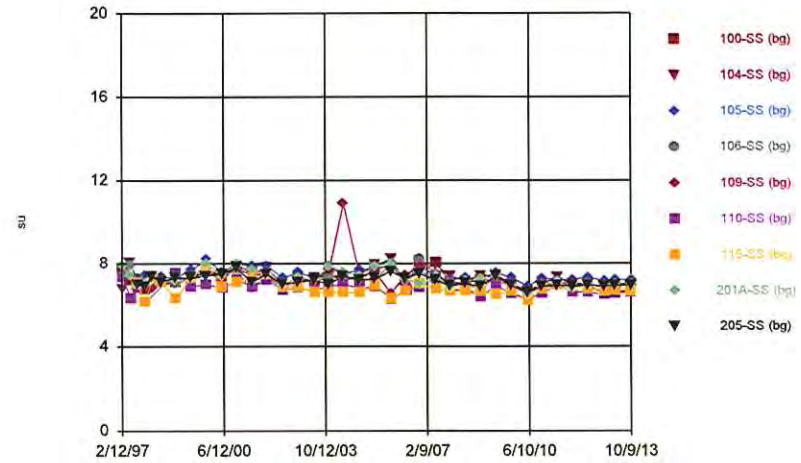
Time Series



Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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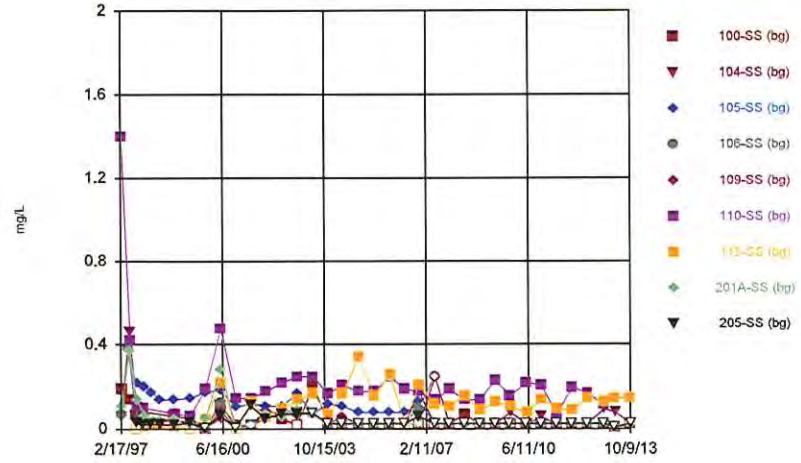
Time Series



Constituent: pH [Field] Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Time Series

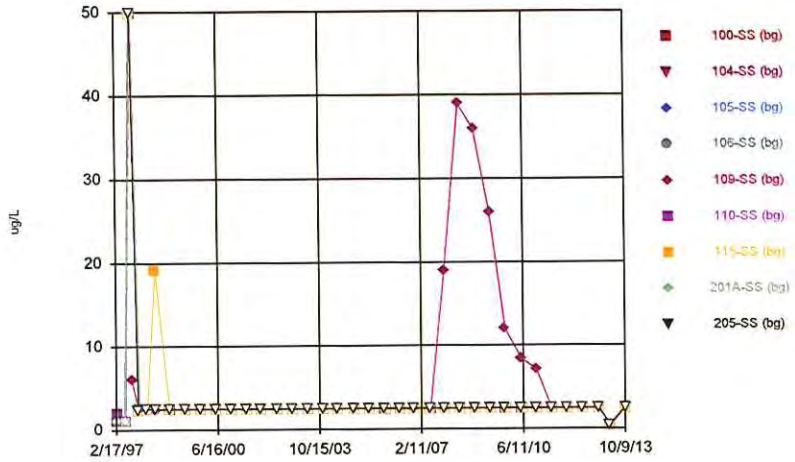


Constituent: Phosphorus Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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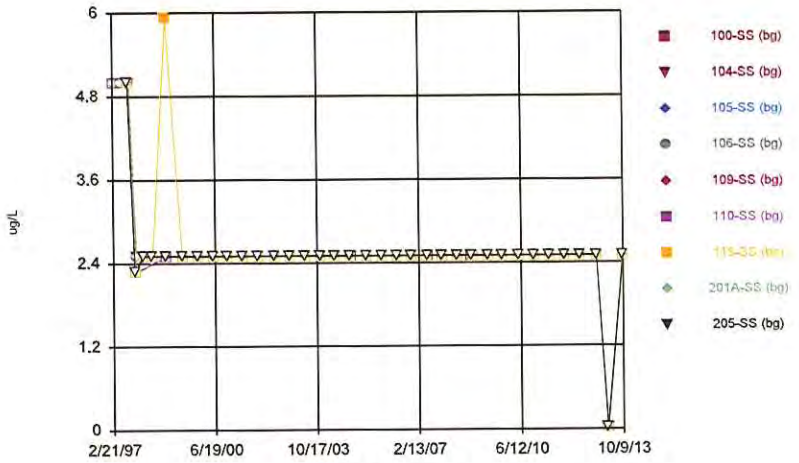
Time Series



Constituent: Selenium Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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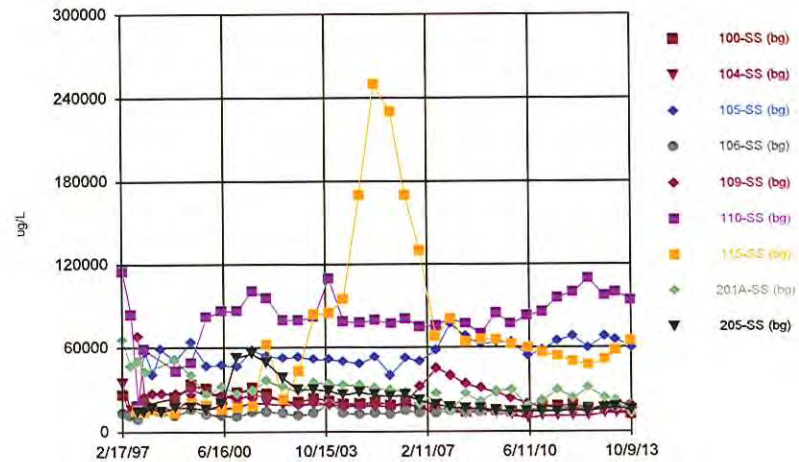
Time Series



Constituent: Silver Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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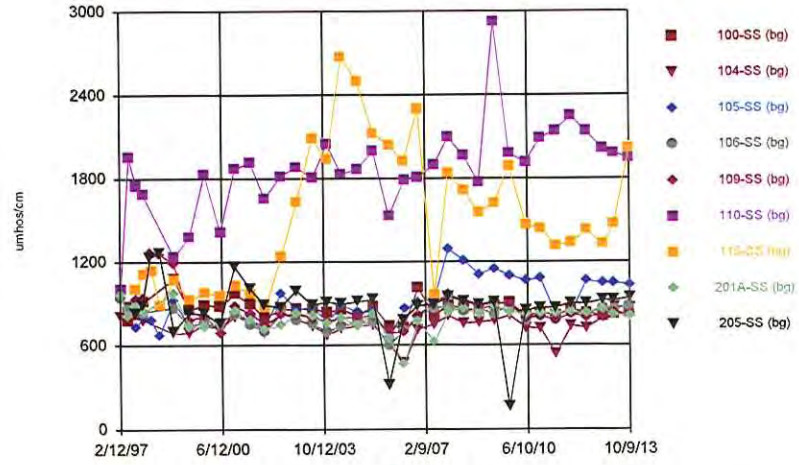
Time Series



Constituent: Sodium Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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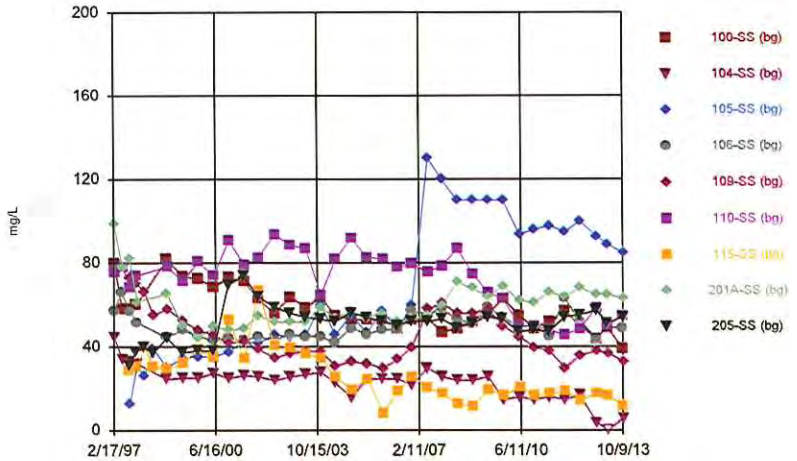
Time Series



Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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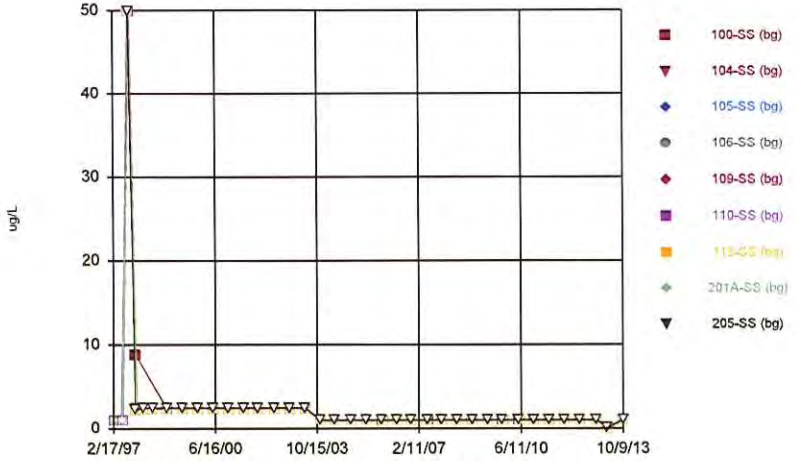
Time Series



Constituent: Sulfate as SO4 Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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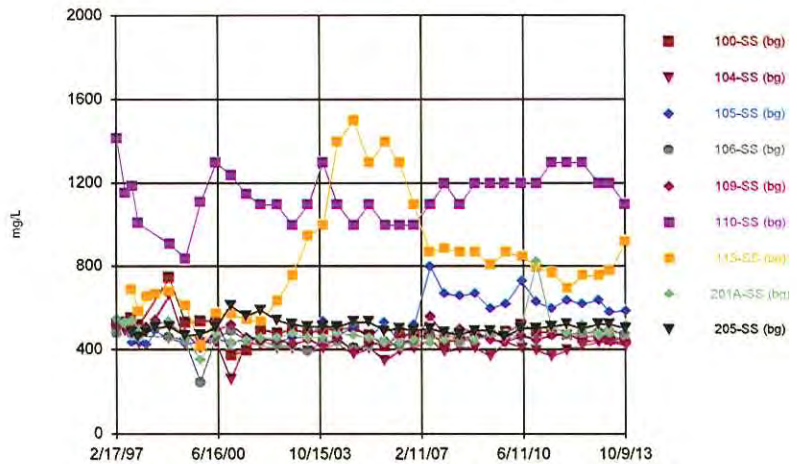
Time Series



Constituent: Thallium Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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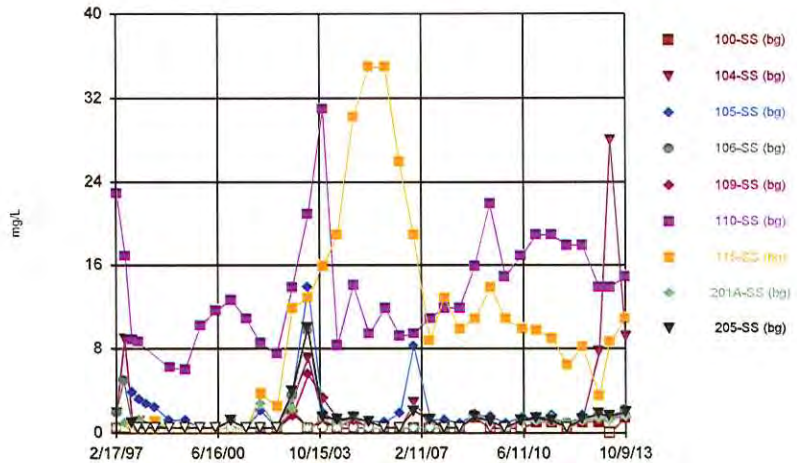
Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Time Series

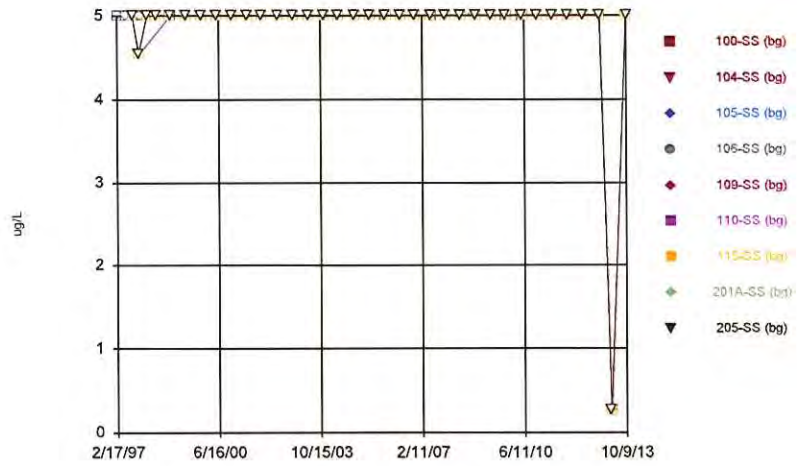


Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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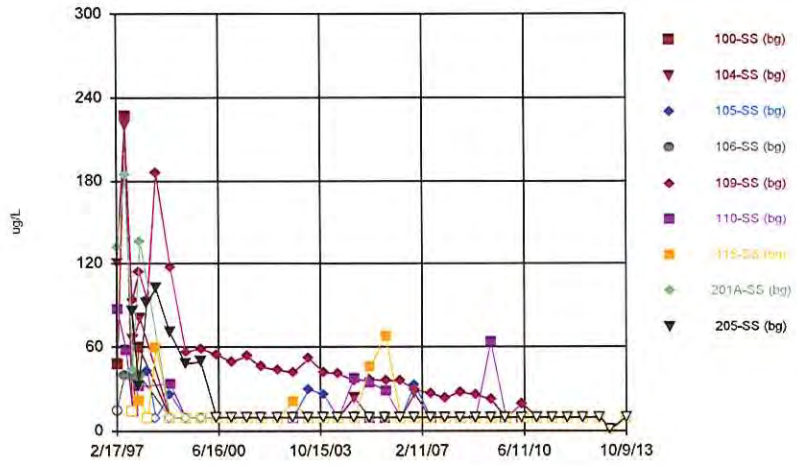
Time Series



Constituent: Vanadium Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Time Series



Constituent: Zinc Total Analysis Run 12/17/2013 11:51 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

APPENDIX E
STATISTICAL EVALUATIONS
SALEM FORMATION

TREND EVALUATION OF BACKGROUND DATA
SALEM FORMATION

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, 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

- Ammonia at 106-SD (2/97 through 11/10)
- Barium at 104-SD (2/97 through 5/10)
- Barium at 106-SD (2/97 through 11/01)
- Barium at 111-SD (2/97 through 5/02)
- Chloride at 104-SD (2/97 through 5/09)
- Fluoride at 106-SD (2/97 through 11/09)
- Magnesium at 104-SD (2/97 through 5/12)
- Sodium at 104-SD (2/97 through 5/01)
- Total dissolved solids at 104-SD (2/97 through 11/12)
- Total organic carbon at 104-SD (2/97 through 5/12)

Trend Test

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:32 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Ammonia as N (mg/L)	100-SD (bg)	0	-14	-158	No	34	2.941	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	104-SD (bg)	0	-38	-158	No	34	38.24	n/a	n/a	0.02	NP
Ammonia as N (mg/L)	**106-SD (bg)**	**0.01204**	**227**	**158**	**Yes**	**34**	**47.06**	**n/a**	**n/a**	**0.02**	**NP**
Ammonia as N (mg/L)	111-SD (bg)	0	-35	-158	No	34	79.41	n/a	n/a	0.02	NP
Antimony Total (ug/L)	100-SD (bg)	0	29	158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	104-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	106-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Antimony Total (ug/L)	111-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	100-SD (bg)	0	-18	-158	No	34	88.24	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	104-SD (bg)	0	152	158	No	34	94.12	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	106-SD (bg)	0	-16	-158	No	34	76.47	n/a	n/a	0.02	NP
Arsenic Total (ug/L)	111-SD (bg)	0	57	158	No	34	100	n/a	n/a	0.02	NP
Barium Total (ug/L)	100-SD (bg)	0.4882	50	158	No	34	0	n/a	n/a	0.02	NP
Barium Total (ug/L)	**104-SD (bg)**	**4.964**	**252**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Barium Total (ug/L)	**106-SD (bg)**	**2.141**	**256**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Barium Total (ug/L)	**111-SD (bg)**	**0.9995**	**188**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Beryllium Total (ug/L)	100-SD (bg)	0	5	158	No	34	97.06	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	104-SD (bg)	0	57	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	106-SD (bg)	0	57	158	No	34	100	n/a	n/a	0.02	NP
Beryllium Total (ug/L)	111-SD (bg)	0	57	158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	100-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Boron Total (ug/L)	104-SD (bg)	0	94	158	No	34	88.24	n/a	n/a	0.02	NP
Boron Total (ug/L)	106-SD (bg)	0	-23	-158	No	34	97.06	n/a	n/a	0.02	NP
Boron Total (ug/L)	111-SD (bg)	0	-61	-158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	100-SD (bg)	0	-72	-158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	104-SD (bg)	0	-47	-158	No	34	100	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	106-SD (bg)	0	9	158	No	34	97.06	n/a	n/a	0.02	NP
Cadmium Total (ug/L)	111-SD (bg)	0	-47	-158	No	34	100	n/a	n/a	0.02	NP
Calcium Total (ug/L)	100-SD (bg)	-250.5	-131	-158	No	34	0	n/a	n/a	0.02	NP
Calcium Total (ug/L)	104-SD (bg)	0	87	158	No	34	0	n/a	n/a	0.02	NP
Calcium Total (ug/L)	106-SD (bg)	173.7	74	158	No	34	0	n/a	n/a	0.02	NP
Calcium Total (ug/L)	111-SD (bg)	0	9	158	No	34	0	n/a	n/a	0.02	NP
Chemical Oxygen Demand [COD] (mg/L)	**100-SD (bg)**	**0**	**-188**	**-158**	**Yes**	**34**	**91.18**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	**104-SD (bg)**	**0**	**188**	**158**	**Yes**	**34**	**73.53**	**n/a**	**n/a**	**0.02**	**NP**
Chemical Oxygen Demand [COD] (mg/L)	106-SD (bg)	0	-25	-158	No	34	85.29	n/a	n/a	0.02	NP
Chemical Oxygen Demand [COD] (mg/L)	**111-SD (bg)**	**0**	**-198**	**-158**	**Yes**	**34**	**94.12**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	100-SD (bg)	0	-34	-158	No	34	94.12	n/a	n/a	0.02	NP
Chloride (mg/L)	**104-SD (bg)**	**4.984**	**306**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**106-SD (bg)**	**-0.6603**	**-391**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**111-SD (bg)**	**-0.4125**	**-457**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chromium Total (ug/L)	**100-SD (bg)**	**0**	**-171**	**-158**	**Yes**	**34**	**88.24**	**n/a**	**n/a**	**0.02**	**NP**
Chromium Total (ug/L)	104-SD (bg)	0	-32	-158	No	34	91.18	n/a	n/a	0.02	NP
Chromium Total (ug/L)	106-SD (bg)	0	-59	-158	No	34	88.24	n/a	n/a	0.02	NP
Chromium Total (ug/L)	111-SD (bg)	0	-135	-158	No	34	97.06	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	100-SD (bg)	0	-95	-158	No	34	100	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	104-SD (bg)	0	-63	-158	No	34	97.06	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	106-SD (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Cobalt Total (ug/L)	111-SD (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Copper Total (ug/L)	100-SD (bg)	0	-95	-158	No	34	100	n/a	n/a	0.02	NP
Copper Total (ug/L)	104-SD (bg)	0	-100	-158	No	34	97.06	n/a	n/a	0.02	NP

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Trend Test

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:32 AM

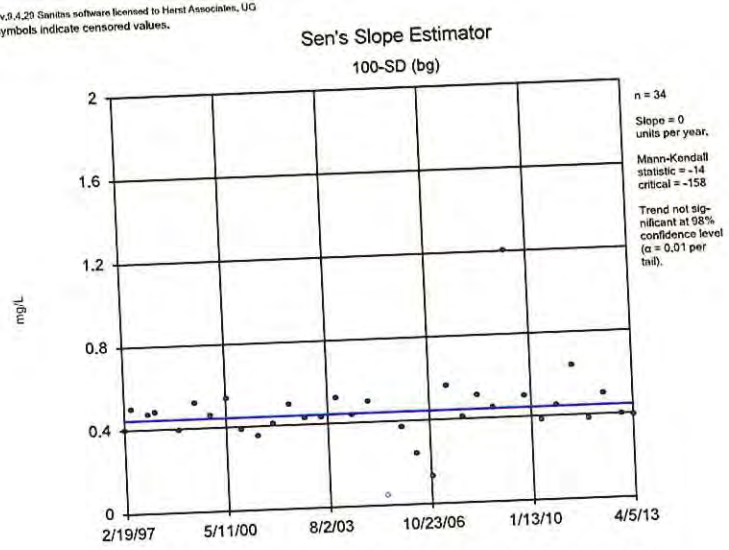
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Copper Total (ug/L)	106-SD (bg)	0	-122	-158	No	34	97.06	n/a	n/a	0.02	NP
Copper Total (ug/L)	111-SD (bg)	0	-146	-158	No	34	94.12	n/a	n/a	0.02	NP
Fluoride (mg/L)	100-SD (bg)	-0.0005003	-85	-145	No	32	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	104-SD (bg)	-0.008966	-123	-145	No	32	3.125	n/a	n/a	0.02	NP
Fluoride (mg/L)	**106-SD (bg)**	**0.01593**	**219**	**145**	**Yes**	**32**	**3.125**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	111-SD (bg)	0	-6	-145	No	32	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	100-SD (bg)	0	-50	-158	No	34	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	104-SD (bg)	2.155	117	158	No	34	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	106-SD (bg)	2.088	101	158	No	34	0	n/a	n/a	0.02	NP
Hardness Total (mg/L)	111-SD (bg)	0	42	158	No	34	0	n/a	n/a	0.02	NP
Iron Total (ug/L)	**100-SD (bg)**	**-36.57**	**-172**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Iron Total (ug/L)	104-SD (bg)	-10.52	-38	-158	No	34	0	n/a	n/a	0.02	NP
Iron Total (ug/L)	106-SD (bg)	38.62	72	158	No	34	0	n/a	n/a	0.02	NP
Iron Total (ug/L)	**111-SD (bg)**	**-59.99**	**-162**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Lead Total (ug/L)	100-SD (bg)	0	29	158	No	34	100	n/a	n/a	0.02	NP
Lead Total (ug/L)	104-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Lead Total (ug/L)	106-SD (bg)	0	63	158	No	34	97.06	n/a	n/a	0.02	NP
Lead Total (ug/L)	111-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	100-SD (bg)	74.82	89	158	No	34	0	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	**104-SD (bg)**	**336.4**	**191**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Magnesium Total (ug/L)	106-SD (bg)	133.5	67	158	No	34	0	n/a	n/a	0.02	NP
Magnesium Total (ug/L)	111-SD (bg)	0	28	158	No	34	0	n/a	n/a	0.02	NP
Manganese Total (ug/L)	**100-SD (bg)**	**-7.412**	**-460**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Manganese Total (ug/L)	104-SD (bg)	0.4011	32	158	No	34	0	n/a	n/a	0.02	NP
Manganese Total (ug/L)	106-SD (bg)	0.5214	14	158	No	34	0	n/a	n/a	0.02	NP
Manganese Total (ug/L)	**111-SD (bg)**	**-0.9343**	**-410**	**-158**	**Yes**	**34**	**41.18**	**n/a**	**n/a**	**0.02**	**NP**
Mercury Total (ug/L)	100-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	104-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	106-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Mercury Total (ug/L)	111-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Nickel Total (ug/L)	100-SD (bg)	0	-95	-158	No	34	100	n/a	n/a	0.02	NP
Nickel Total (ug/L)	104-SD (bg)	0	15	158	No	34	88.24	n/a	n/a	0.02	NP
Nickel Total (ug/L)	106-SD (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Nickel Total (ug/L)	111-SD (bg)	0	-123	-158	No	34	100	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	100-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	104-SD (bg)	0	4	158	No	34	94.12	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	106-SD (bg)	0	-63	-158	No	34	97.06	n/a	n/a	0.02	NP
Nitrate/Nitrite (mg/L)	111-SD (bg)	0	14	158	No	34	91.18	n/a	n/a	0.02	NP
pH [Field] (su)	100-SD (bg)	-0.02116	-81	-158	No	34	0	n/a	n/a	0.02	NP
pH [Field] (su)	104-SD (bg)	-0.03545	-154	-158	No	34	0	n/a	n/a	0.02	NP
pH [Field] (su)	**106-SD (bg)**	**-0.02625**	**-191**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
pH [Field] (su)	111-SD (bg)	-0.02691	-123	-158	No	34	0	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	**100-SD (bg)**	**-0.002757**	**-295**	**-158**	**Yes**	**34**	**58.82**	**n/a**	**n/a**	**0.02**	**NP**
Phosphorus Total (mg/L)	104-SD (bg)	0	-44	-158	No	34	52.94	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	106-SD (bg)	0.0005578	32	158	No	34	17.65	n/a	n/a	0.02	NP
Phosphorus Total (mg/L)	111-SD (bg)	0	-11	-158	No	34	67.65	n/a	n/a	0.02	NP
Selenium Total (ug/L)	100-SD (bg)	0	29	158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	104-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	106-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP
Selenium Total (ug/L)	111-SD (bg)	0	-1	-158	No	34	100	n/a	n/a	0.02	NP

Trend Test

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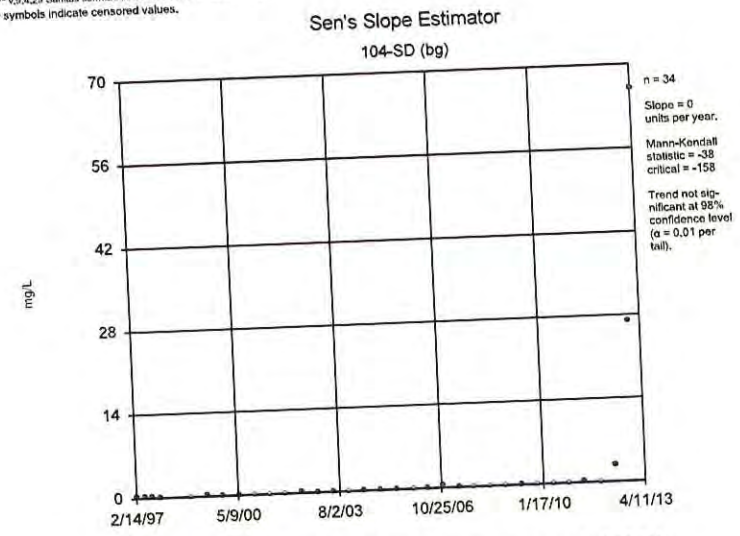
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Silver Total (ug/L)	100-SD (bg)	0	-31	-145	No	32	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	104-SD (bg)	0	-61	-145	No	32	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	106-SD (bg)	0	-92	-151	No	33	100	n/a	n/a	0.02	NP
Silver Total (ug/L)	111-SD (bg)	0	-92	-151	No	33	100	n/a	n/a	0.02	NP
Sodium Total (ug/L)	**100-SD (bg)**	**-260.4**	**-358**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	**104-SD (bg)**	**2244**	**410**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	**106-SD (bg)**	**-1931**	**-428**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium Total (ug/L)	111-SD (bg)	0	-23	-158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	100-SD (bg)	-1.402	-58	-158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	104-SD (bg)	14.09	150	158	No	34	0	n/a	n/a	0.02	NP
Specific Conductance [Field] (umhos/cm)	**106-SD (bg)**	**-8.714**	**-229**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Specific Conductance [Field] (umhos/cm)	**111-SD (bg)**	**-7.223**	**-215**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	100-SD (bg)	0.02001	60	158	No	34	0	n/a	n/a	0.02	NP
Sulfate as SO4 (mg/L)	104-SD (bg)	0.423	37	158	No	34	0	n/a	n/a	0.02	NP
Sulfate as SO4 (mg/L)	**106-SD (bg)**	**-3.476**	**-372**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate as SO4 (mg/L)	**111-SD (bg)**	**-0.7729**	**-402**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**100-SD (bg)**	**0**	**-237**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**104-SD (bg)**	**0**	**-248**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**106-SD (bg)**	**0**	**-248**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Thallium Total (ug/L)	**111-SD (bg)**	**0**	**-248**	**-158**	**Yes**	**34**	**100**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**100-SD (bg)**	**-2.505**	**-177**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**104-SD (bg)**	**8.379**	**181**	**158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**106-SD (bg)**	**-9.527**	**-328**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**111-SD (bg)**	**-4.313**	**-234**	**-158**	**Yes**	**34**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Organic Carbon [TOC] (mg/L)	100-SD (bg)	-0.0216	-87	-158	No	34	32.35	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	**104-SD (bg)**	**0.08172**	**252**	**158**	**Yes**	**34**	**58.82**	**n/a**	**n/a**	**0.02**	**NP**
Total Organic Carbon [TOC] (mg/L)	106-SD (bg)	0	76	158	No	34	41.18	n/a	n/a	0.02	NP
Total Organic Carbon [TOC] (mg/L)	111-SD (bg)	0.01271	131	158	No	34	44.12	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	100-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	104-SD (bg)	0	33	158	No	34	97.06	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	106-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Vanadium Total (ug/L)	111-SD (bg)	0	-33	-158	No	34	100	n/a	n/a	0.02	NP
Zinc Total (ug/L)	**100-SD (bg)**	**0**	**-182**	**-158**	**Yes**	**34**	**79.41**	**n/a**	**n/a**	**0.02**	**NP**
Zinc Total (ug/L)	104-SD (bg)	0	-63	-158	No	34	73.53	n/a	n/a	0.02	NP
Zinc Total (ug/L)	106-SD (bg)	0	-112	-158	No	34	76.47	n/a	n/a	0.02	NP
Zinc Total (ug/L)	111-SD (bg)	0	-126	-158	No	34	79.41	n/a	n/a	0.02	NP

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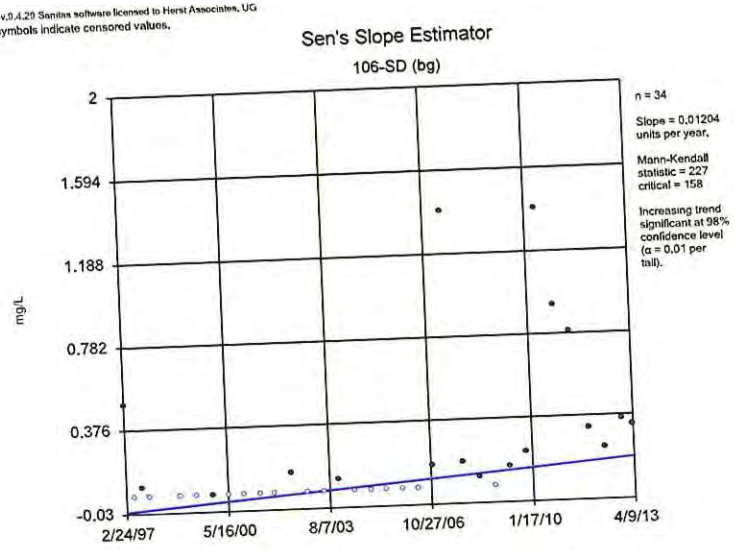
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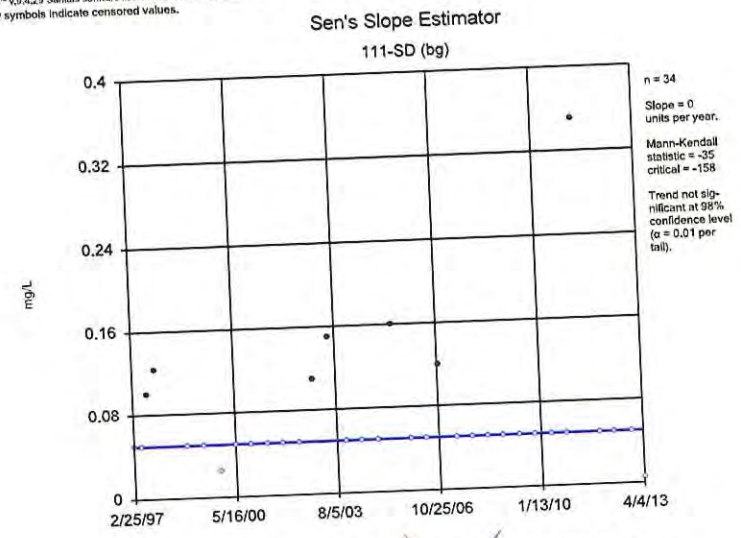
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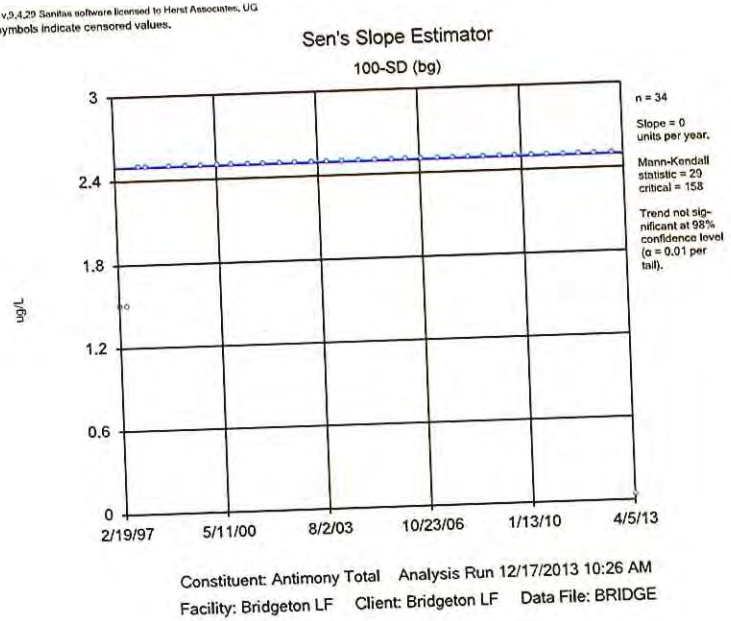
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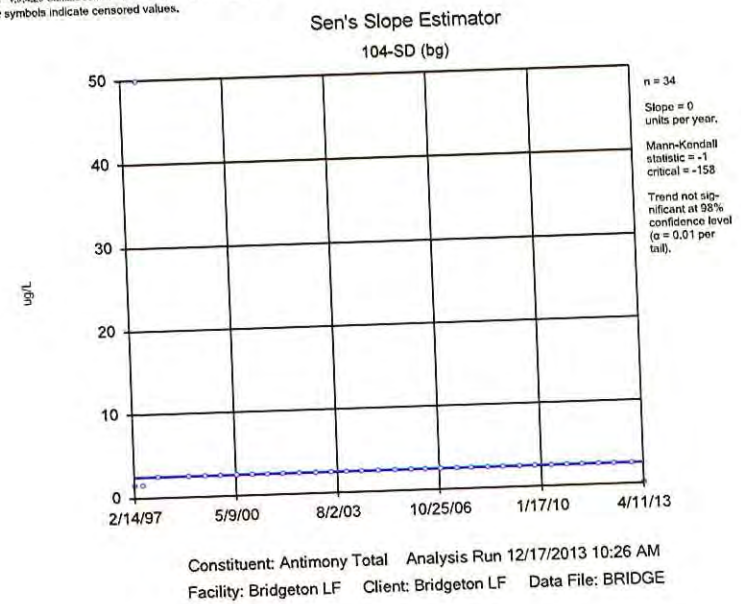
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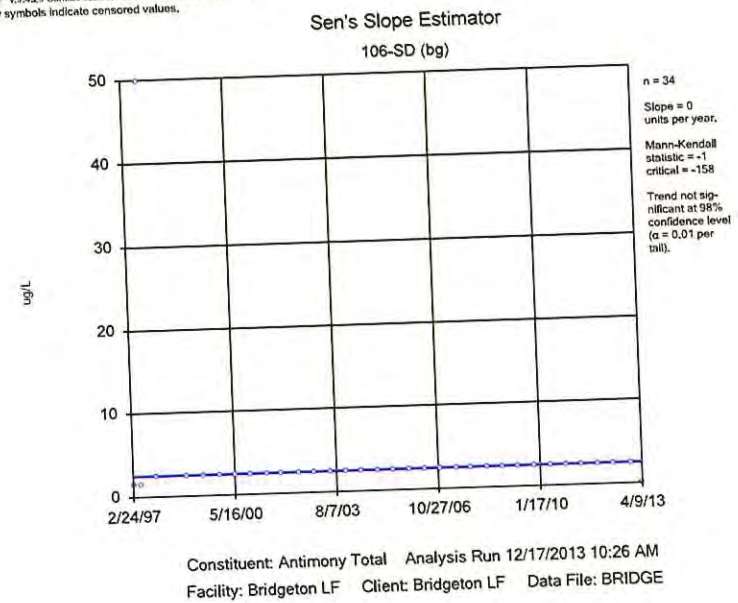
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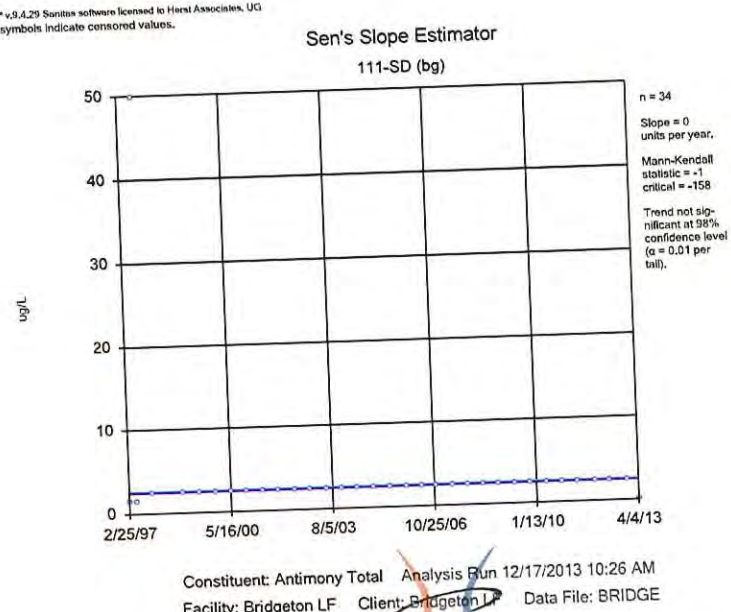
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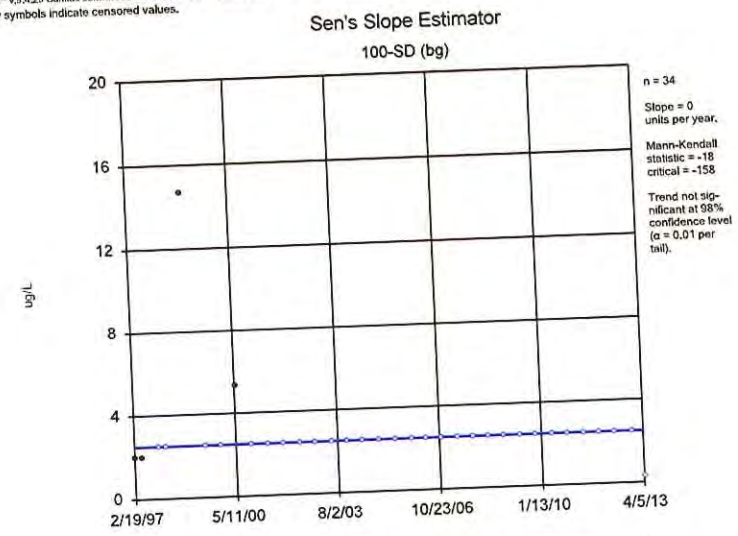
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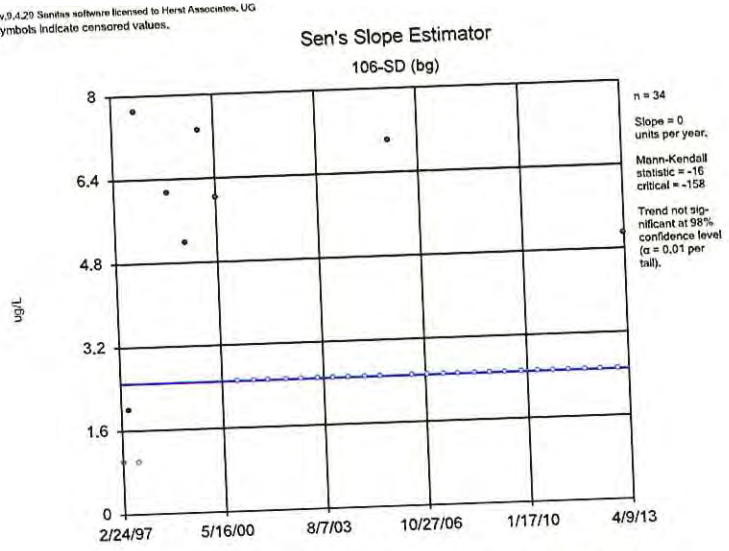
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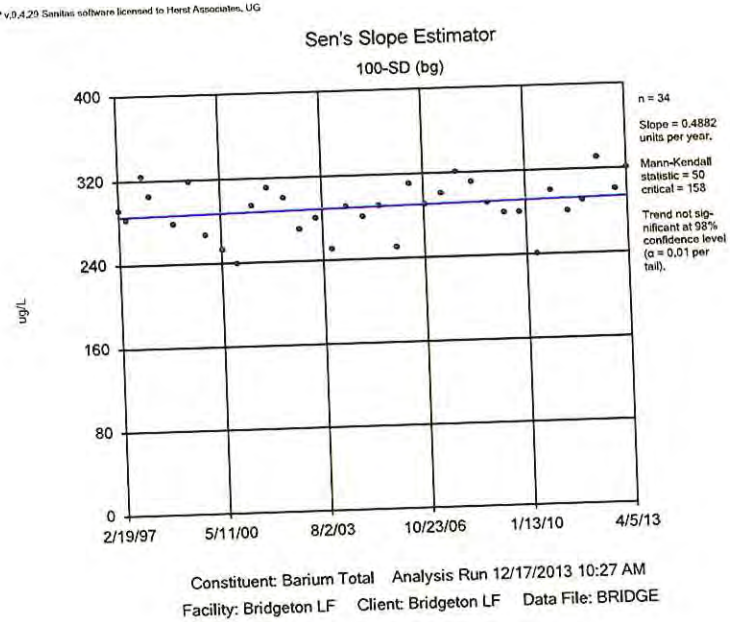
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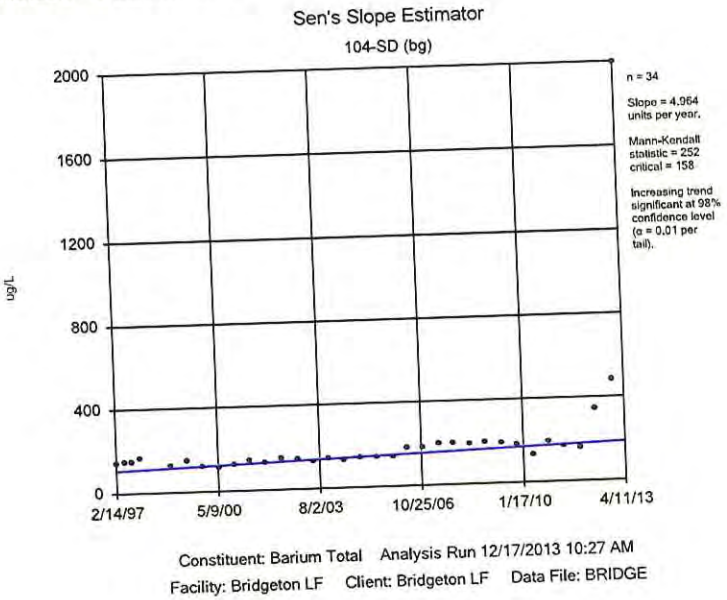
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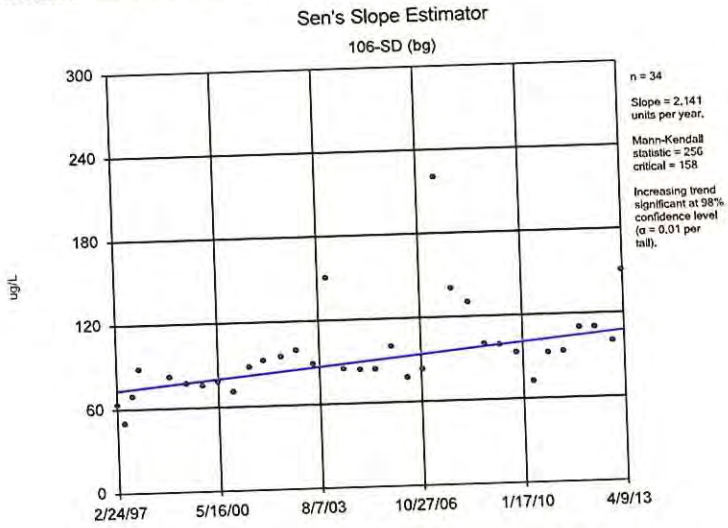
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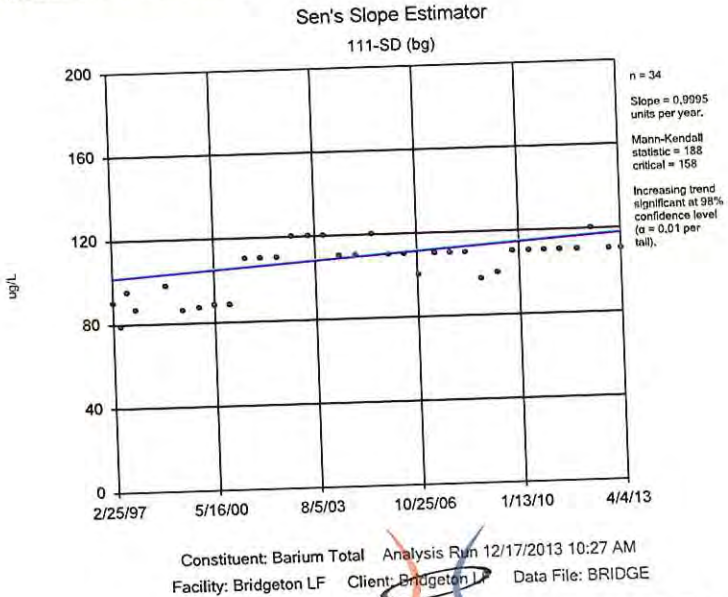
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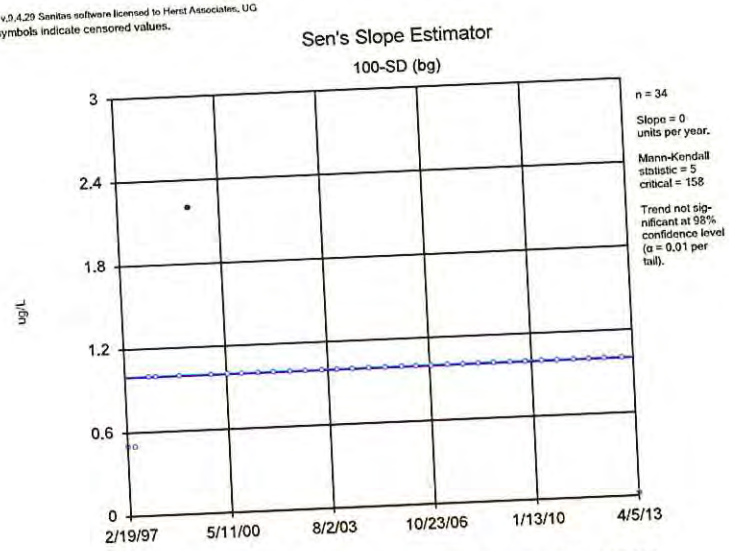
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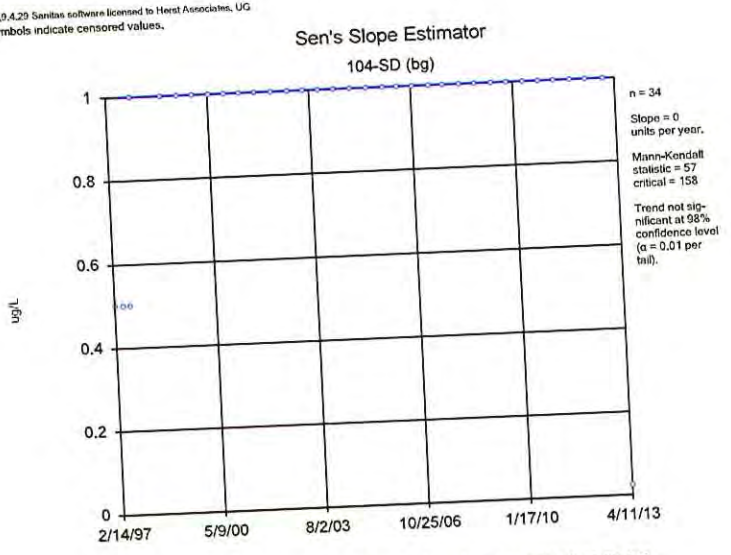
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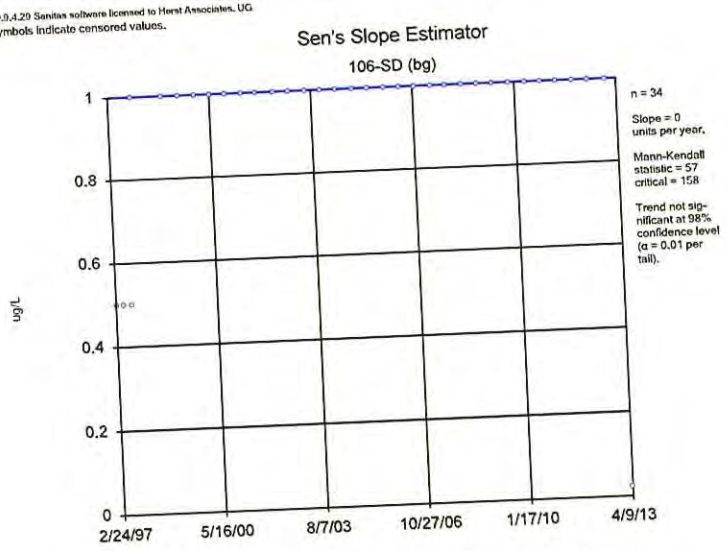
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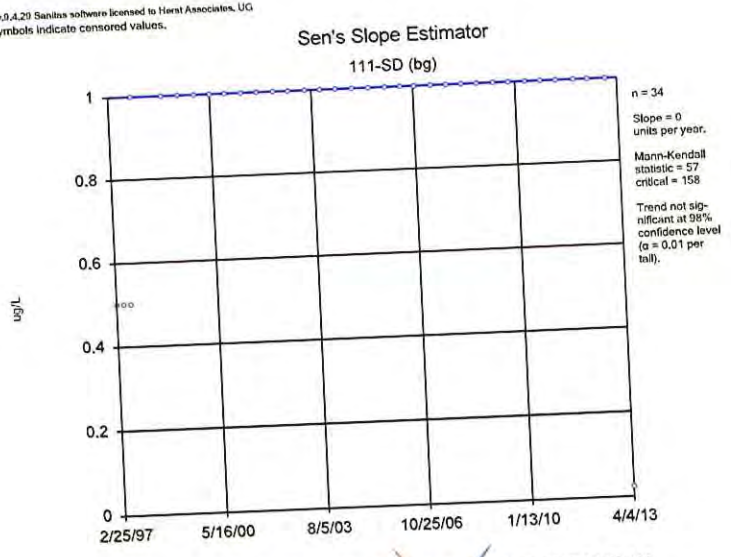
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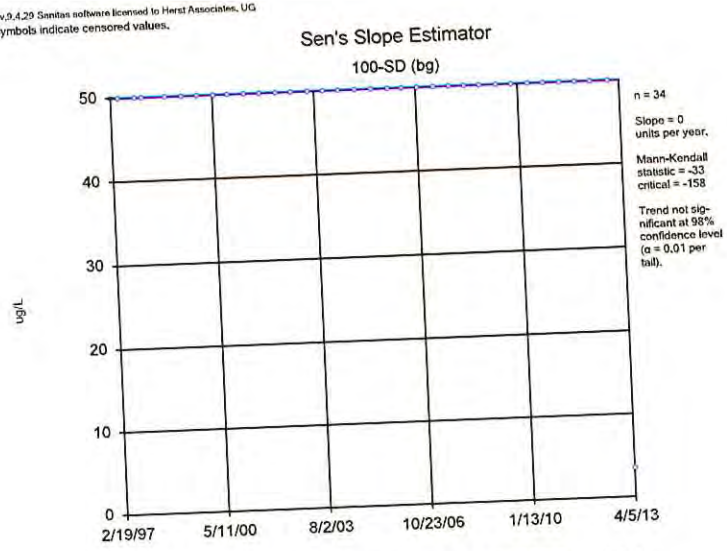
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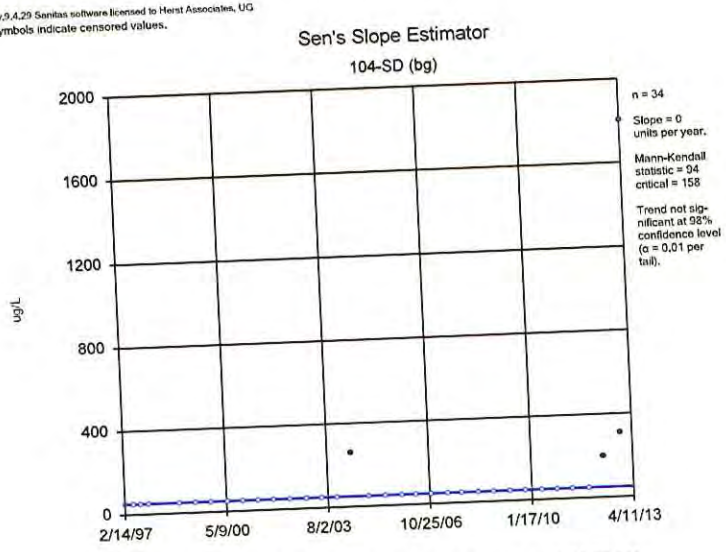
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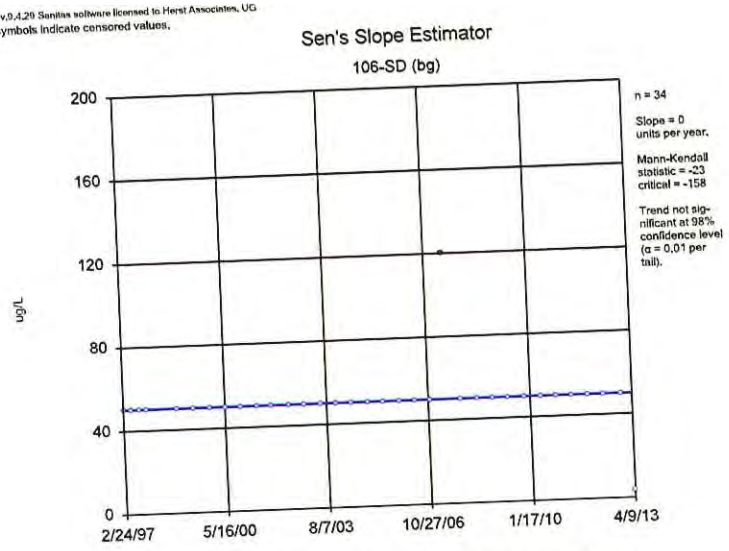
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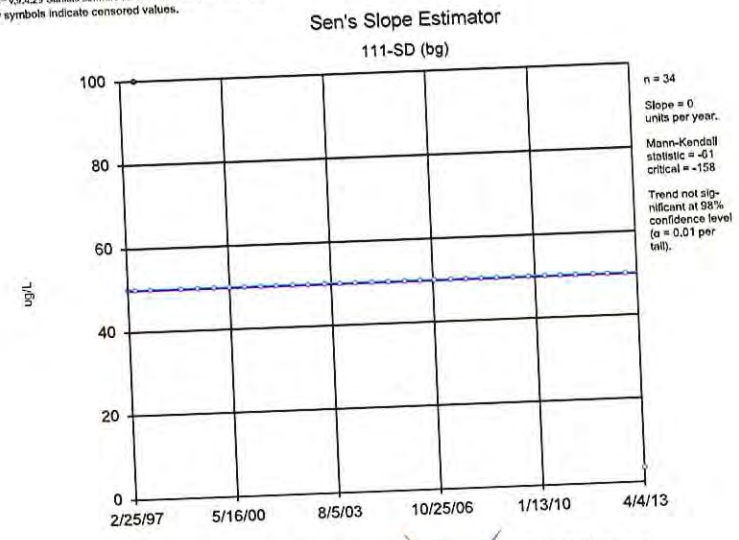
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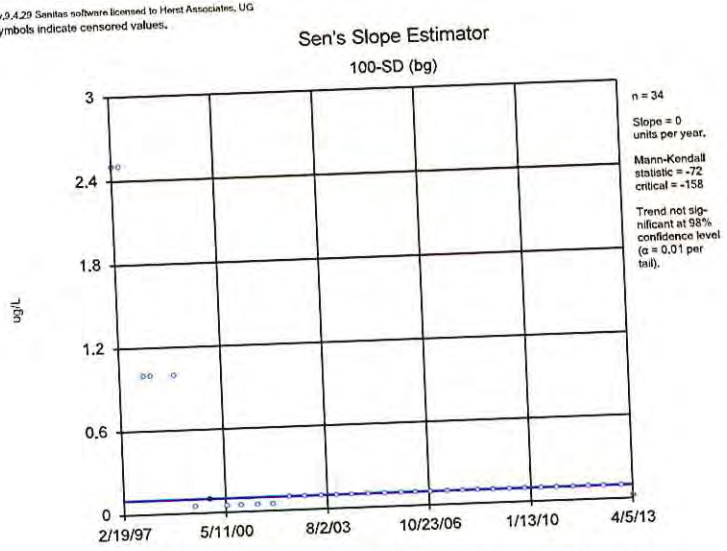
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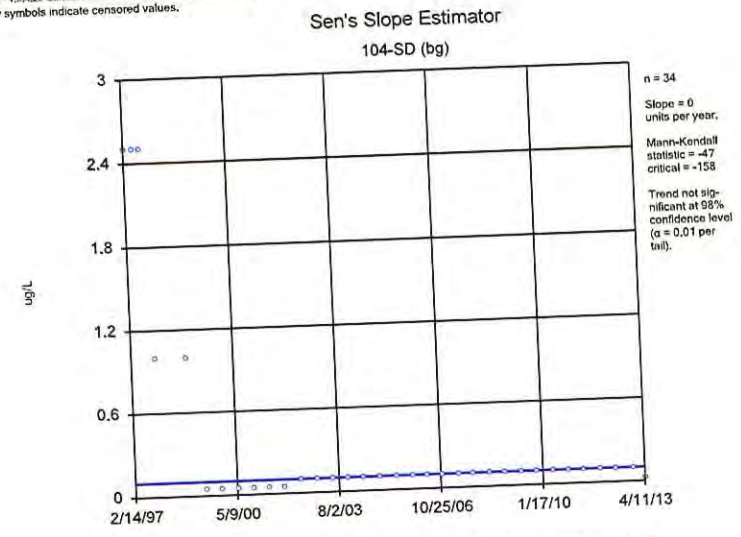
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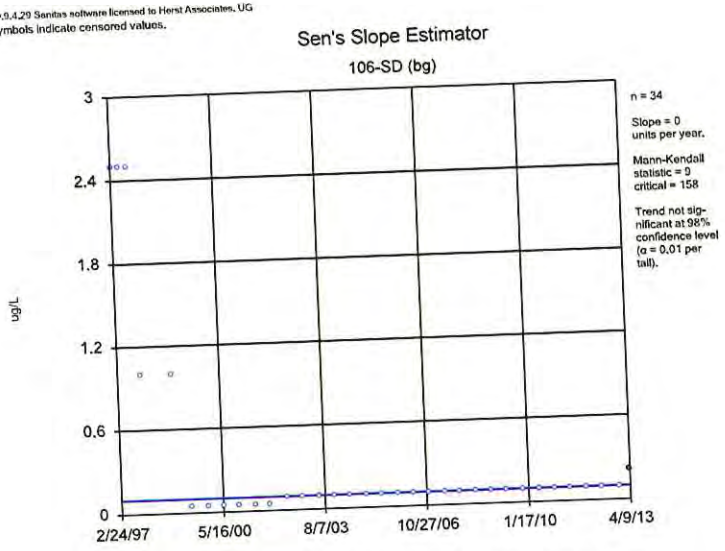
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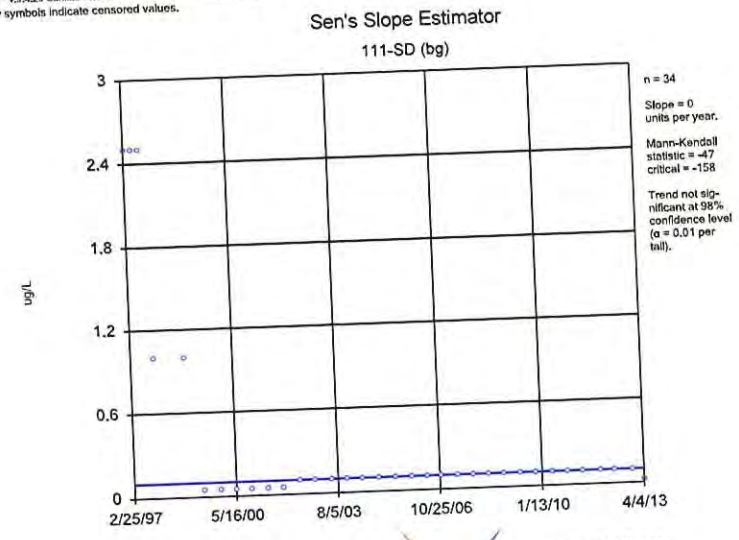
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.



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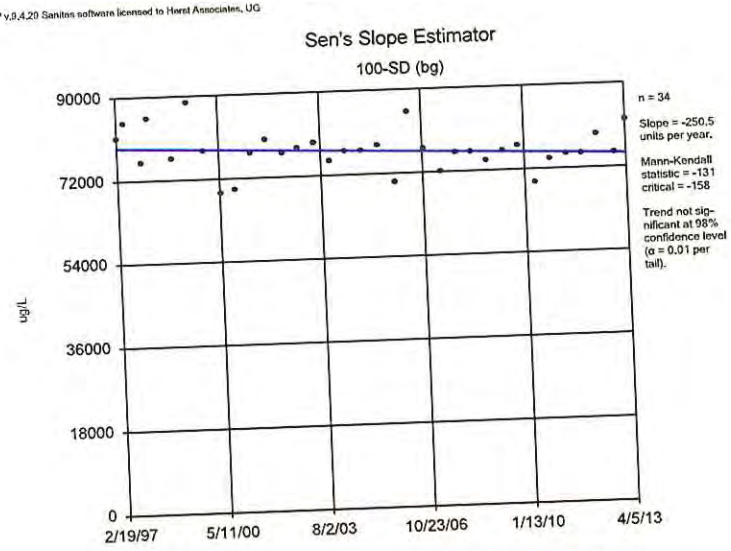
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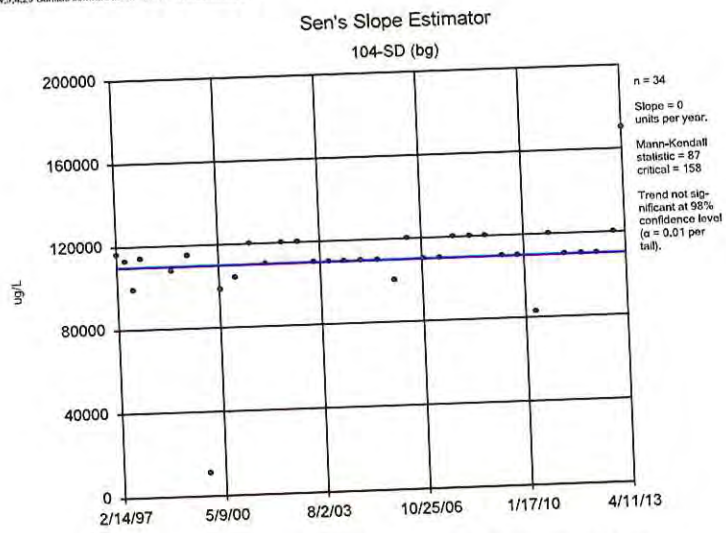
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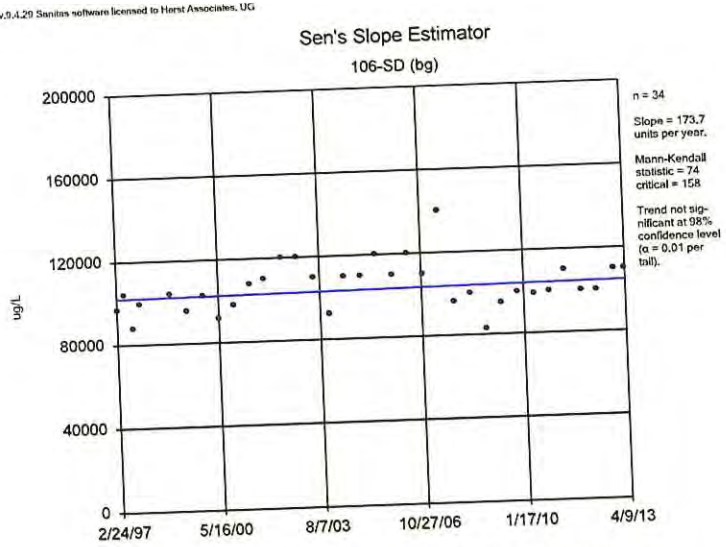
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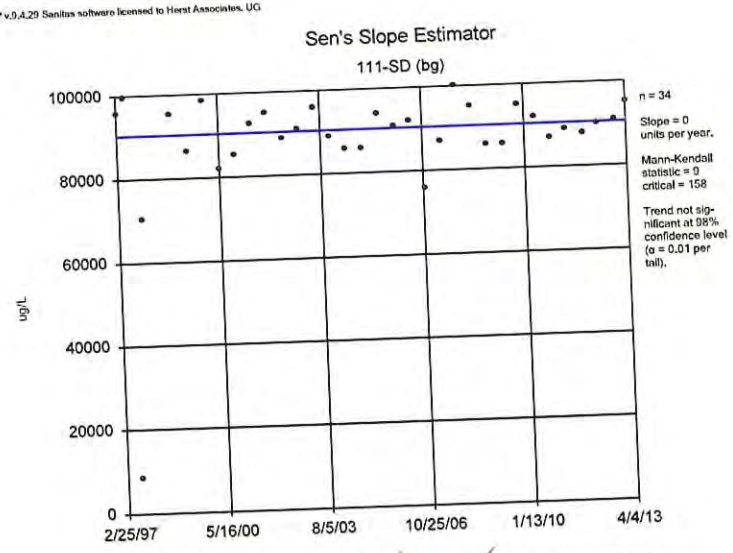
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Constituent: Calcium Total Analysis Run 12/17/2013 10:27 AM
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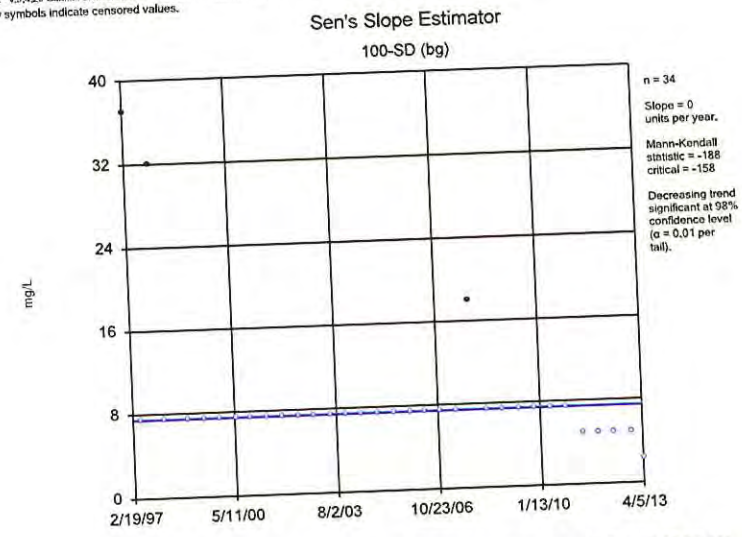
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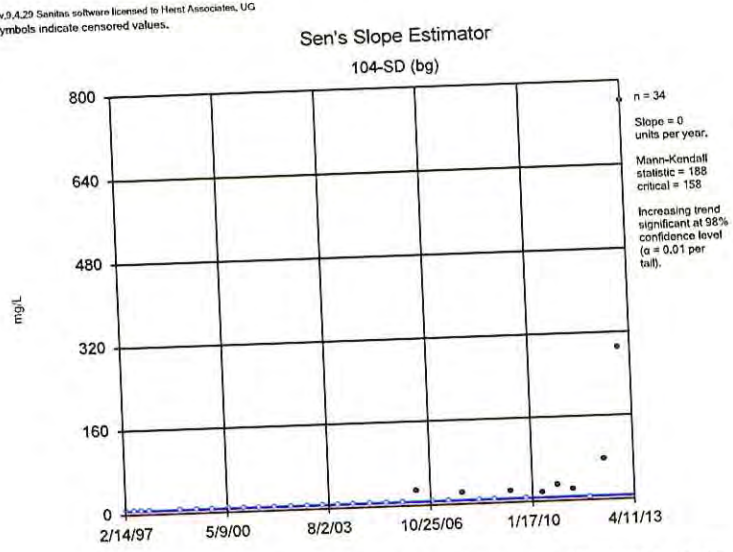
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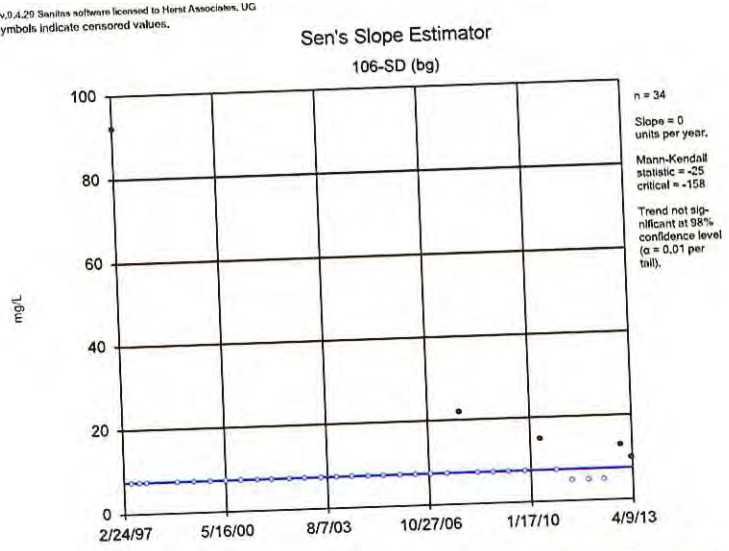
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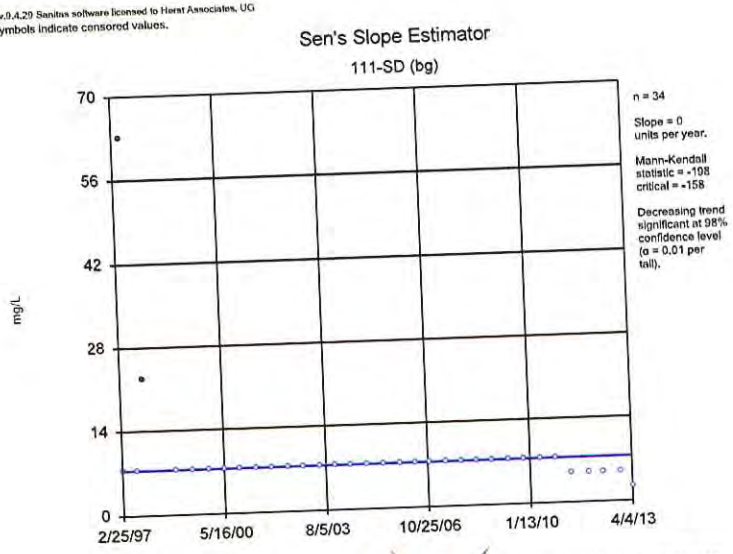
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Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:27 AM
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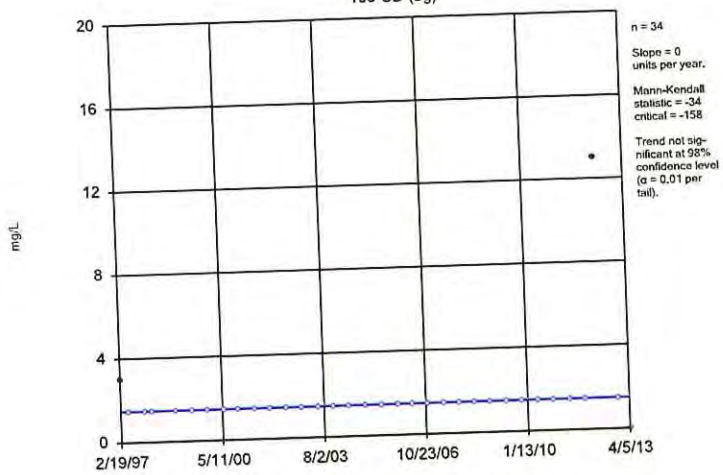
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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)

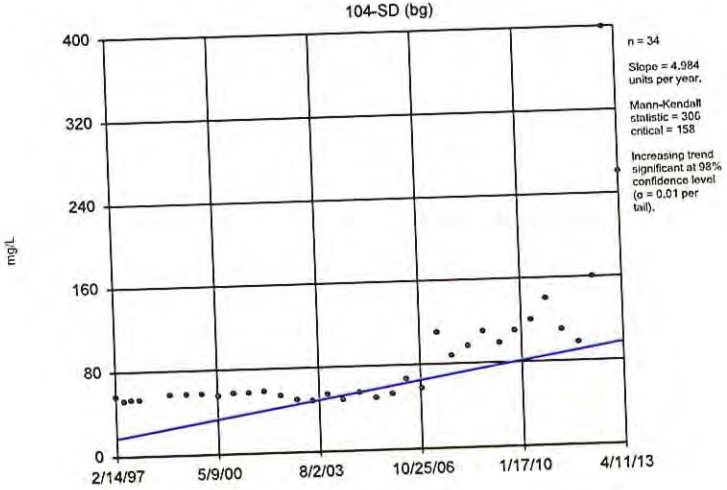


Constituent: Chloride Analysis Run 12/17/2013 10:27 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

104-SD (bg)

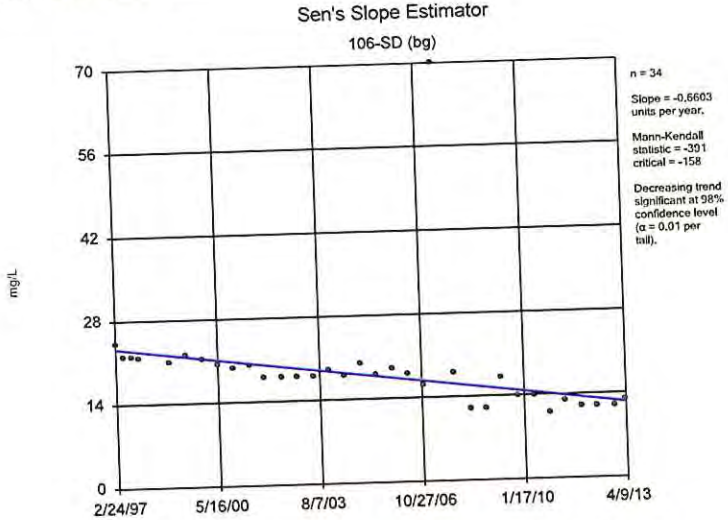


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Sen's Slope Estimator

106-SD (bg)

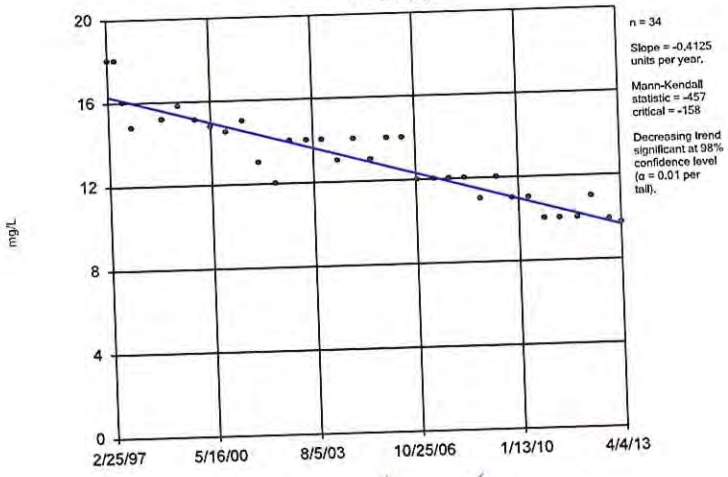


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Sen's Slope Estimator

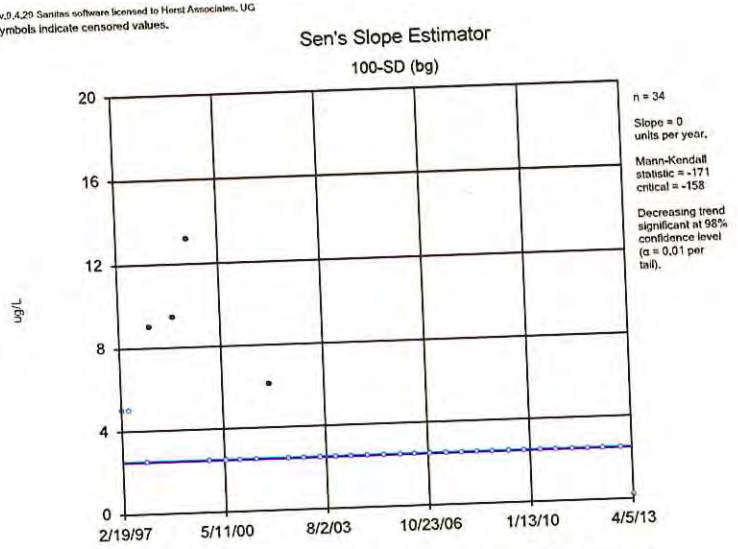
111-SD (bg)



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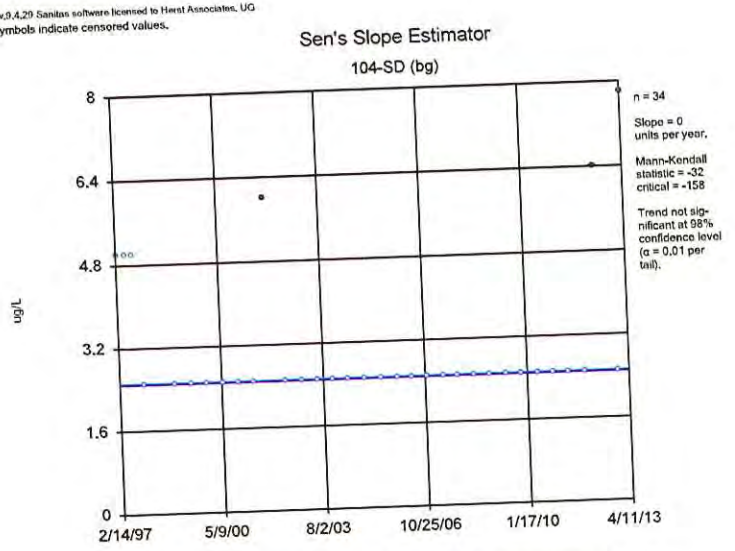
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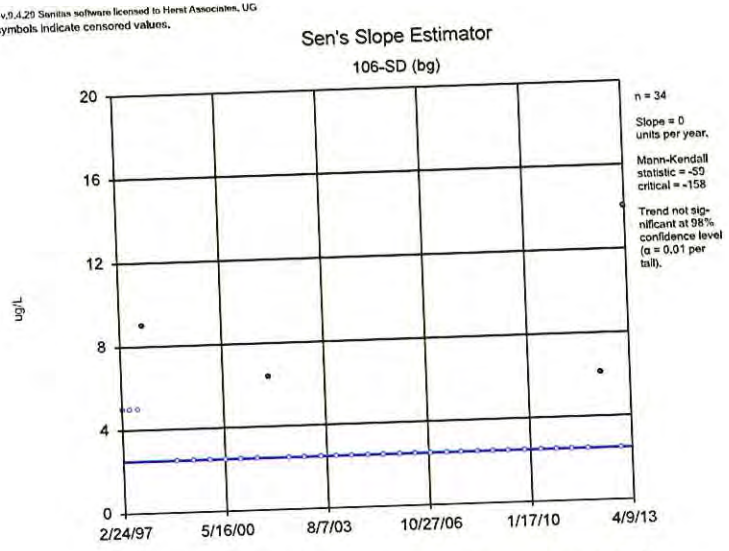
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: Chromium Total Analysis Run 12/17/2013 10:27 AM
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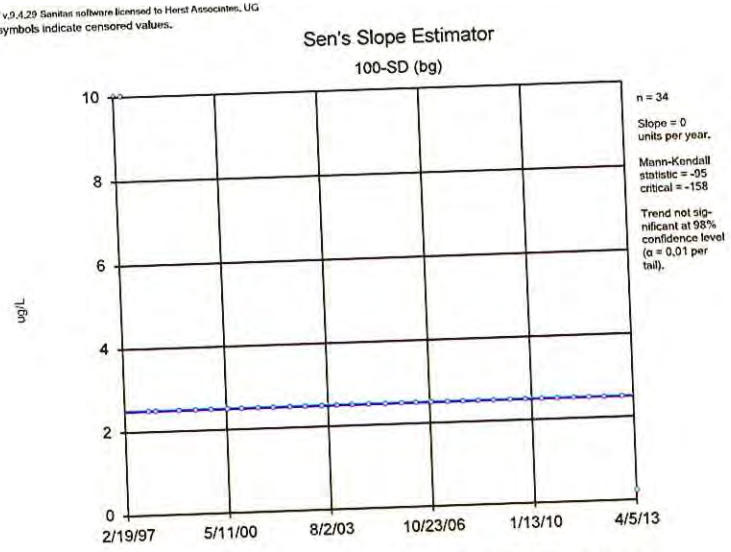
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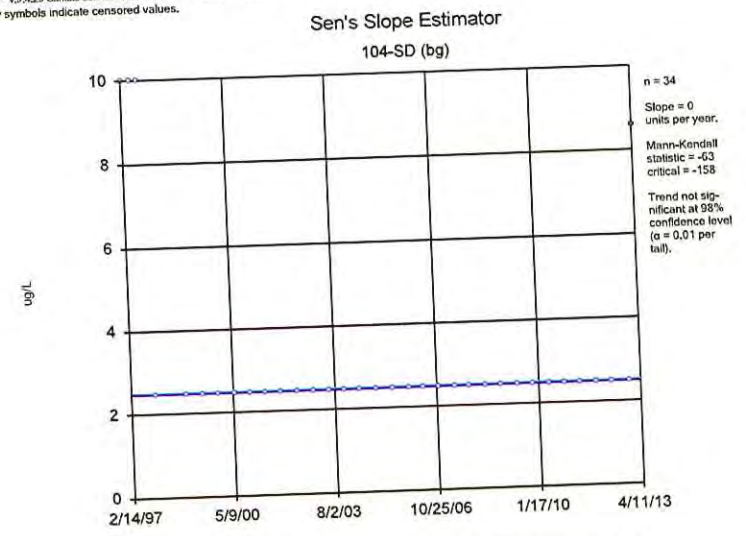
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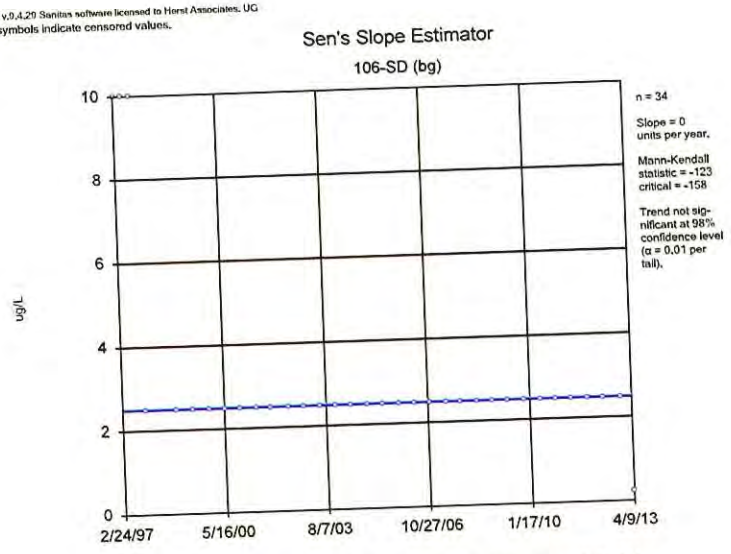
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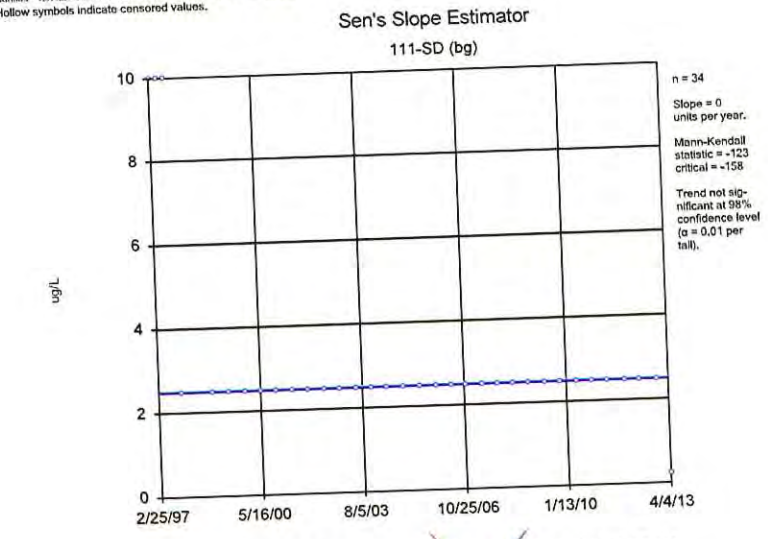
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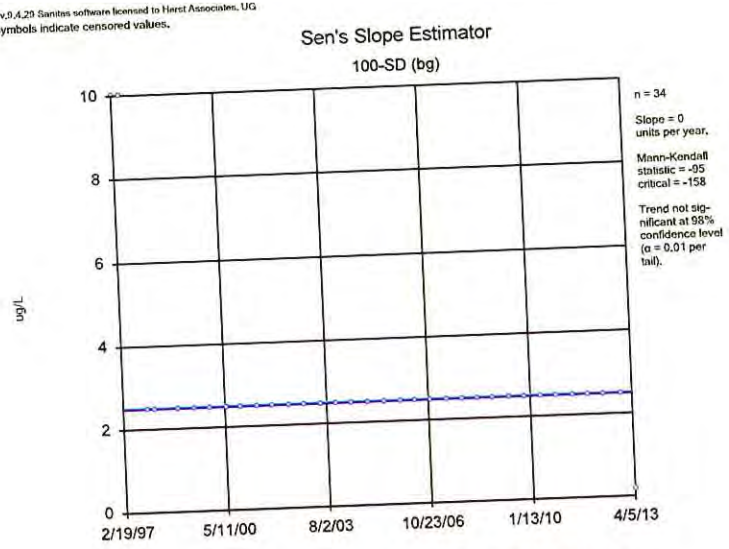
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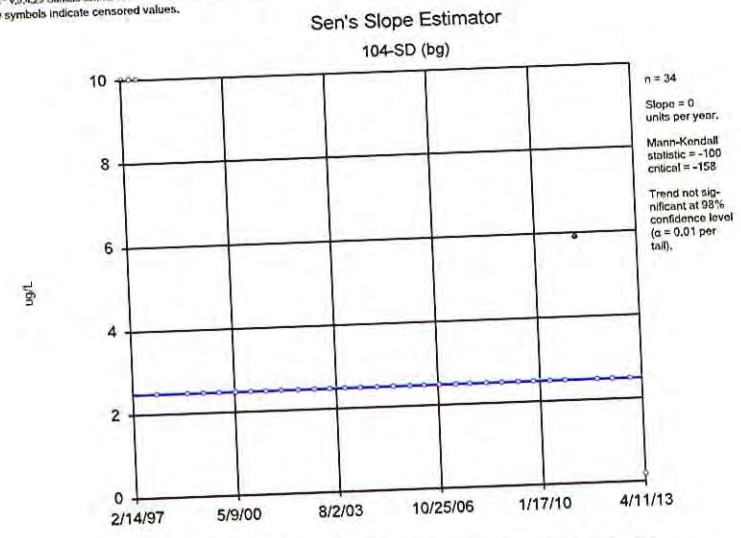
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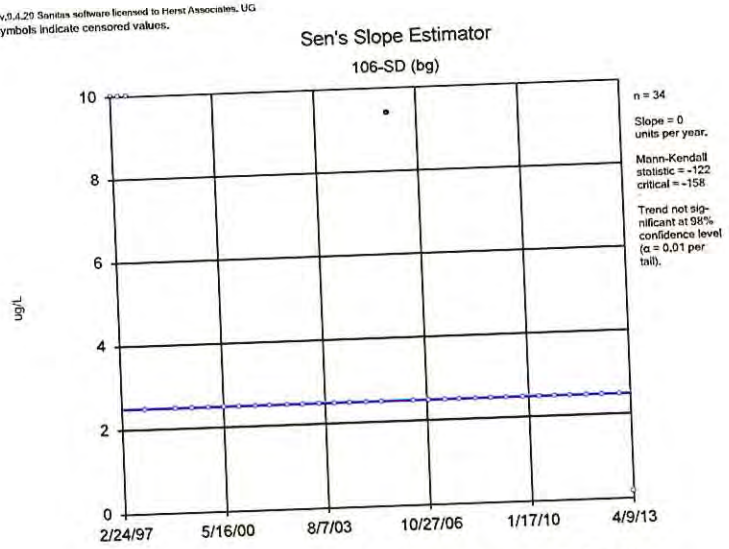
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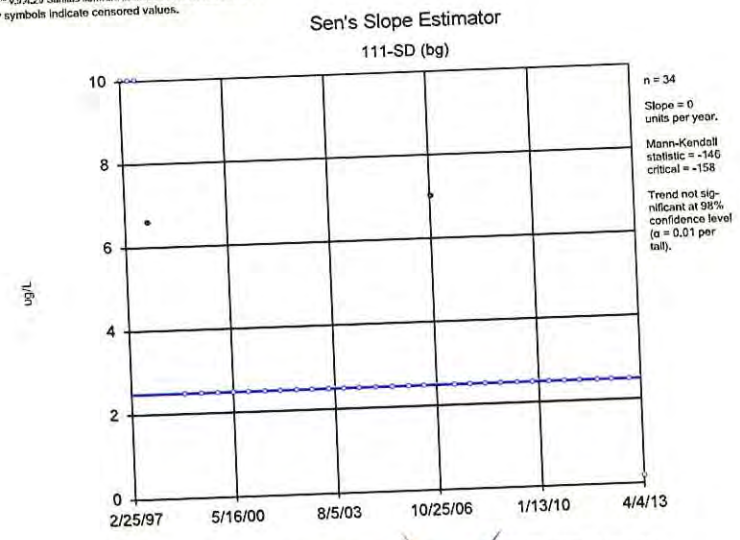
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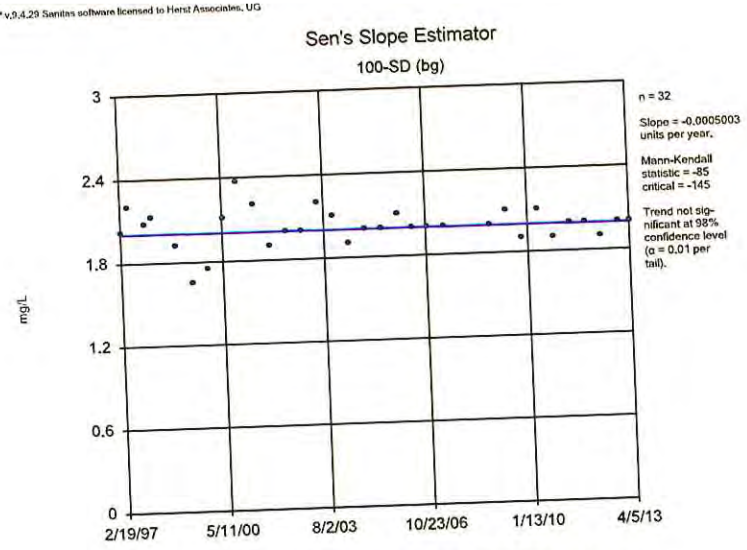
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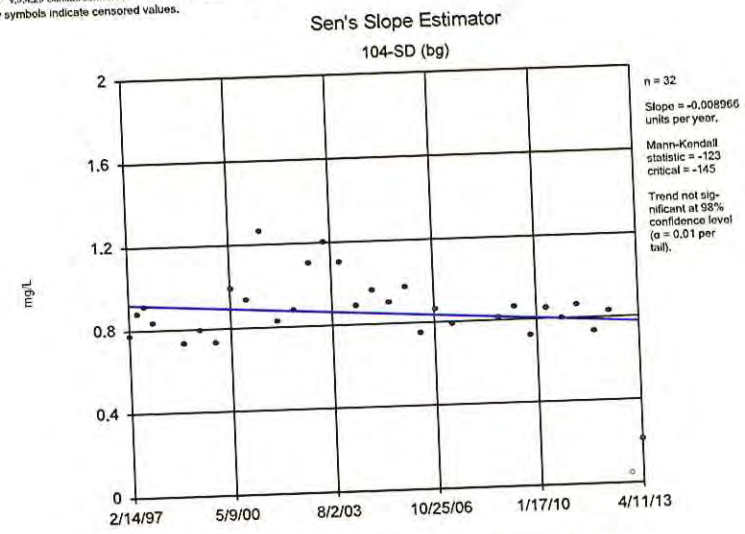
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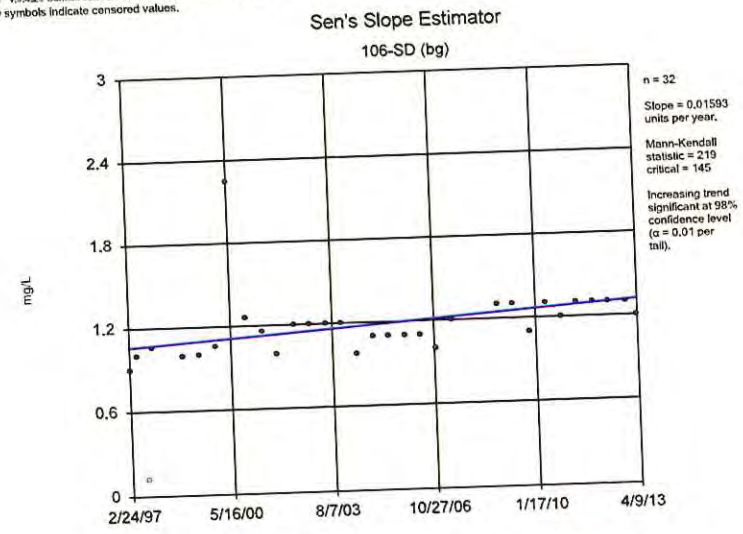
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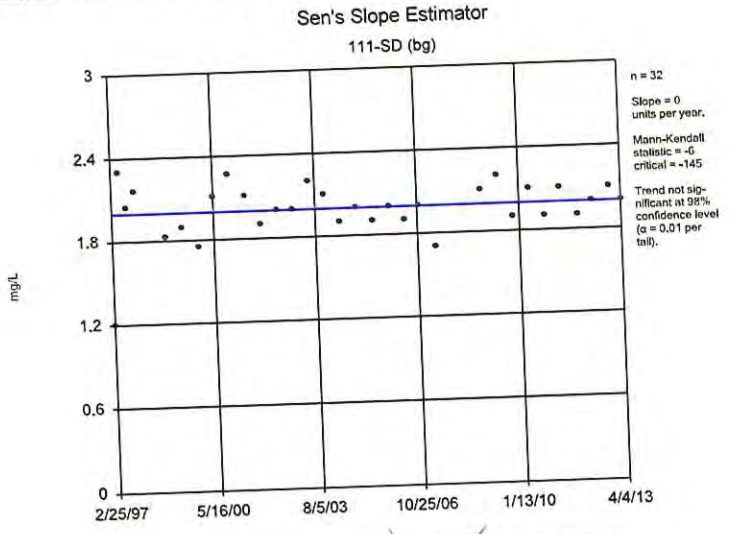
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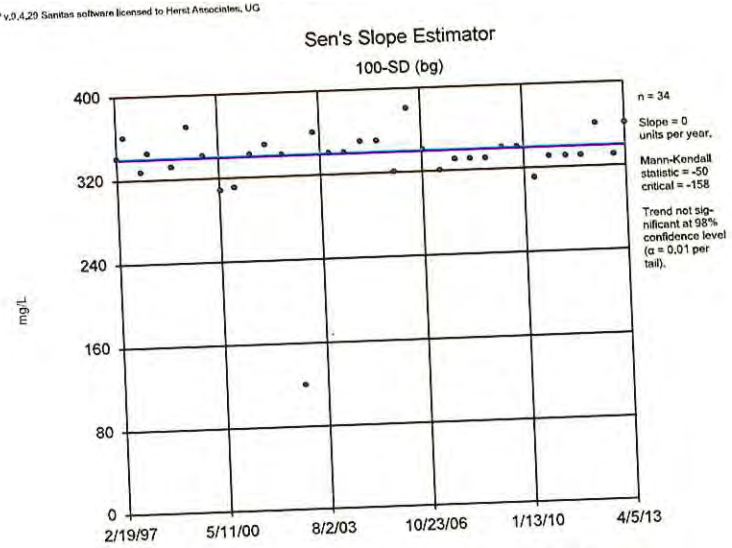
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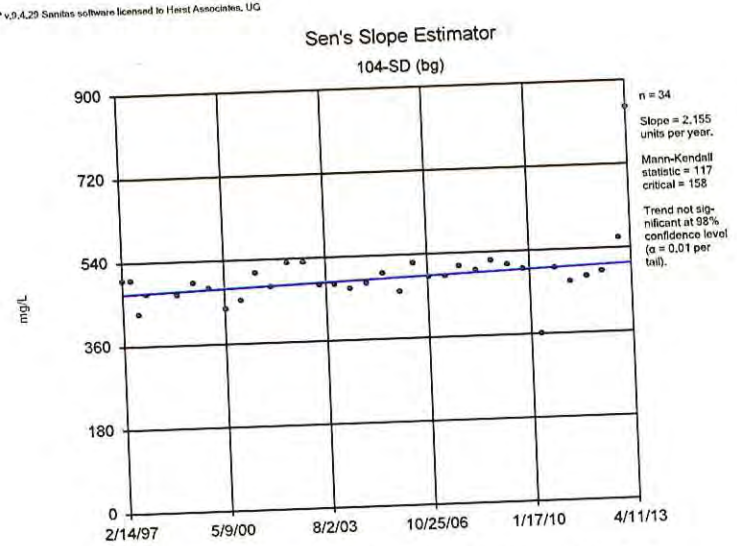
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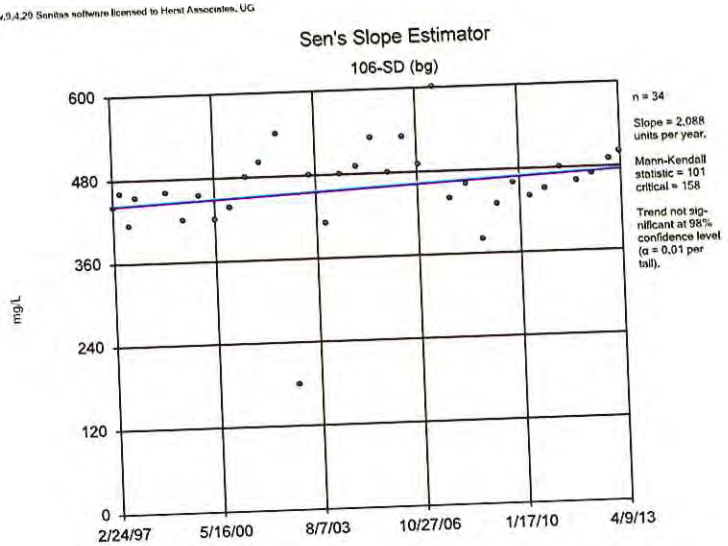
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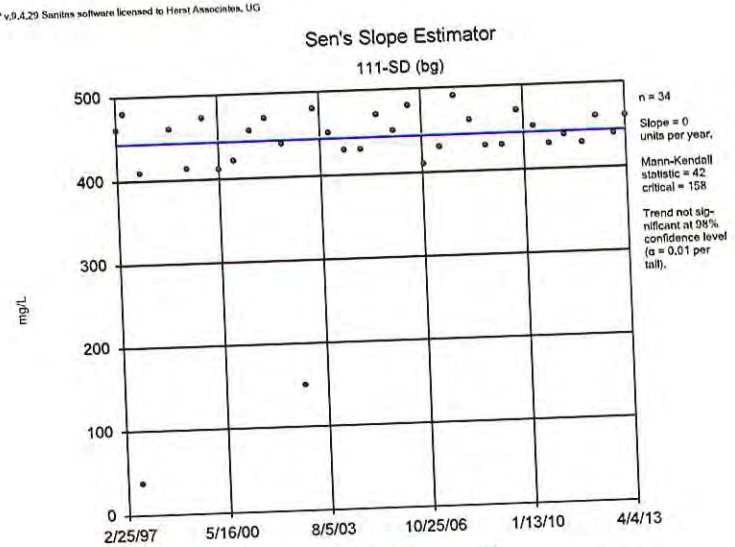
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Constituent: Hardness Total Analysis Run 12/17/2013 10:27 AM
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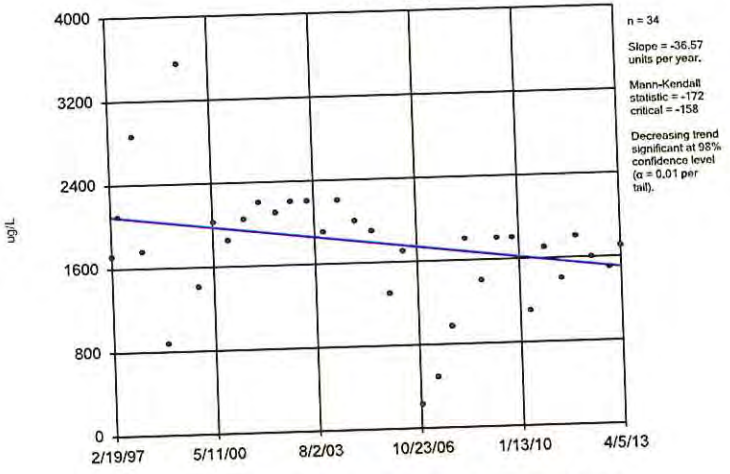


Constituent: Hardness Total Analysis Run 12/17/2013 10:27 AM
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Sen's Slope Estimator

100-SD (bg)



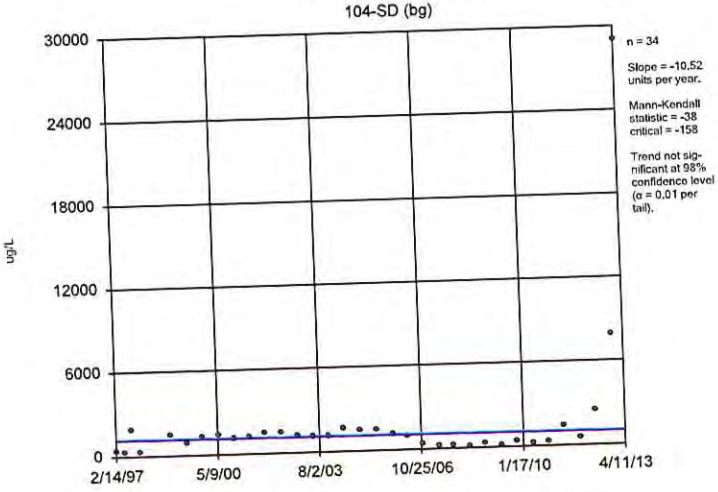
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

104-SD (bg)



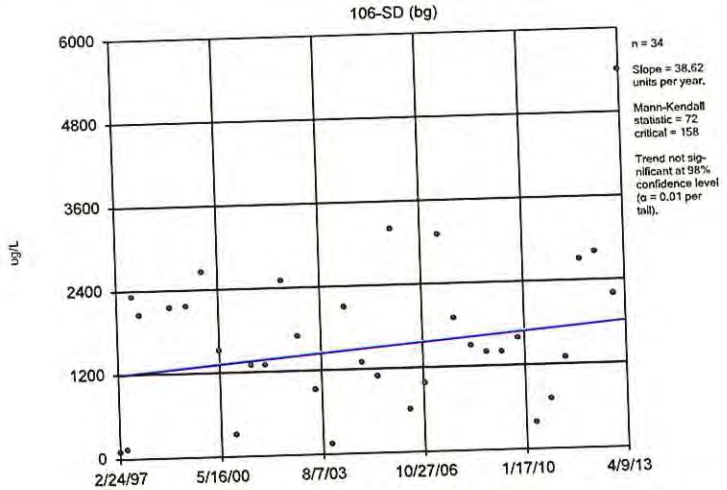
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

106-SD (bg)



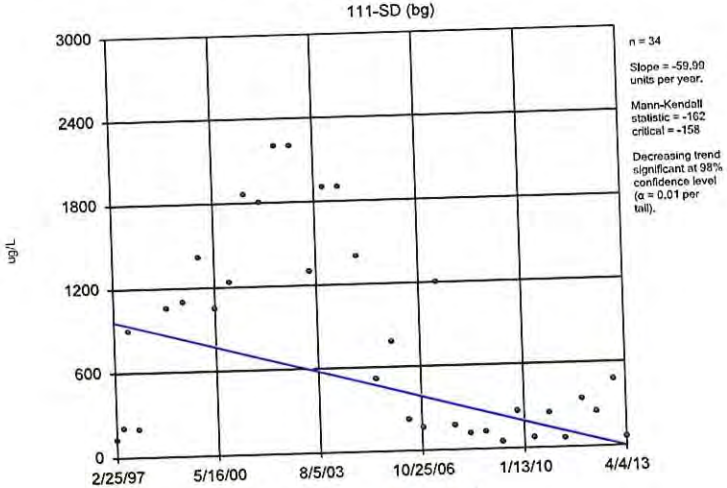
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

111-SD (bg)

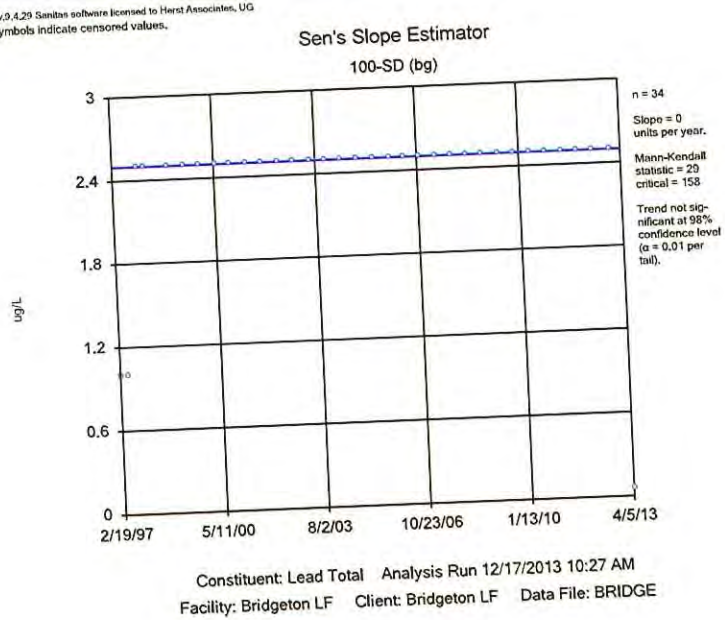


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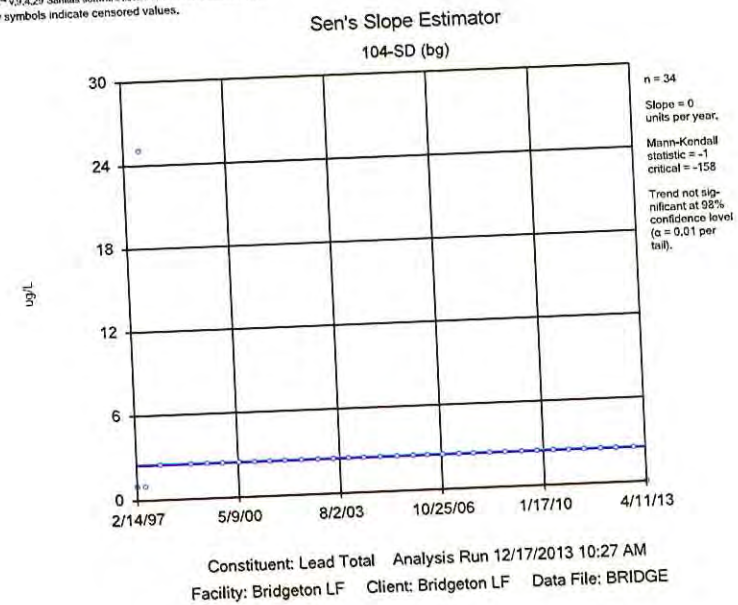
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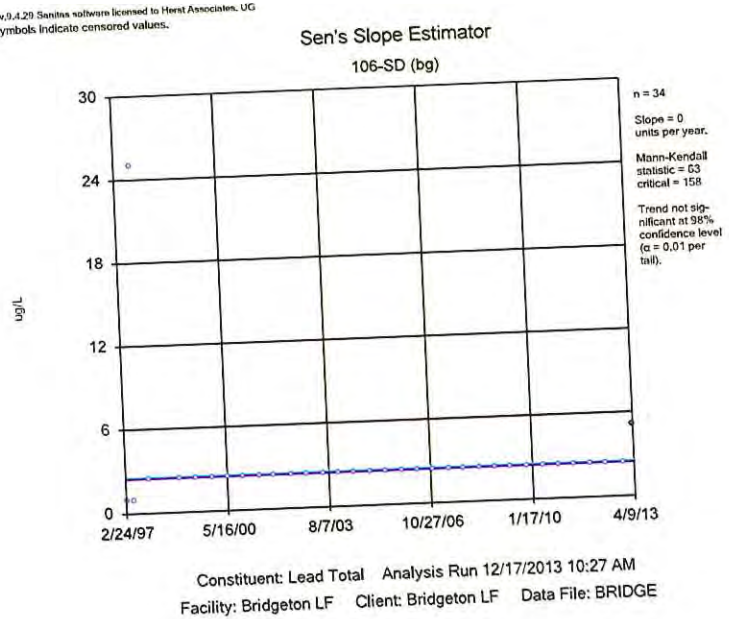
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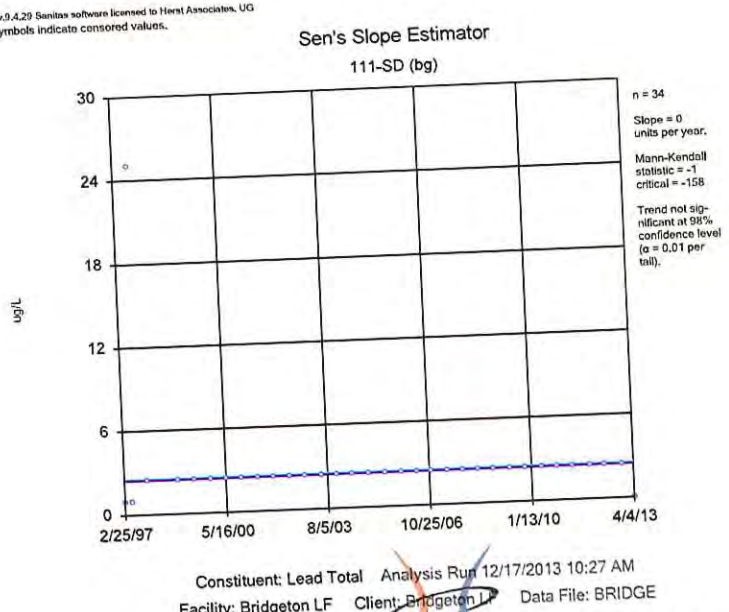
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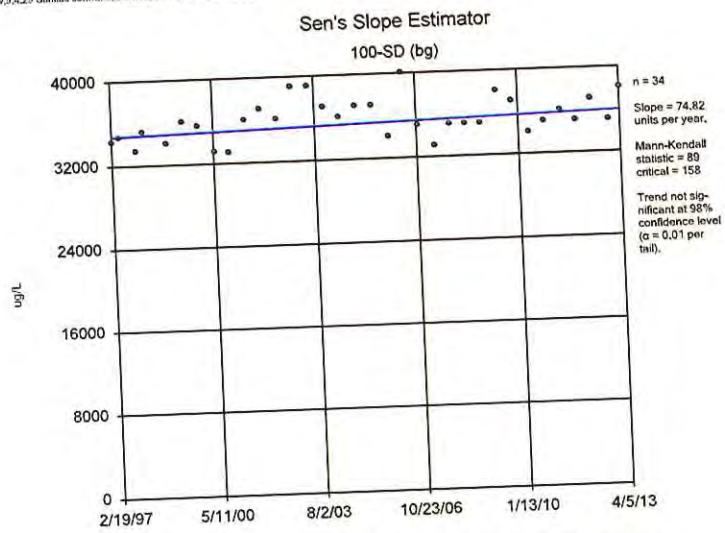
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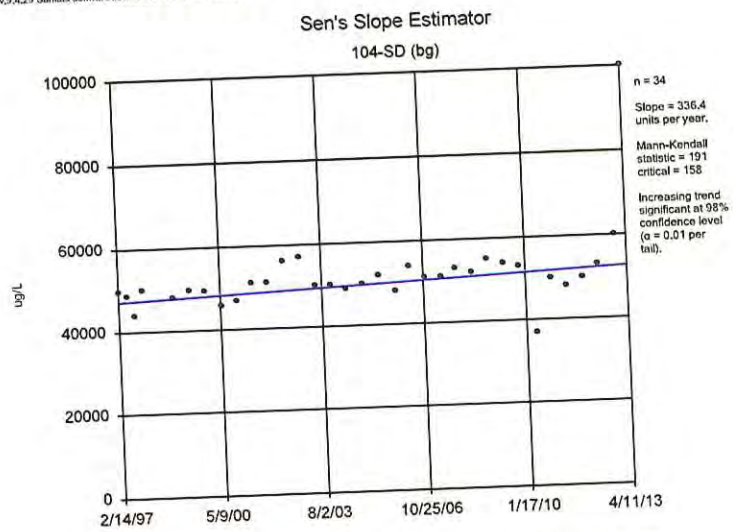
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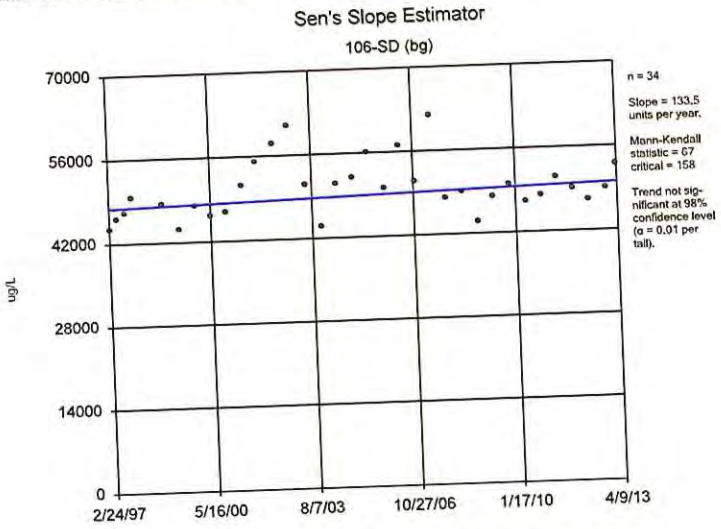
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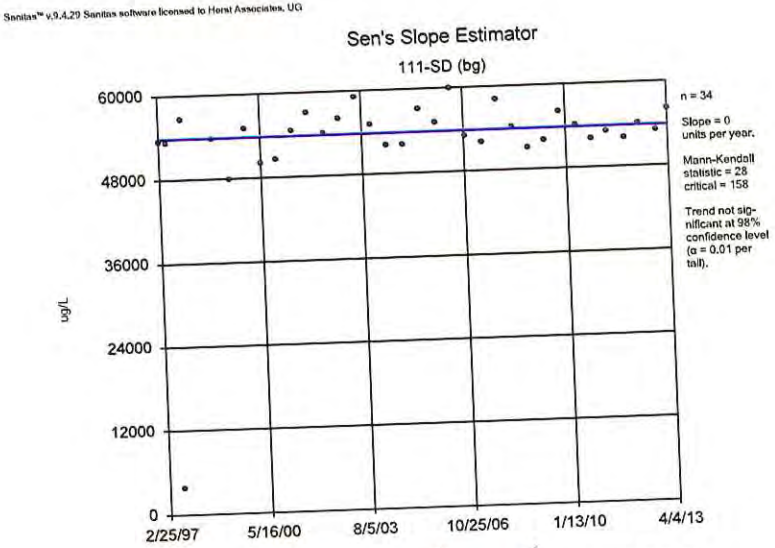
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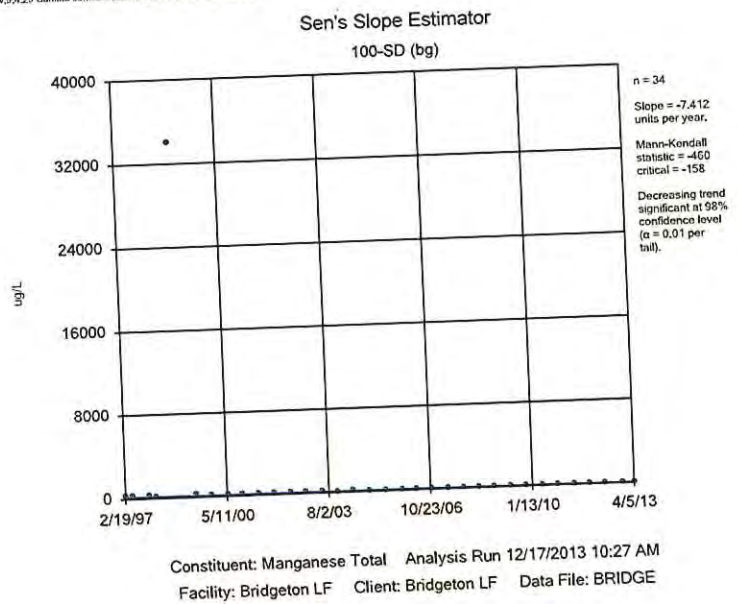
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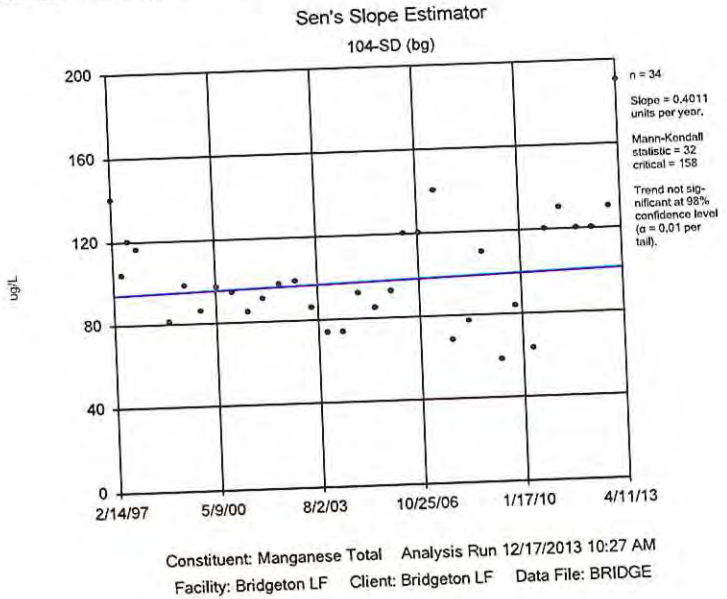
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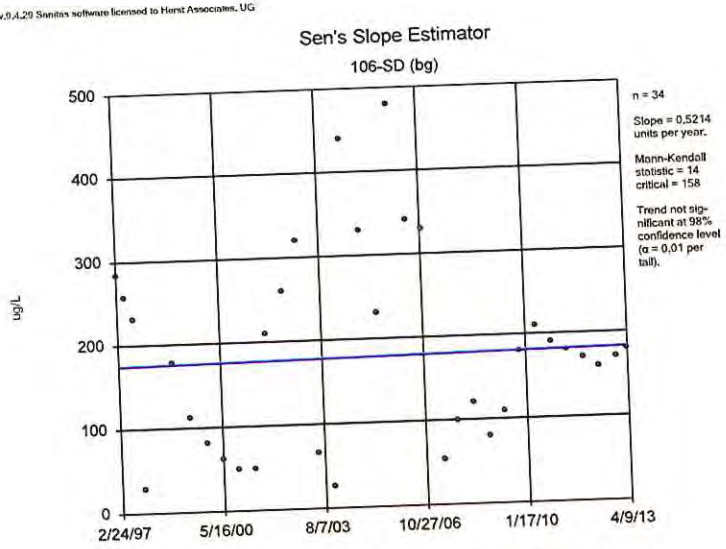
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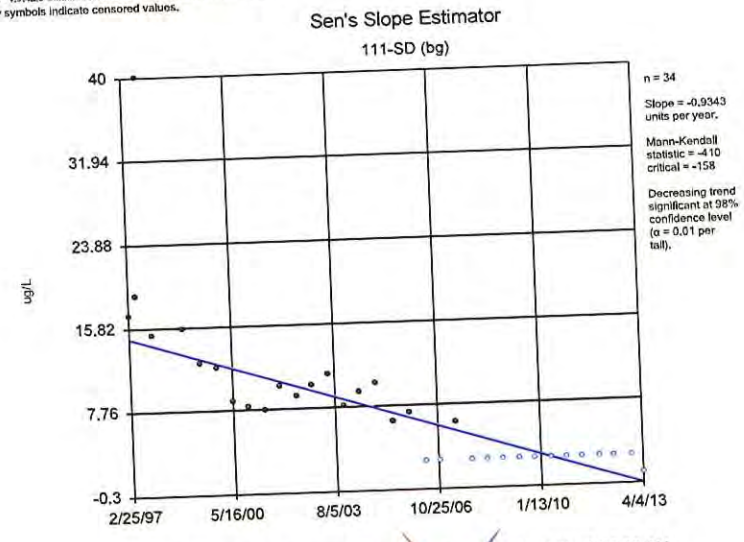
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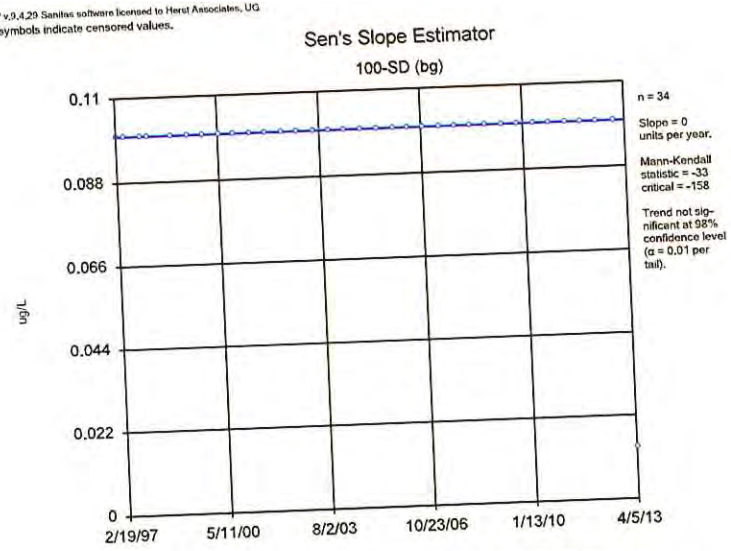
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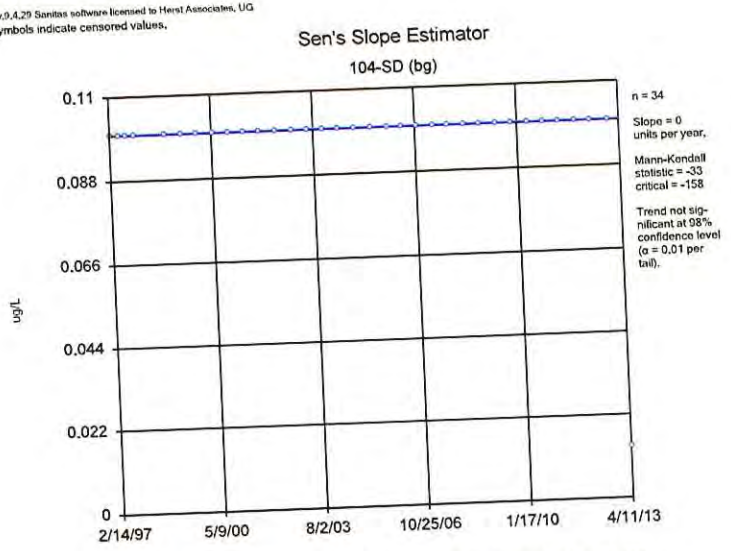
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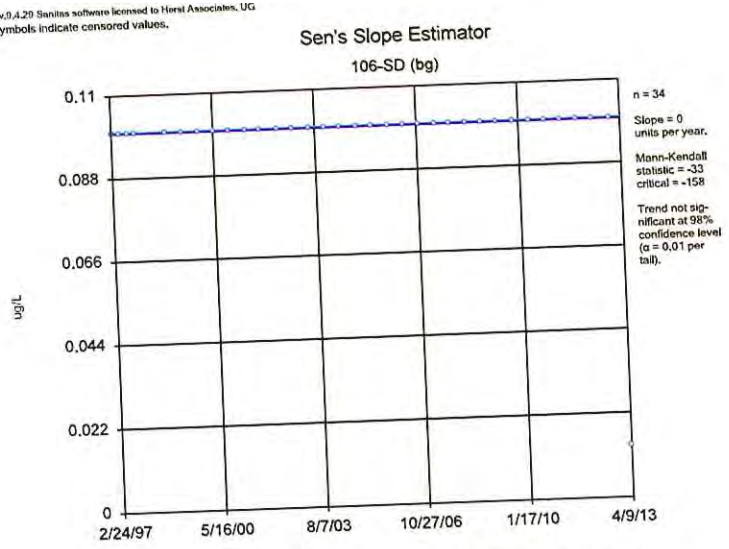
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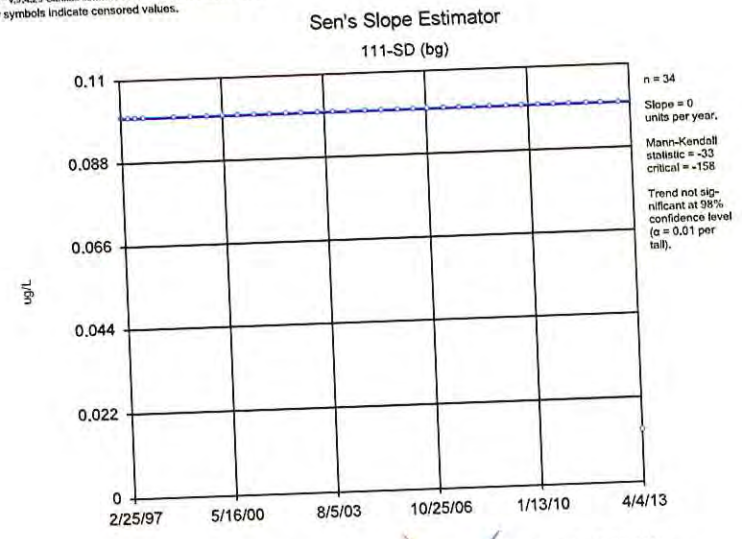
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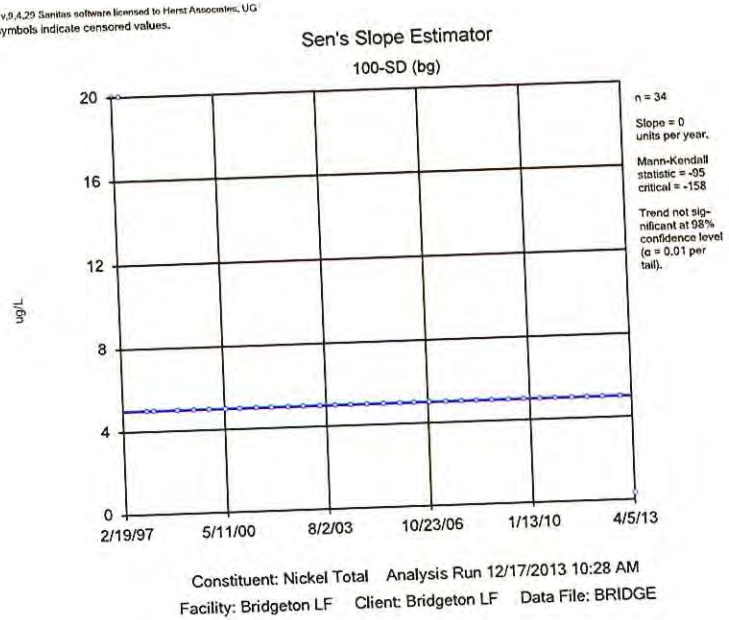
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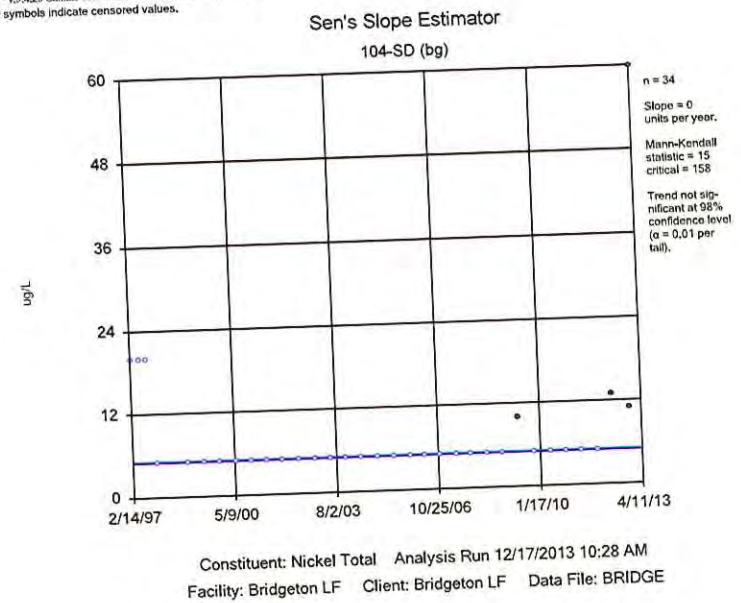
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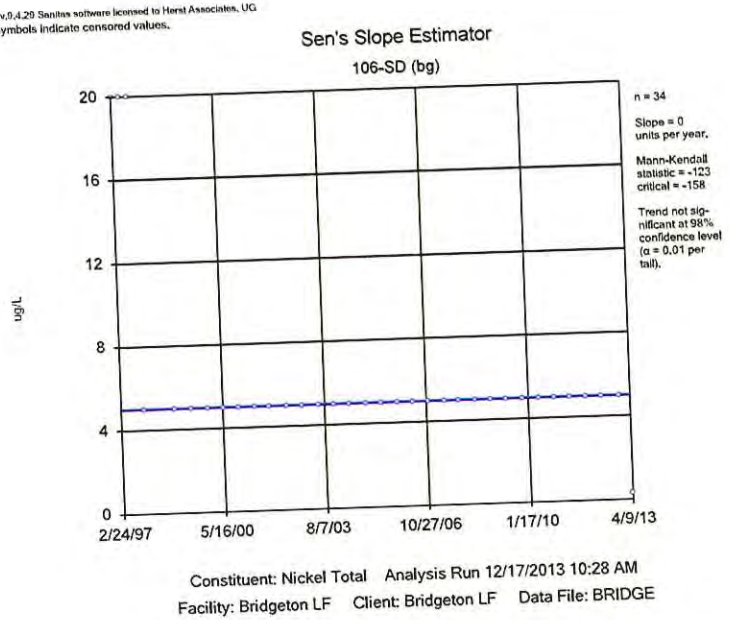
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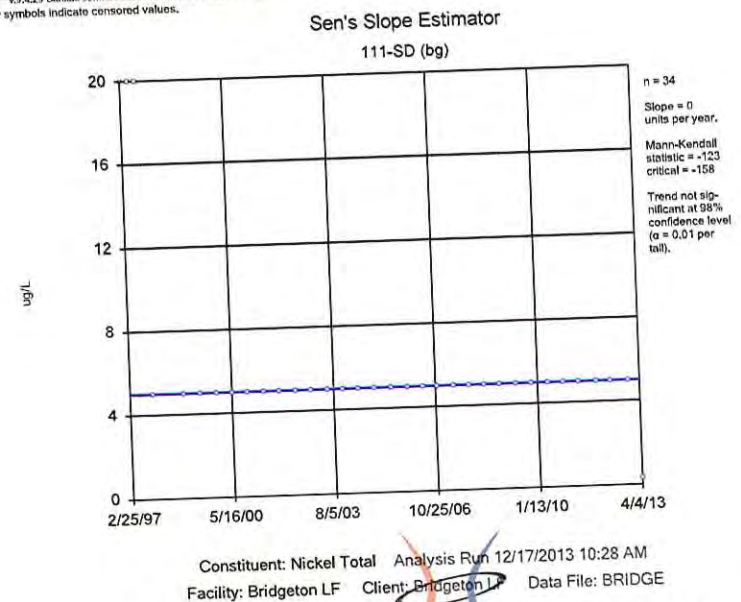
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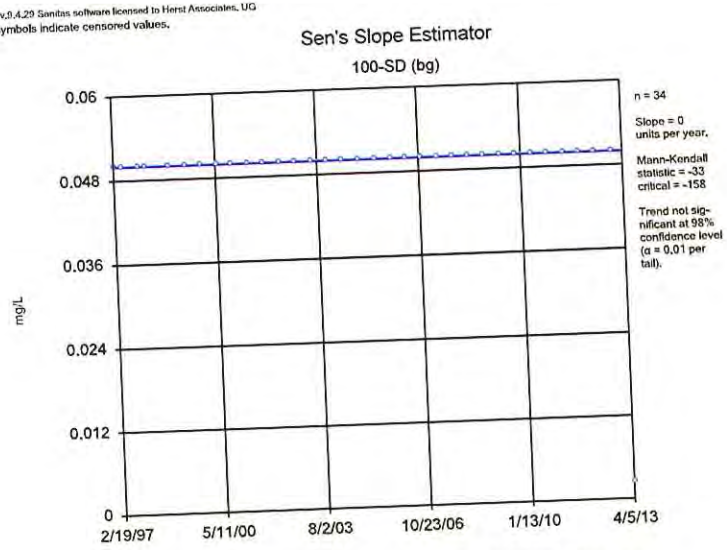
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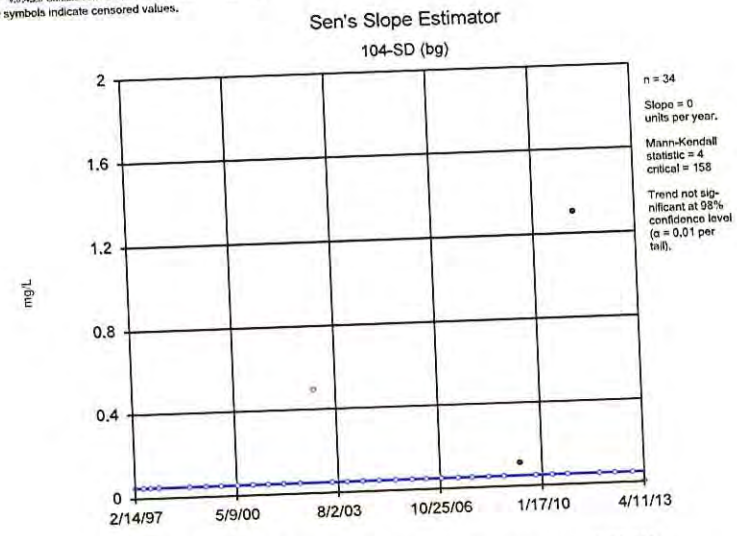
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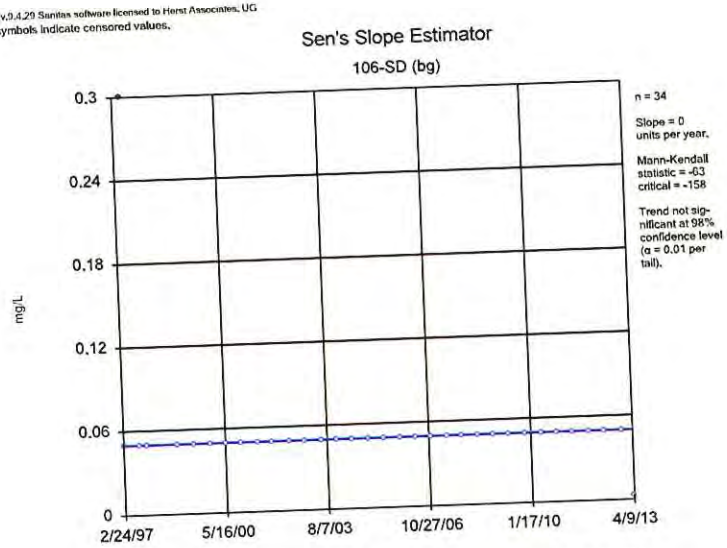
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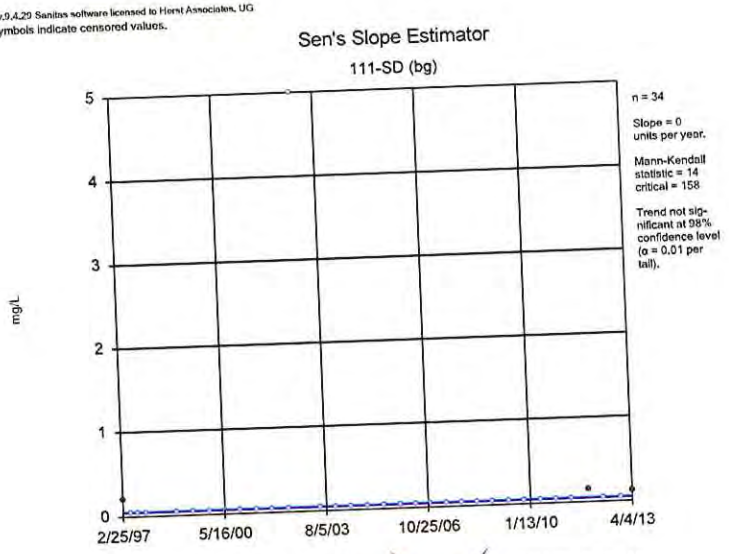
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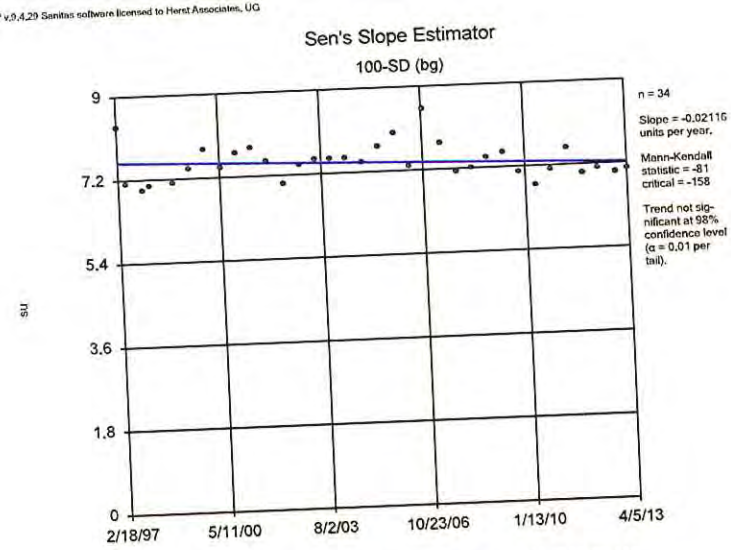
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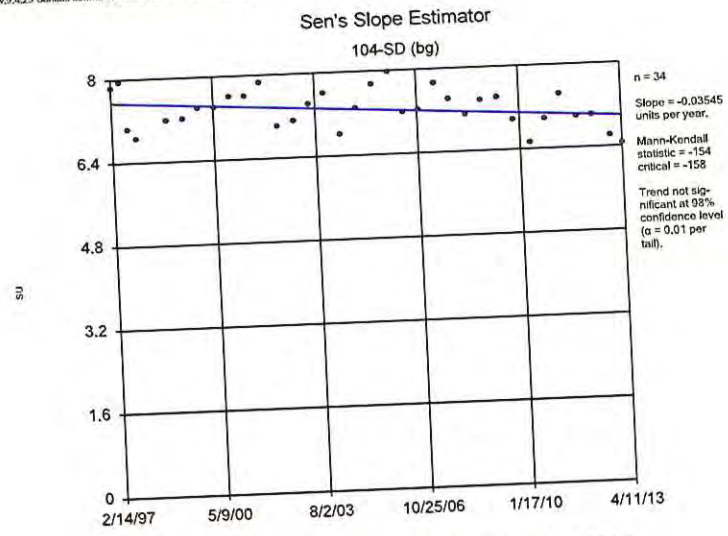
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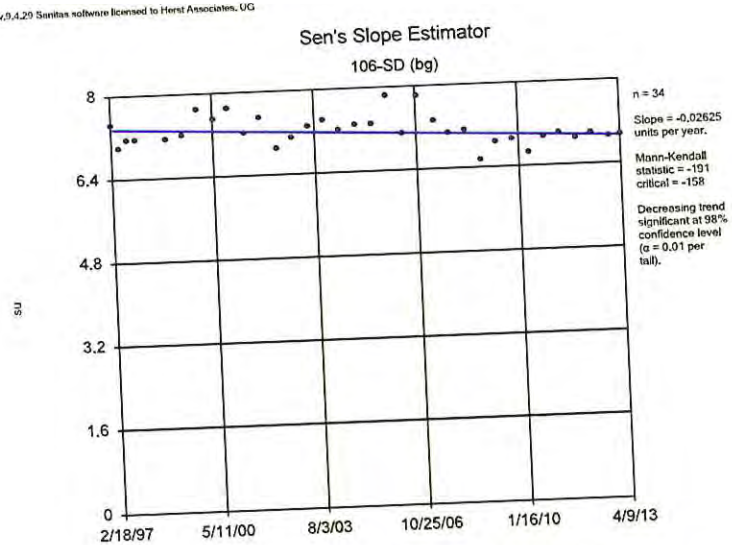
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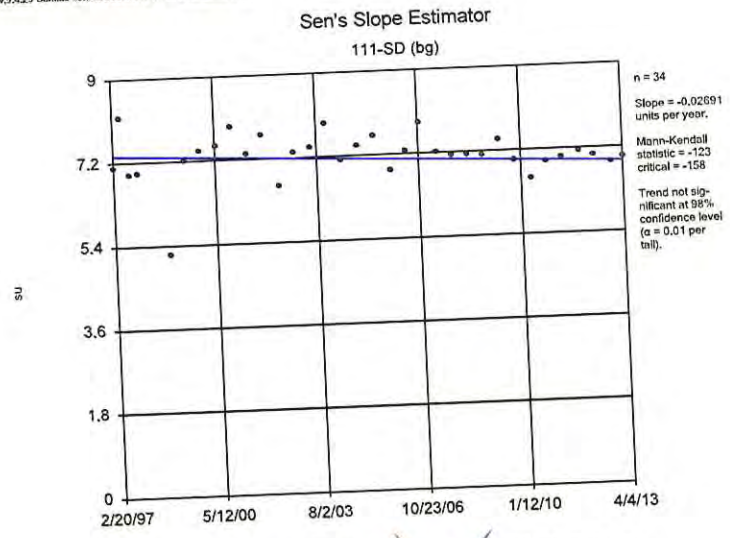
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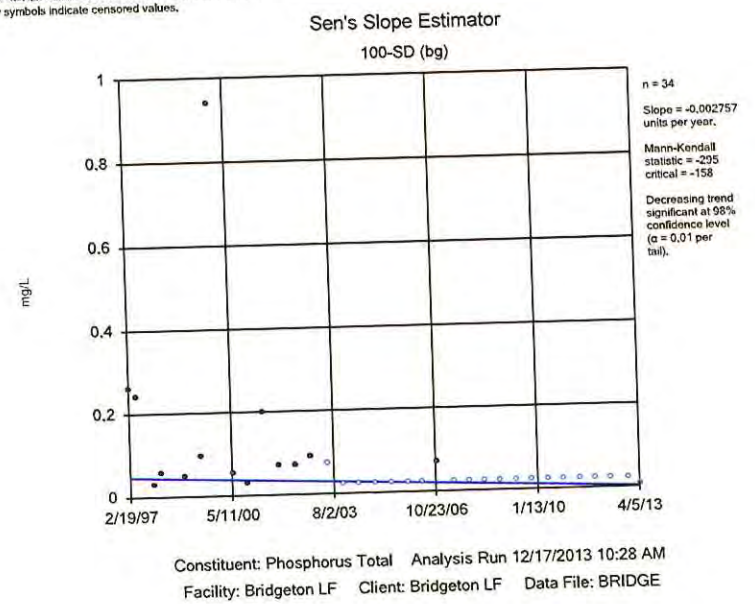
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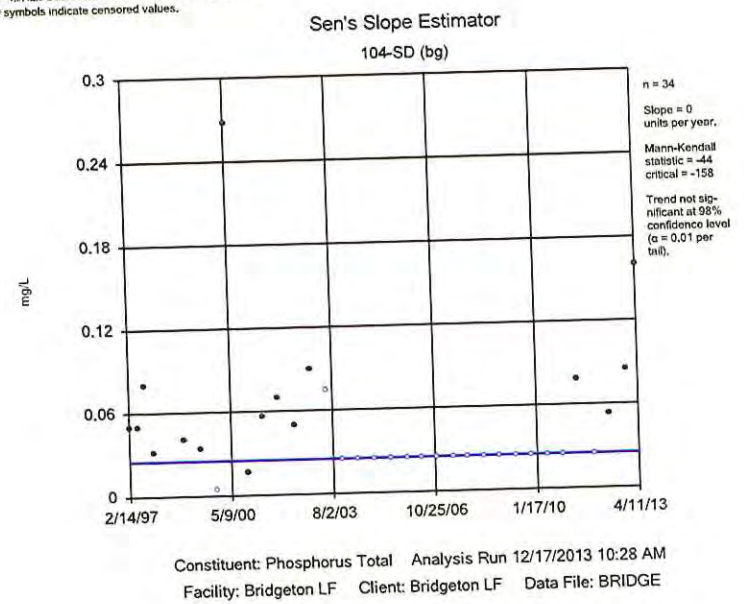
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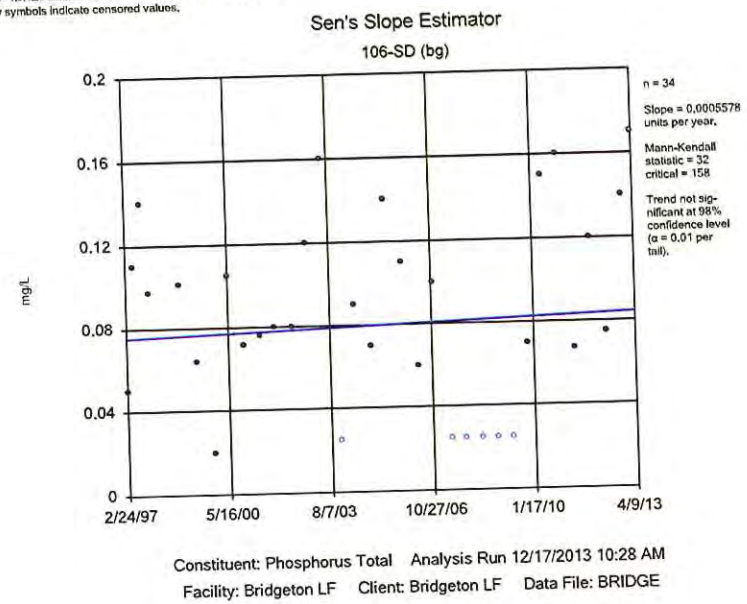
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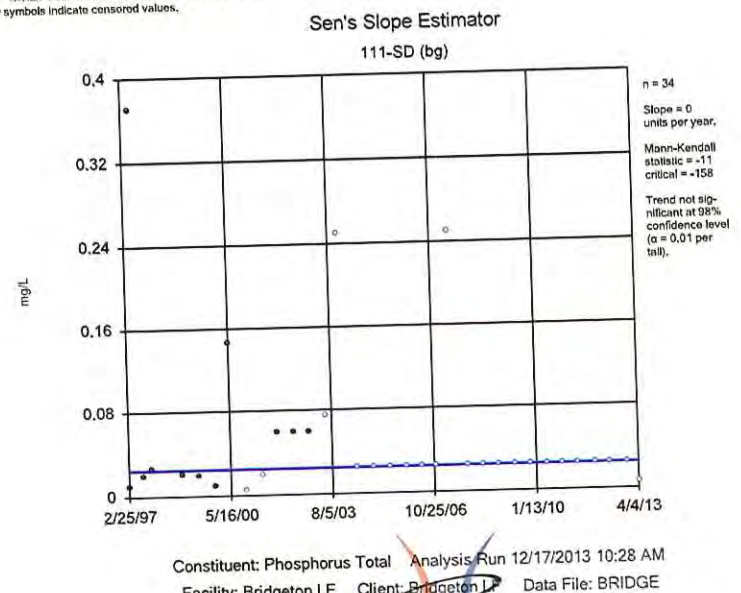
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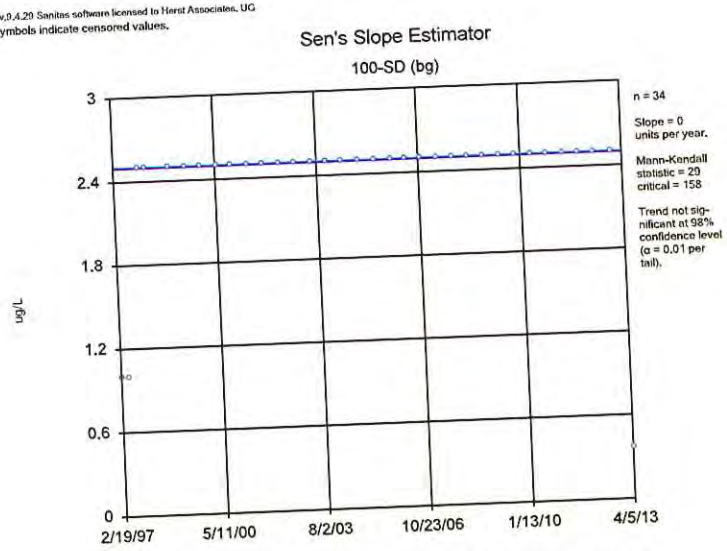
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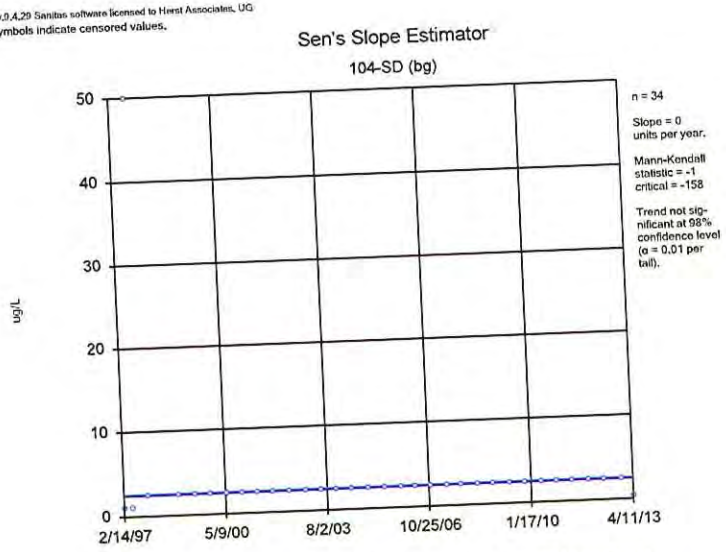
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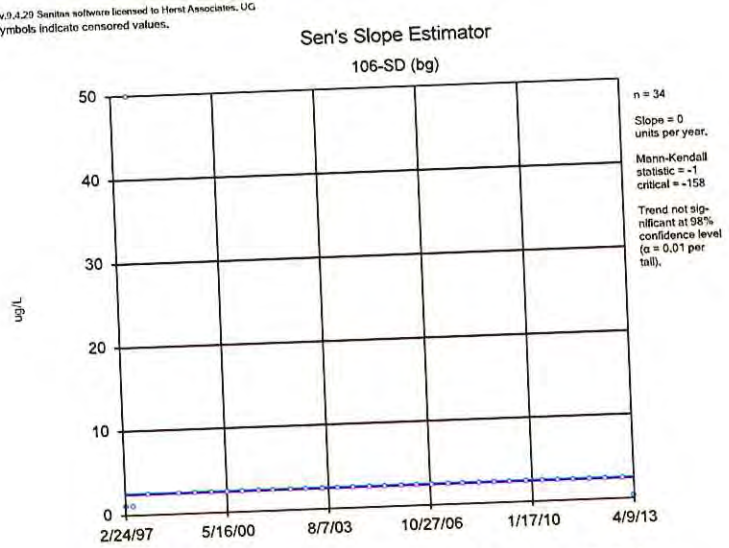
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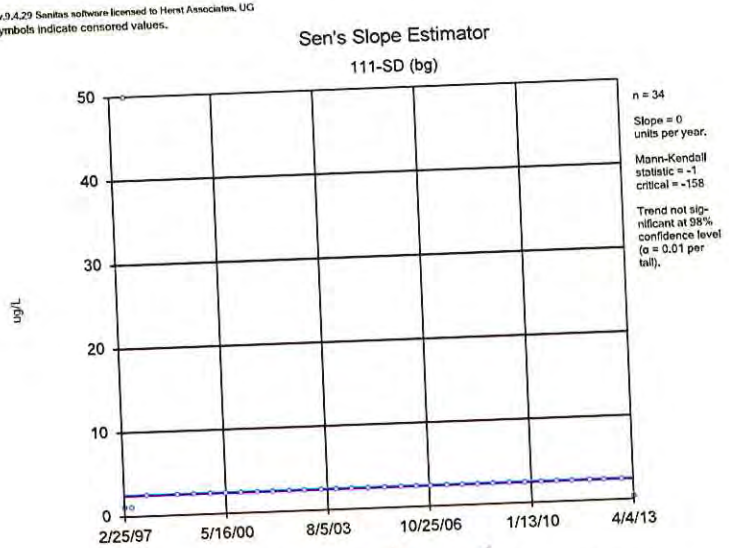
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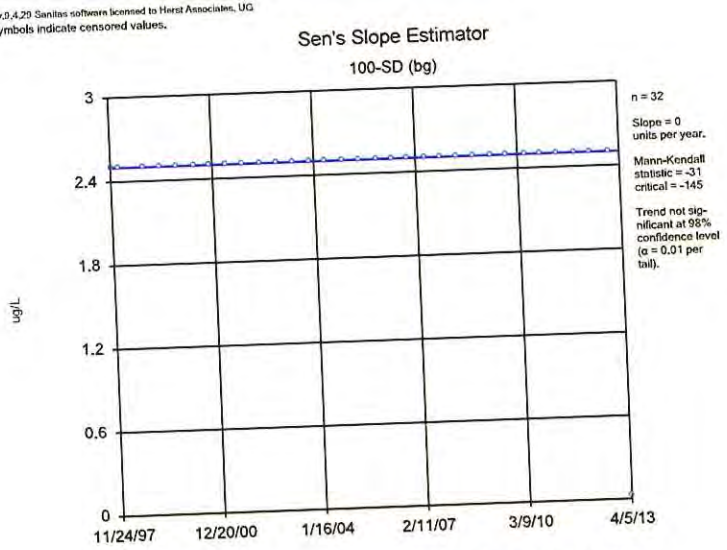
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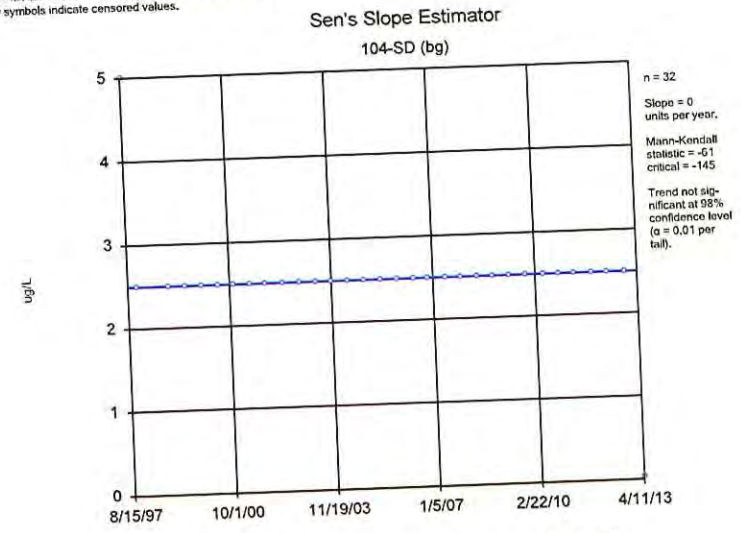
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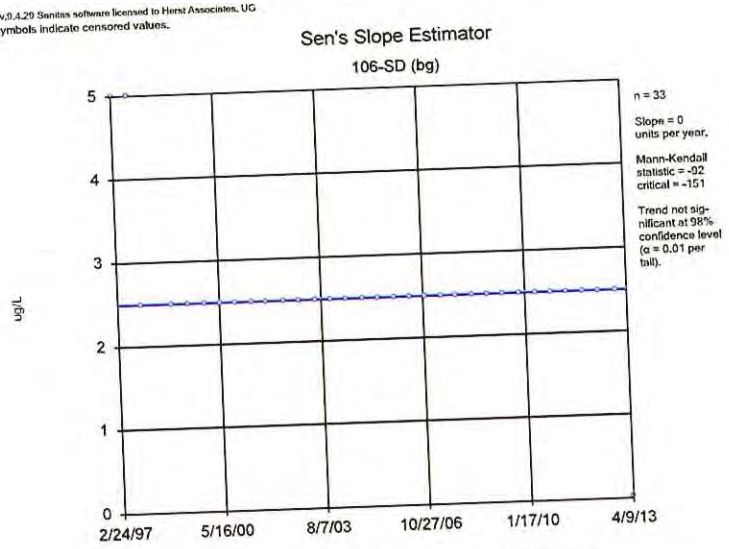
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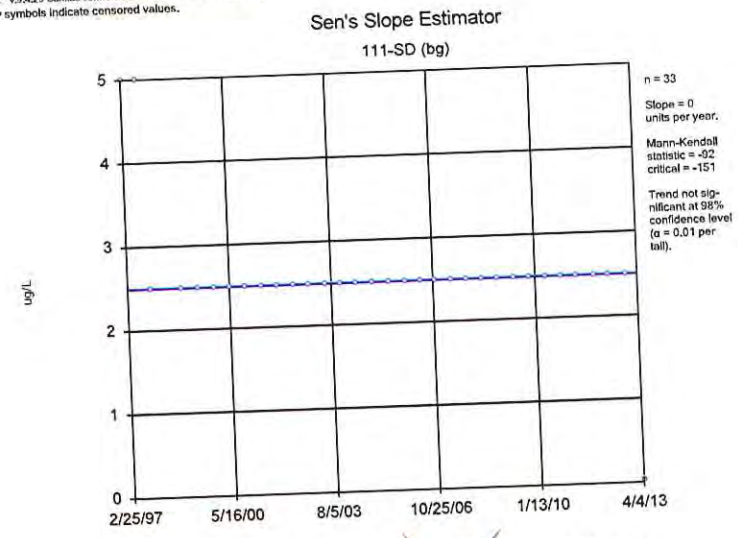
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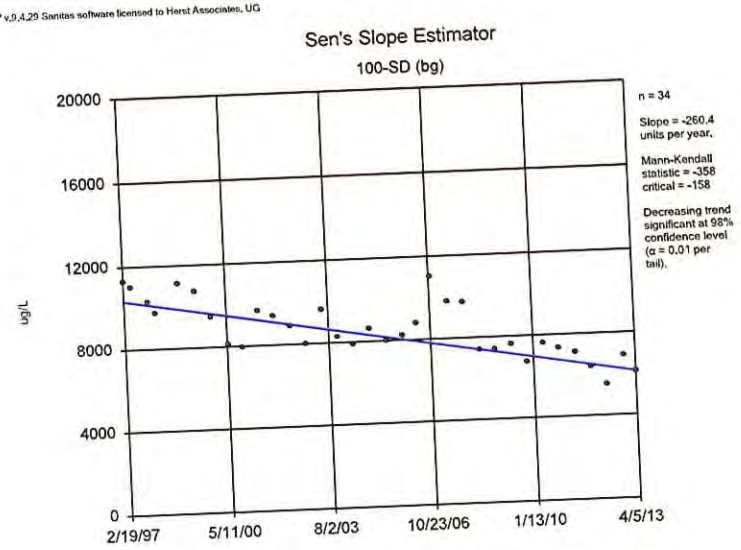
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.



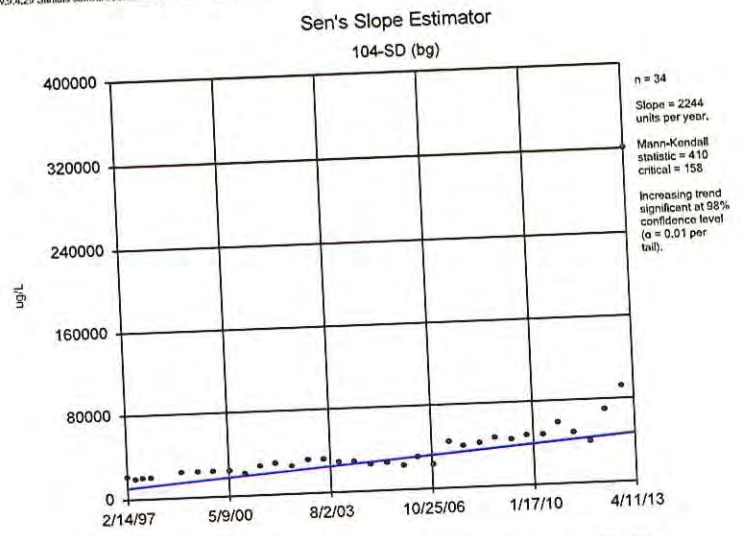
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



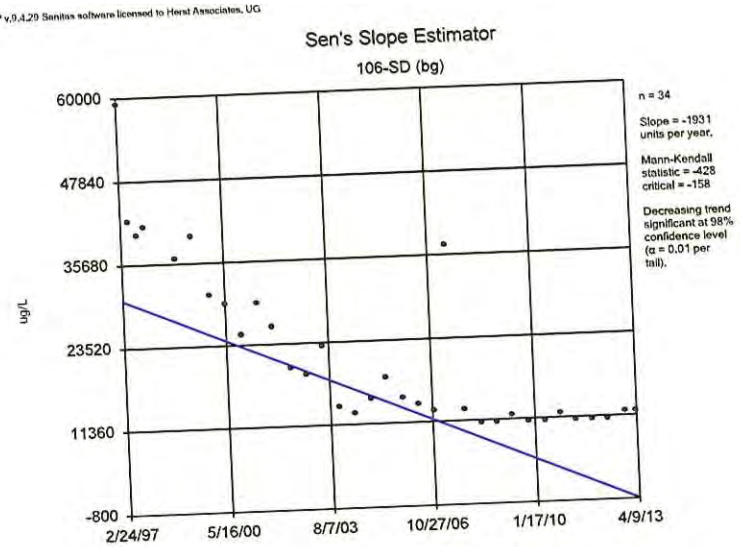
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



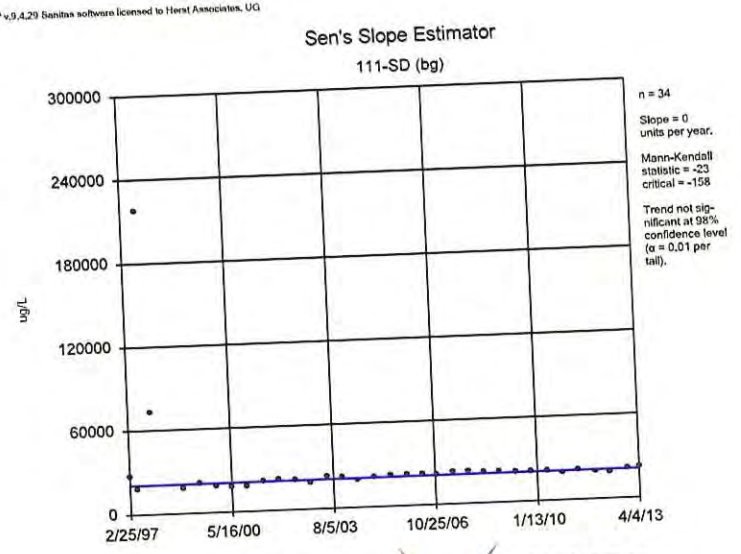
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



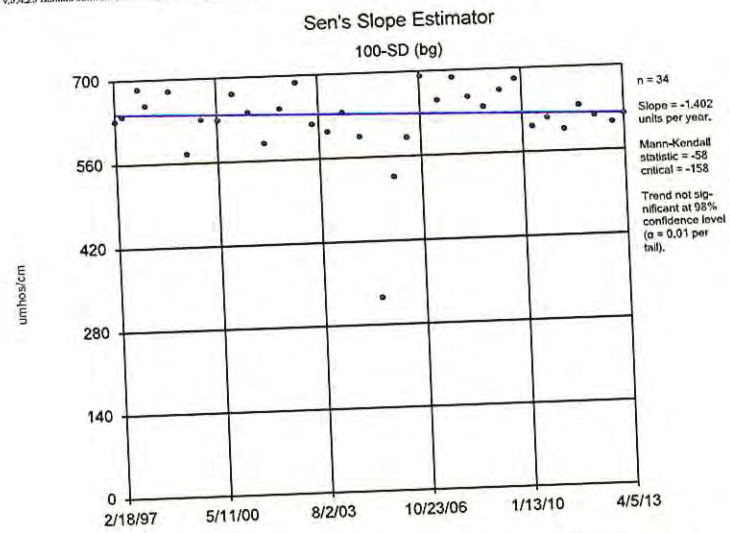
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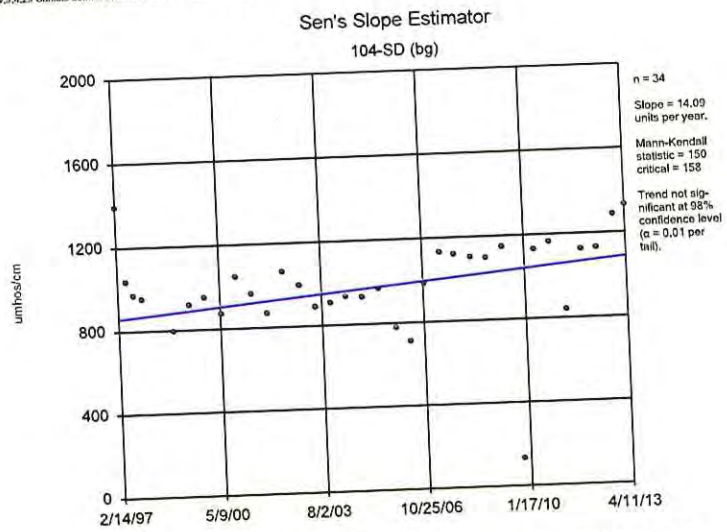
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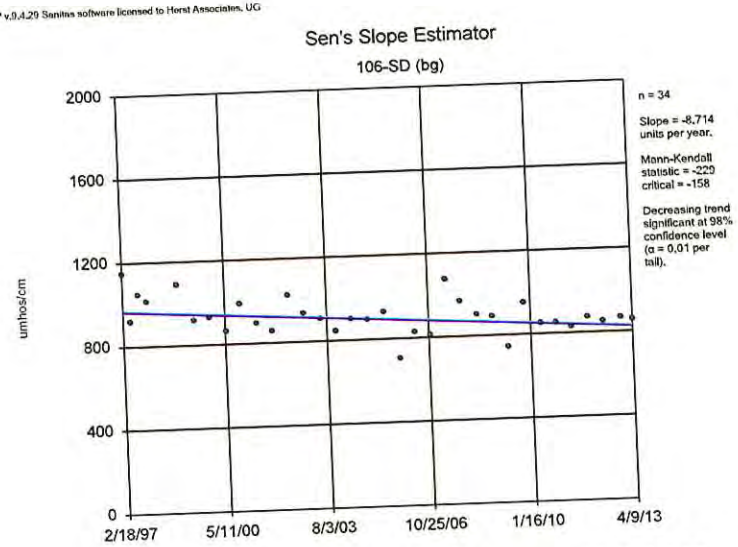
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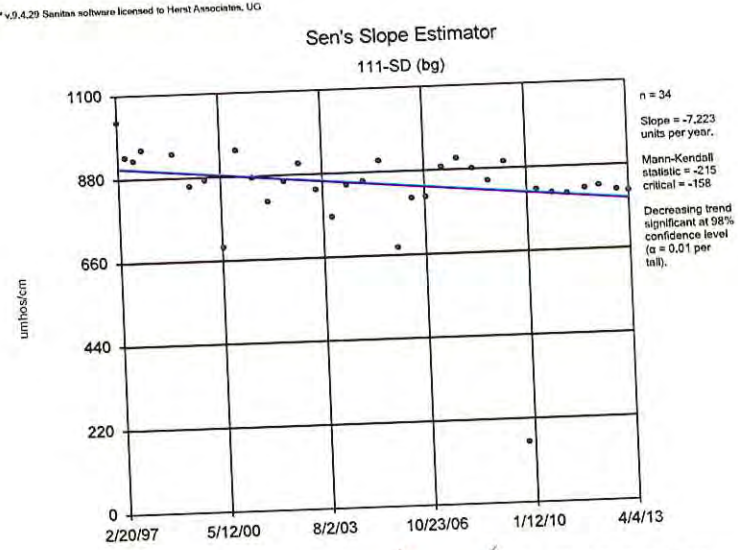
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:28 AM
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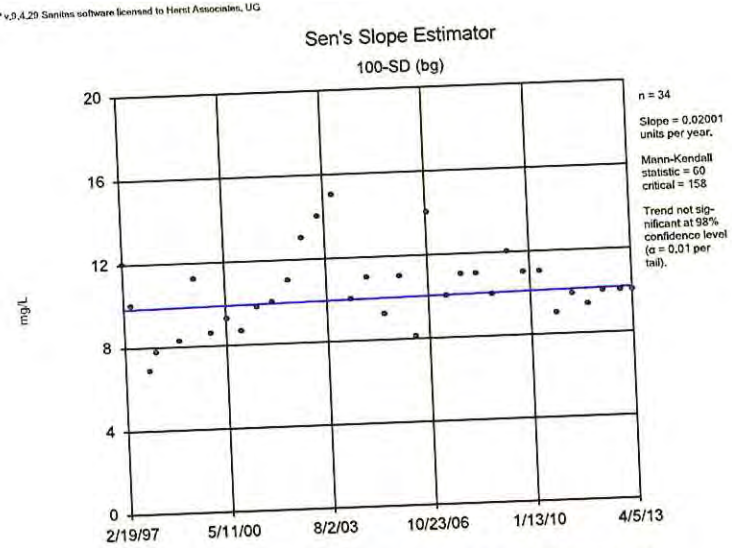
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:28 AM
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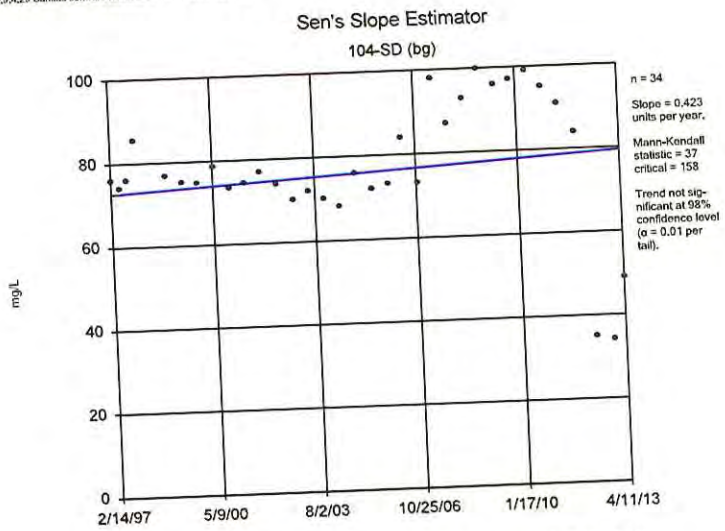
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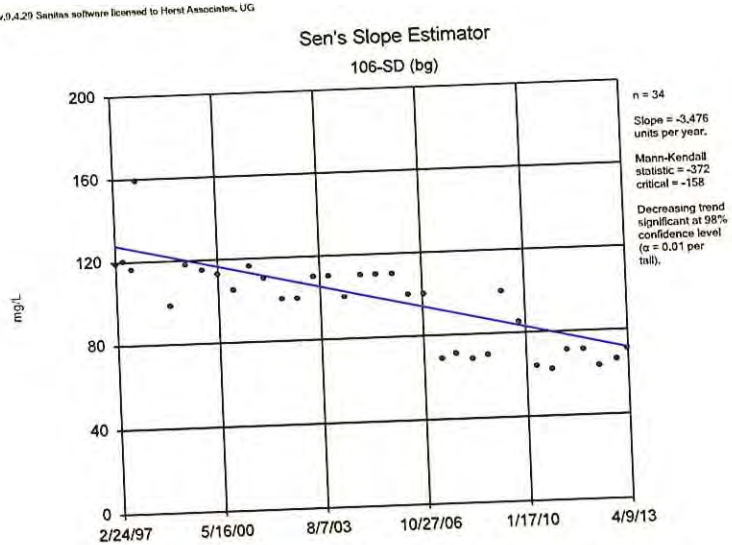
Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



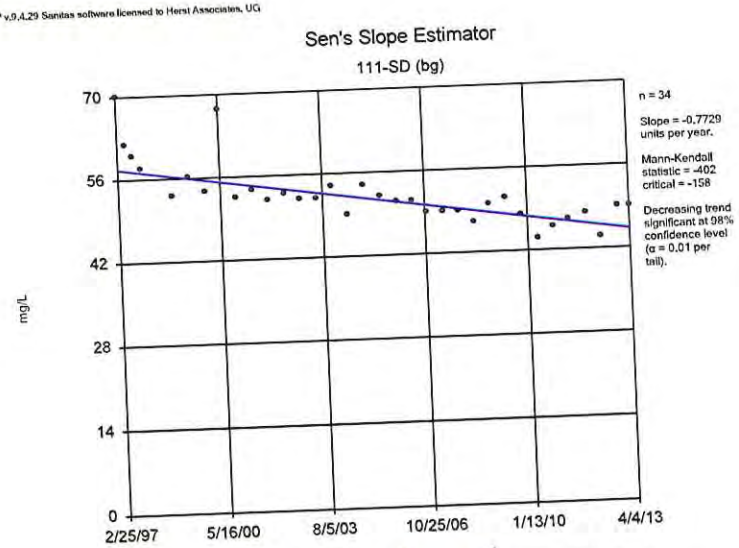
Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



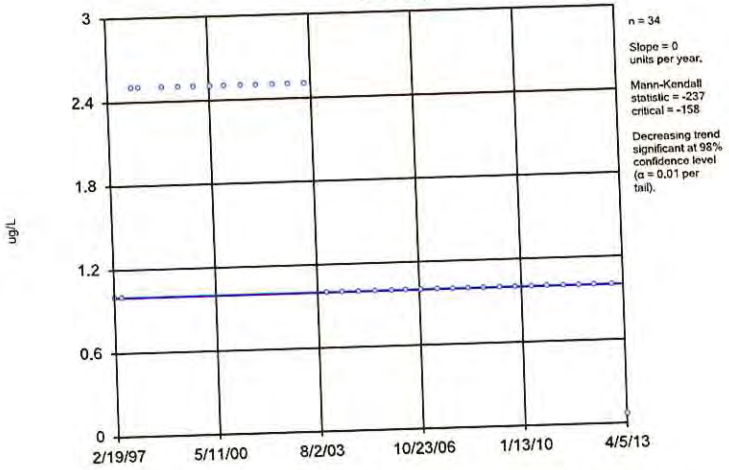
Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)

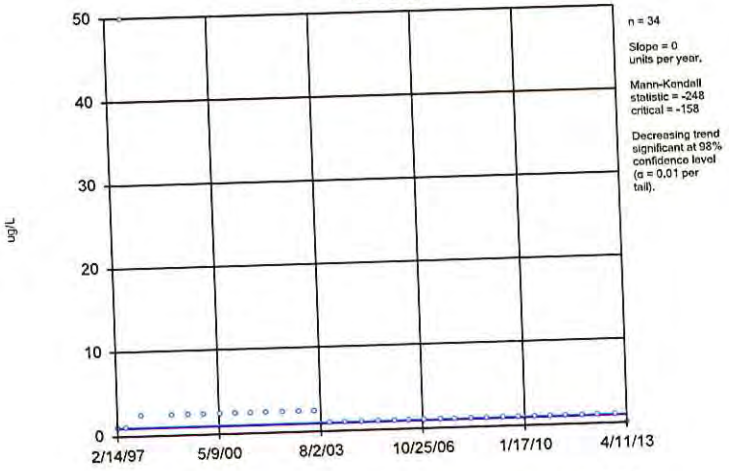


Constituent: Thallium Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)

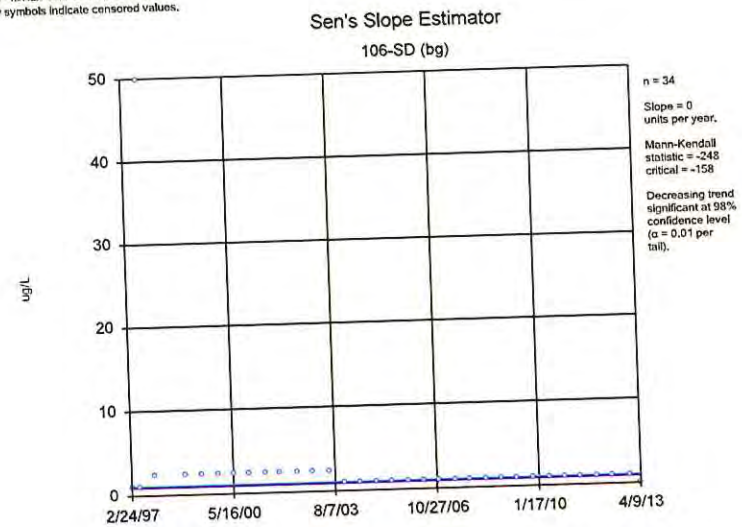


Constituent: Thallium Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)

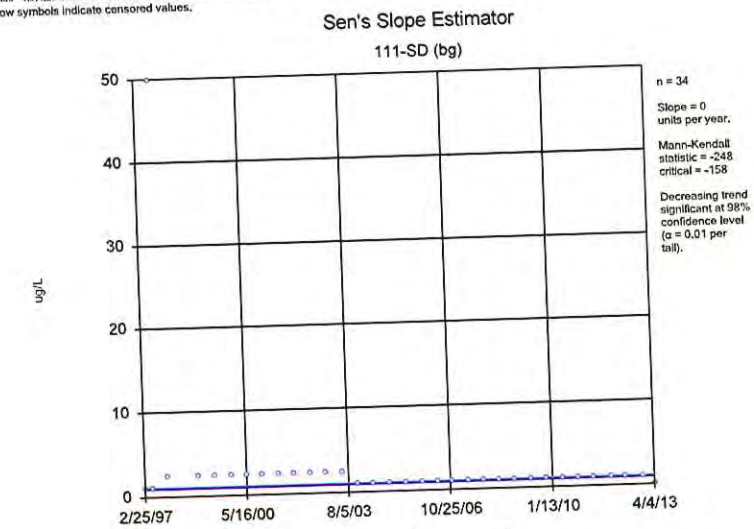


Constituent: Thallium Total Analysis Run 12/17/2013 10:28 AM
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

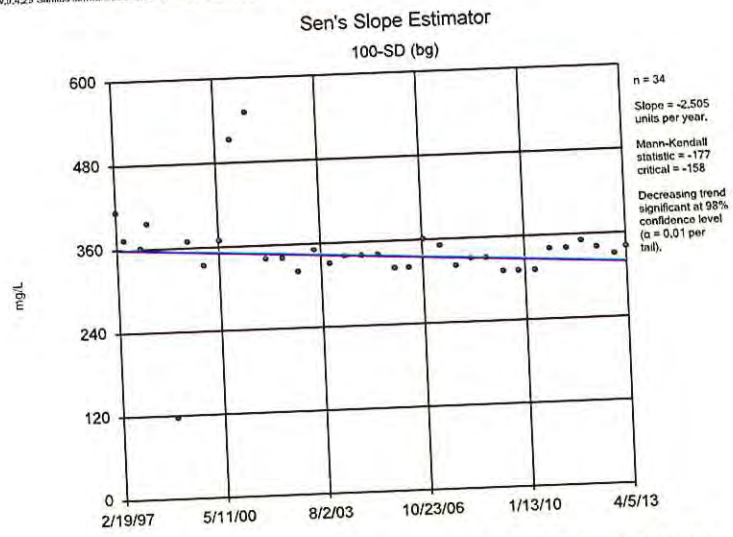
Sen's Slope Estimator

111-SD (bg)



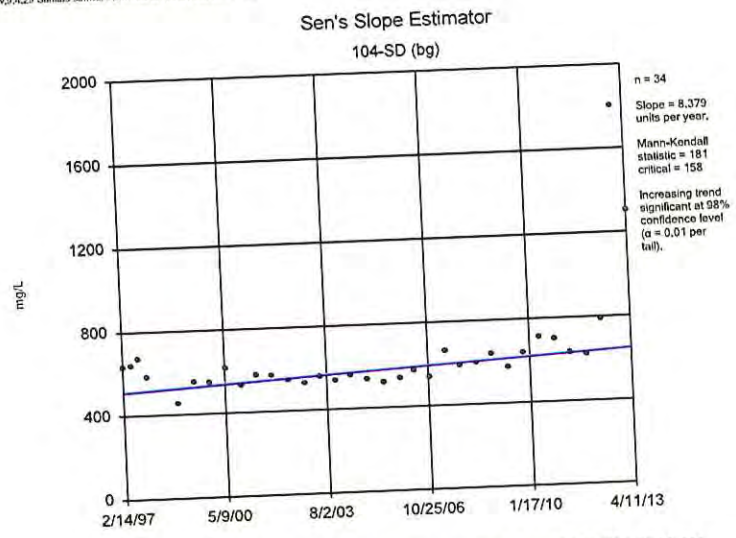
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



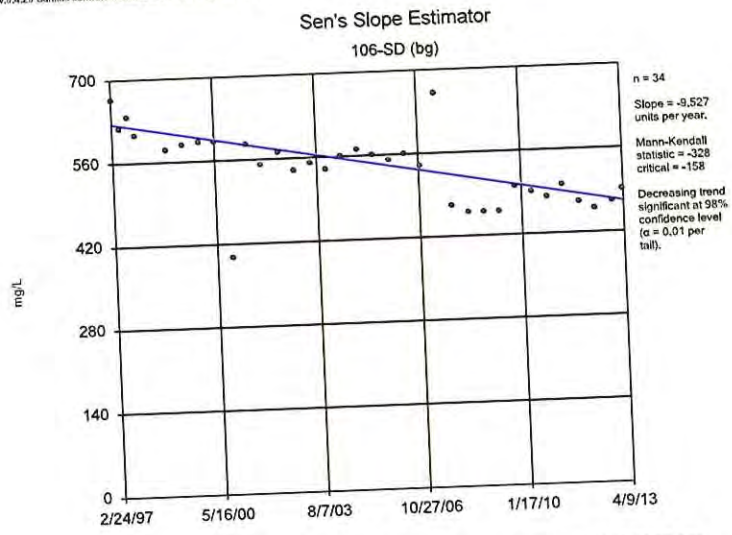
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



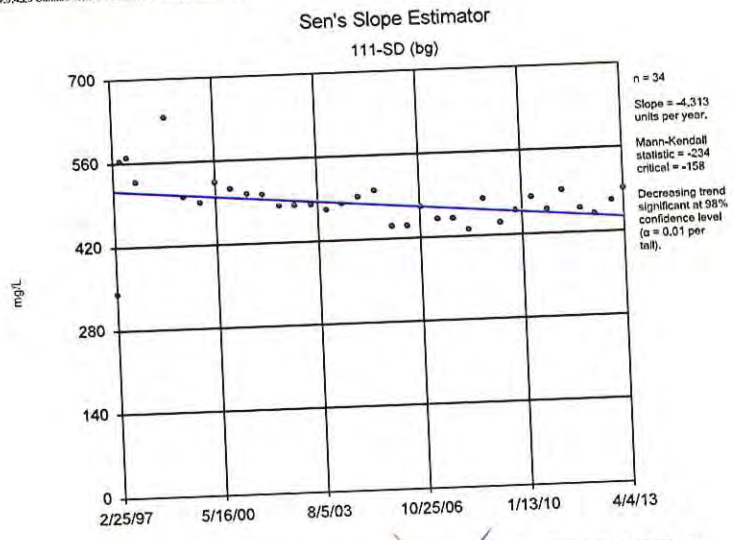
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

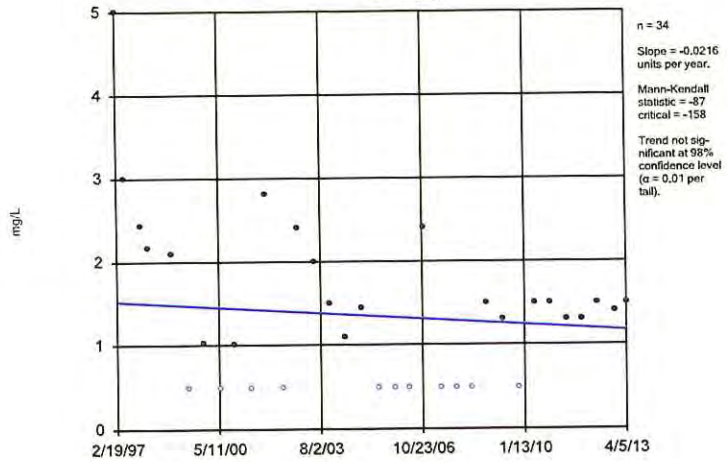


Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)

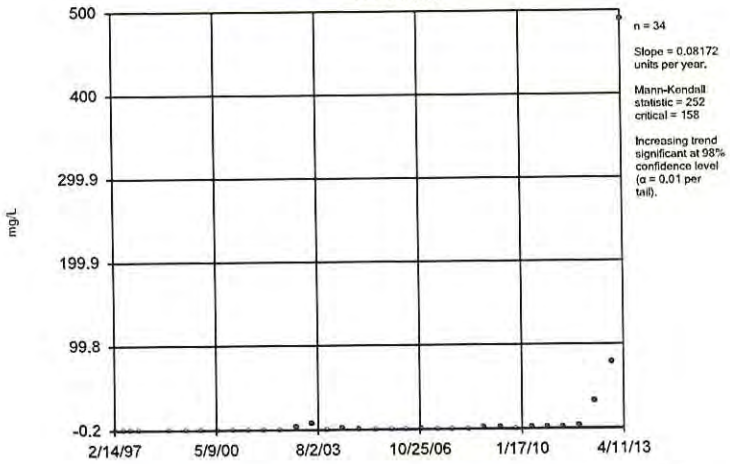


Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)

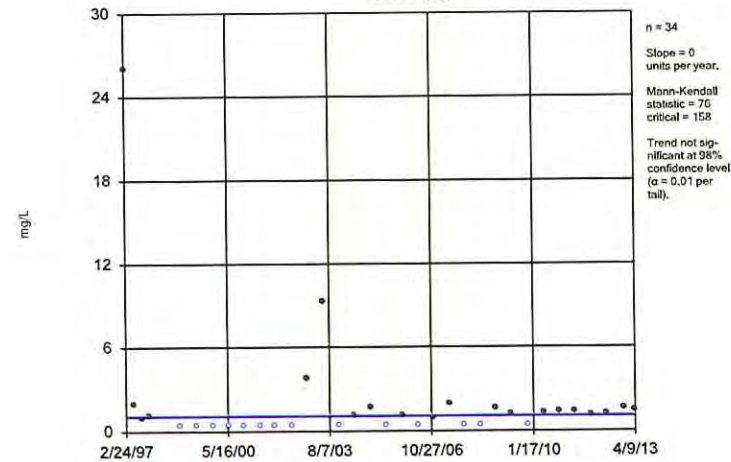


Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)

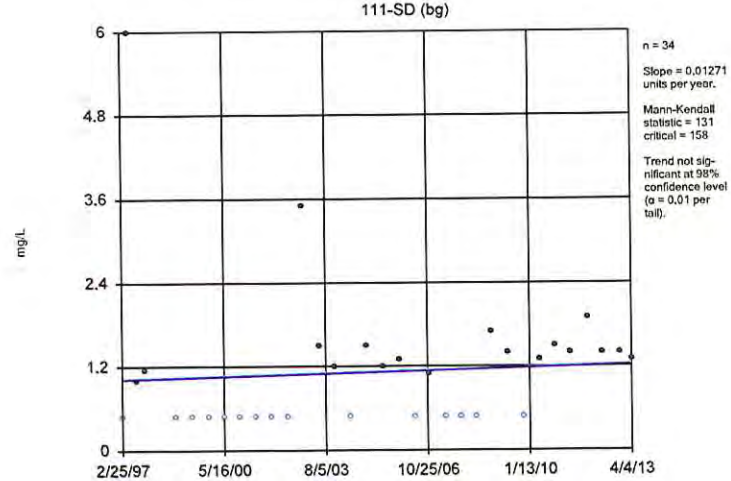


Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

111-SD (bg)



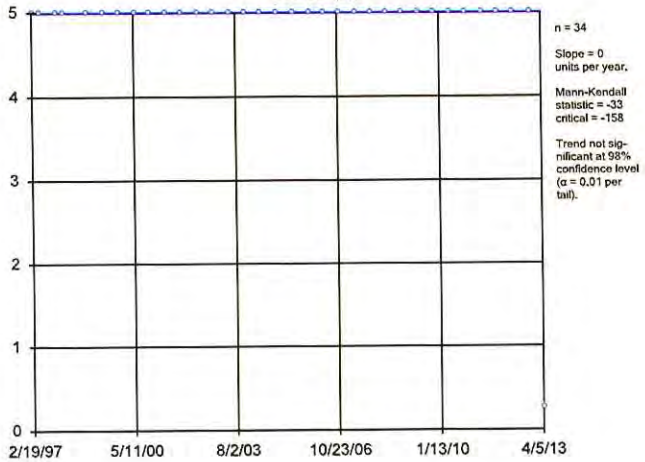
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)

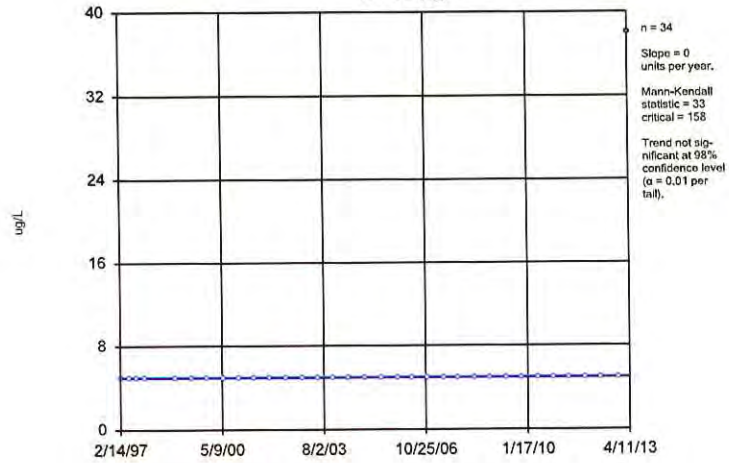


Constituent: Vanadium Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)

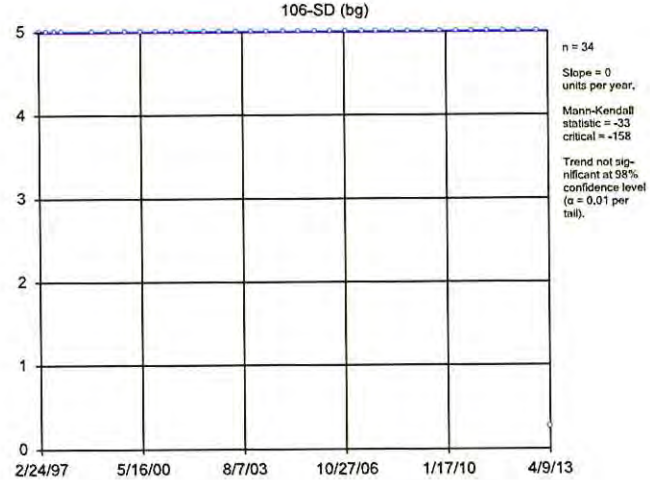


Constituent: Vanadium Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)

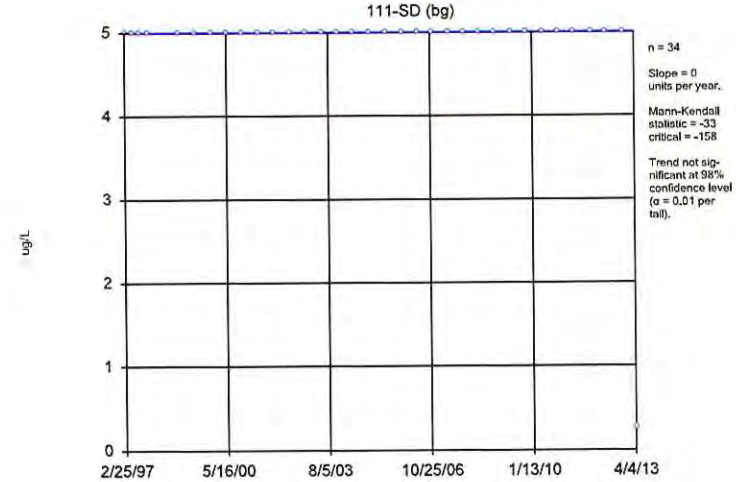


Constituent: Vanadium Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

111-SD (bg)

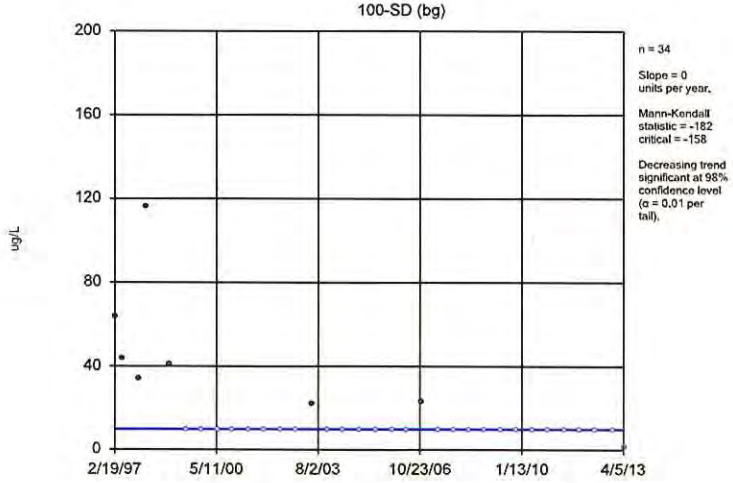


Constituent: Vanadium Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

100-SD (bg)

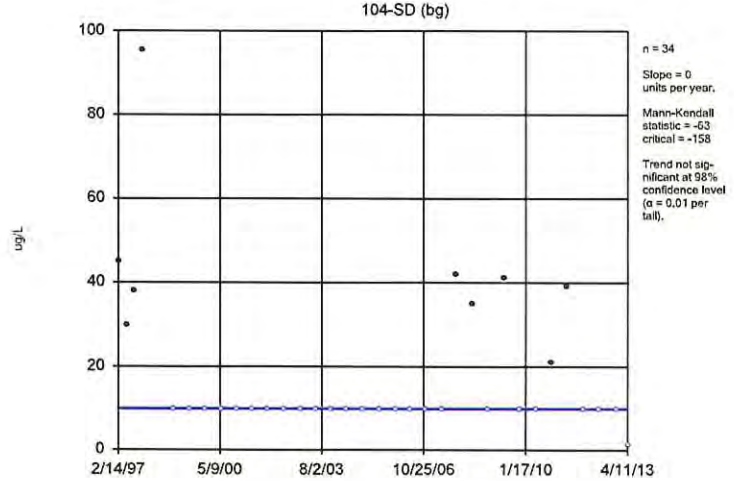


Constituent: Zinc Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)

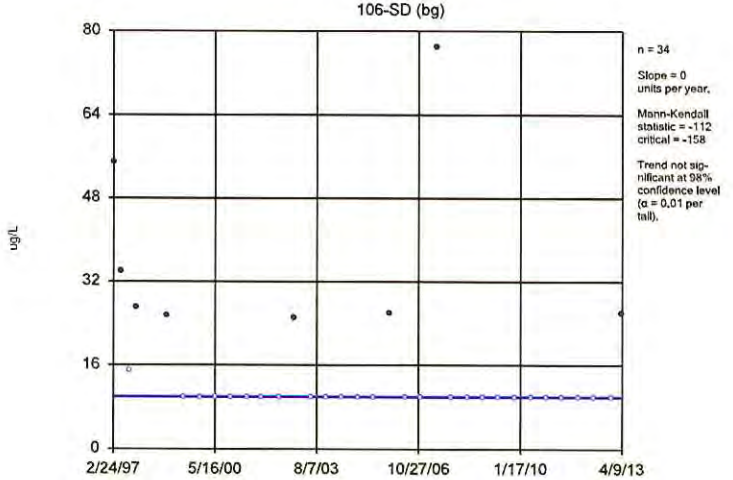


Constituent: Zinc Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)

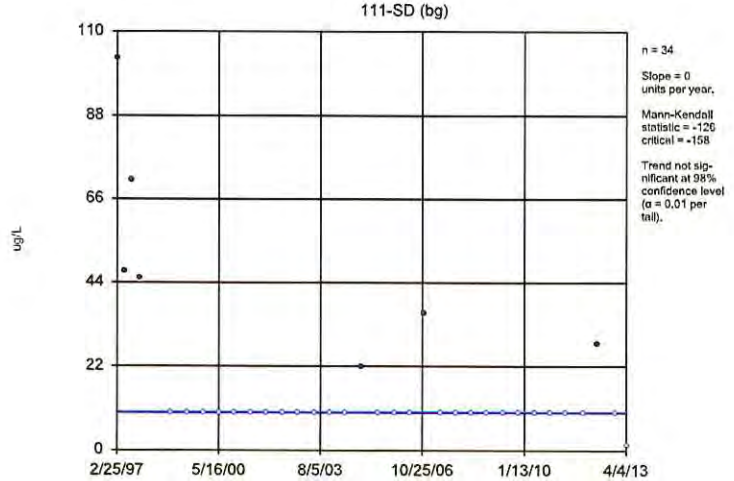


Constituent: Zinc Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

111-SD (bg)



Constituent: Zinc Total Analysis Run 12/17/2013 10:28 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

HERST & ASSOCIATES, INC.®

INTRA-WELL PREDICTION LIMITS
SALEM FORMATION

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:49 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Ammonia as N (mg/L)	100-SD	0.625	0.29	No	31	0.449	0.07591	0	None	No	0.0003873	Param Intra 1 of 2
Ammonia as N (mg/L)	104-SD	66	27	No	34	n/a	n/a	38.24	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Ammonia as N (mg/L)	106-SD	1.4	0.11	No	34	n/a	n/a	47.06	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Ammonia as N (mg/L)	111-SD	0.35	0.05ND	No	34	n/a	n/a	79.41	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	100-SD	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	104-SD	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	106-SD	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Antimony Total (ug/L)	111-SD	0.075	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	100-SD	14.7	2.5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	104-SD	27	9.9	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	106-SD	7.7	2.5ND	No	34	n/a	n/a	76.47	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Arsenic Total (ug/L)	111-SD	0.6	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Barium Total (ug/L)	100-SD	342.8	330	No	34	288.5	23.67	0	None	No	0.0003873	Param Intra 1 of 2
Barium Total (ug/L)	**104-SD**	**215.5**	**610**	**Yes**	**31**	**154.3**	**26.41**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Barium Total (ug/L)	106-SD	149.2	120	No	33	9.577	1.146	0	None	sqrt(x)	0.0003873	Param Intra 1 of 2
Barium Total (ug/L)	111-SD	120	110	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Beryllium Total (ug/L)	100-SD	2.2	1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	104-SD	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	106-SD	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium Total (ug/L)	111-SD	0.0485	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	100-SD	6.9	50ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	104-SD	1800	690	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	106-SD	120	50ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Boron Total (ug/L)	111-SD	100	50ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	100-SD	2.5	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	104-SD	0.0355	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	106-SD	2.5	0.1ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cadmium Total (ug/L)	111-SD	0.0355	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Calcium Total (ug/L)	100-SD	87465	81000	No	34	77026	4550	0	None	No	0.0003873	Param Intra 1 of 2
Calcium Total (ug/L)	104-SD	170000	120000	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Calcium Total (ug/L)	106-SD	125210	100000	No	33	103730	9331	0	None	No	0.0003873	Param Intra 1 of 2
Calcium Total (ug/L)	111-SD	102885	92000	No	32	90691	5279	0	None	No	0.0003873	Param Intra 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	100-SD	37	5ND	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	104-SD	760	290	No	34	n/a	n/a	73.53	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	106-SD	92	5ND	No	34	n/a	n/a	85.29	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	111-SD	63	5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chloride (mg/L)	100-SD	13	1.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chloride (mg/L)	104-SD	400	170	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Chloride (mg/L)	106-SD	25.99	12	No	33	17.41	3.725	0	None	No	0.0003873	Param Intra 1 of 2
Chloride (mg/L)	111-SD	18.22	9.6	No	34	13.11	2.229	0	None	No	0.0003873	Param Intra 1 of 2
Chromium Total (ug/L)	100-SD	13.2	2.5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	**104-SD**	**7.8**	**12**	**Yes**	**34**	**n/a**	**n/a**	**91.18**	**n/a**	**n/a**	**0.001599**	**NP Intra (NDs) 1 of 2**
Chromium Total (ug/L)	106-SD	14	2.5ND	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Chromium Total (ug/L)	111-SD	5	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	100-SD	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	104-SD	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	106-SD	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Cobalt Total (ug/L)	111-SD	0.47	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	100-SD	0.37	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	104-SD	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:49 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Copper Total (ug/L)	106-SD	10	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Copper Total (ug/L)	111-SD	10	2.5ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	100-SD	2.329	2.1	No	32	2.017	0.135	0	None	No	0.0003873	Param Intra 1 of 2
Fluoride (mg/L)	104-SD	1.209	0.05ND	No	30	0.9378	0.06952	0	None	sqrt(x)	0.0003873	Param Intra 1 of 2
Fluoride (mg/L)	106-SD	1.429	1.4	No	30	1.146	0.1218	0	None	No	0.0003873	Param Intra 1 of 2
Fluoride (mg/L)	111-SD	2.34	2.2	No	31	2.012	0.1418	0	None	No	0.0003873	Param Intra 1 of 2
Hardness Total (mg/L)	100-SD	377.3	360	No	33	338.9	16.67	0	None	No	0.0003873	Param Intra 1 of 2
Hardness Total (mg/L)	**104-SD**	**553.5**	**570**	**Yes**	**32**	**490.2**	**27.39**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Hardness Total (mg/L)	106-SD	566.3	460	No	33	467.6	42.89	0	None	No	0.0003873	Param Intra 1 of 2
Hardness Total (mg/L)	111-SD	500.5	450	No	32	447.3	23.03	0	None	No	0.0003873	Param Intra 1 of 2
Iron Total (ug/L)	100-SD	2891	730	No	33	1684	524.1	0	None	No	0.0003873	Param Intra 1 of 2
Iron Total (ug/L)	**104-SD**	**6519**	**8200**	**Yes**	**33**	**6.638**	**0.9314**	**0**	**None**	**ln(x)**	**0.0003873**	**Param Intra 1 of 2**
Iron Total (ug/L)	106-SD	4159	2100	No	34	1674	1084	0	None	No	0.0003873	Param Intra 1 of 2
Iron Total (ug/L)	111-SD	7320	23	No	34	6.098	1.221	0	None	ln(x)	0.0003873	Param Intra 1 of 2
Lead Total (ug/L)	100-SD	0.12	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	104-SD	0.12	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	106-SD	25	2.5ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Lead Total (ug/L)	111-SD	0.12	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Magnesium Total (ug/L)	100-SD	39803	37000	No	34	35744	1769	0	None	No	0.0003873	Param Intra 1 of 2
Magnesium Total (ug/L)	**104-SD**	**59805**	**64000**	**Yes**	**33**	**50524**	**4032**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Magnesium Total (ug/L)	106-SD	60739	50000	No	34	223.6	9.955	0	None	sqrt(x)	0.0003873	Param Intra 1 of 2
Magnesium Total (ug/L)	111-SD	60028	53000	No	33	53997	2620	0	None	No	0.0003873	Param Intra 1 of 2
Manganese Total (ug/L)	100-SD	34000	64	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Manganese Total (ug/L)	**104-SD**	**163.1**	**170**	**Yes**	**34**	**101.9**	**26.67**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Manganese Total (ug/L)	106-SD	449.4	66	No	34	184.2	115.6	0	None	No	0.0003873	Param Intra 1 of 2
Manganese Total (ug/L)	111-SD	40	2.5ND	No	34	n/a	n/a	41.18	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Mercury Total (ug/L)	100-SD	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	104-SD	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	106-SD	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Mercury Total (ug/L)	111-SD	0.027	0.1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	100-SD	0.66	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	104-SD	60	32	No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	106-SD	0.66	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nickel Total (ug/L)	111-SD	0.66	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	100-SD	0.0053	0.05ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	104-SD	1.3	0.05ND	No	34	n/a	n/a	94.12	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	106-SD	0.3	0.05ND	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Nitrate/Nitrite (mg/L)	111-SD	5	0.11	No	34	n/a	n/a	91.18	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	100-SD	0.94	0.025ND	No	34	n/a	n/a	58.82	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	104-SD	0.268	0.097	No	34	n/a	n/a	52.94	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Phosphorus Total (mg/L)	106-SD	0.2003	0.055	No	34	0.08226	0.05144	17.65	Aitchison`s	No	0.0003873	Param Intra 1 of 2
Phosphorus Total (mg/L)	111-SD	0.37	0.025ND	No	34	n/a	n/a	67.65	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	100-SD	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	104-SD	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	106-SD	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Selenium Total (ug/L)	111-SD	0.75	2.5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	100-SD	0.06	2.5ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	104-SD	0.06	2.5ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	106-SD	0.06	2.5ND	No	33	n/a	n/a	100	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Silver Total (ug/L)	111-SD	0.06	2.5ND	No	33	n/a	n/a	100	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:49 AM

Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sodium Total (ug/L)	100-SD	12098	6900	No	34	8571	1538	0	None	No	0.0003873	Param Intra 1 of 2
Sodium Total (ug/L)	**104-SD**	**79056**	**130000**	**Yes**	**33**	**10.37**	**0.3948**	**0**	**None**	**ln(x)**	**0.0003873**	**Param Intra 1 of 2**
Sodium Total (ug/L)	106-SD	59100	11000	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Sodium Total (ug/L)	111-SD	25264	20000	No	32	20988	1851	0	None	No	0.0003873	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	100-SD	719.7	626	No	33	632.6	37.84	0	None	No	0.0003873	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	104-SD	1372	1345	No	33	1014	155.4	0	None	No	0.0003873	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	106-SD	1125	827	No	34	909.2	94.13	0	None	No	0.0003873	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	111-SD	1020	838	No	33	856	71.34	0	None	No	0.0003873	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	100-SD	14.47	9.8	No	34	10.38	1.783	0	None	No	0.0003873	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	104-SD	106.1	28	No	34	6224	2194	0	None	x^2	0.0003873	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	106-SD	159	58	No	34	n/a	n/a	0	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Sulfate as SO4 (mg/L)	111-SD	63.09	47	No	33	51.72	4.938	0	None	No	0.0003873	Param Intra 1 of 2
Thallium Total (ug/L)	100-SD	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	104-SD	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	106-SD	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Thallium Total (ug/L)	111-SD	0.135	1ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	100-SD	396.8	340	No	31	342.2	23.53	0	None	No	0.0003873	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**104-SD**	**747.7**	**970**	**Yes**	**32**	**593.2**	**66.9**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	106-SD	686.3	440	No	34	538.7	64.33	0	None	No	0.0003873	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	111-SD	571.2	470	No	33	477.8	40.59	0	None	No	0.0003873	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	100-SD	5	1.9	No	34	n/a	n/a	32.35	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Total Organic Carbon [TOC] (mg/L)	104-SD	490	81	No	34	n/a	n/a	58.82	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Total Organic Carbon [TOC] (mg/L)	106-SD	26	1.5	No	34	n/a	n/a	41.18	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Total Organic Carbon [TOC] (mg/L)	111-SD	6	1.6	No	34	n/a	n/a	44.12	n/a	n/a	0.001599	NP Intra (normality) 1 of 2
Vanadium Total (ug/L)	100-SD	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	104-SD	38	11	No	34	n/a	n/a	97.06	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	106-SD	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Vanadium Total (ug/L)	111-SD	0.54	5ND	No	34	n/a	n/a	100	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	100-SD	116	10ND	No	34	n/a	n/a	79.41	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	104-SD	95.5	10ND	No	34	n/a	n/a	73.53	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	106-SD	77	10ND	No	34	n/a	n/a	76.47	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Zinc Total (ug/L)	111-SD	103	10ND	No	34	n/a	n/a	79.41	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2



Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 10:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH [Field] (su)	100-SD	8.3	6.506	7.08	No	34	7.403	0.3911	0	None	No	0.0001936	Param Intra 1 of 2
pH [Field] (su)	104-SD	8.172	6.368	6.44	No	34	7.27	0.393	0	None	No	0.0001936	Param Intra 1 of 2
pH [Field] (su)	106-SD	7.878	6.48	6.95	No	34	7.179	0.3046	0	None	No	0.0001936	Param Intra 1 of 2
pH [Field] (su)	111-SD	8.091	6.391	7.05	No	33	7.241	0.3693	0	None	No	0.0001936	Param Intra 1 of 2

Prediction Limit

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE Printed 12/17/2013, 12:20 PM

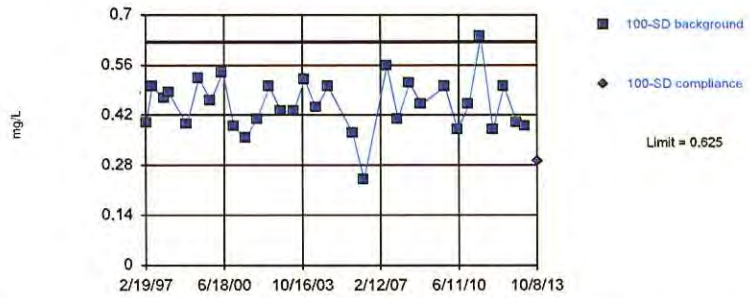
Constituent	Well	Upper Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Ammonia as N (mg/L)	106-SD	1.4	0.11	No	29	n/a	n/a	55.17	n/a	n/a	0.002172	NP Intra (NDs) 1 of 2
Barium Total (ug/L)	**104-SD**	**218.8**	**610**	**Yes**	**28**	**12.29**	**1.062**	**0**	**None**	**sqrt(x)**	**0.0003873**	**Param Intra 1 of 2**
Barium Total (ug/L)	**106-SD**	**113**	**120**	**Yes**	**11**	**75.8**	**12.33**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Barium Total (ug/L)	111-SD	124.9	110	No	12	94.03	10.7	0	None	No	0.0003873	Param Intra 1 of 2
Chloride (mg/L)	**104-SD**	**110**	**170**	**Yes**	**26**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.002667**	**NP Intra (normality) 1 of 2**
Fluoride (mg/L)	**106-SD**	**1.379**	**1.4**	**Yes**	**23**	**1.108**	**0.1113**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Magnesium Total (ug/L)	**104-SD**	**57305**	**64000**	**Yes**	**31**	**50655**	**2869**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Sodium Total (ug/L)	**104-SD**	**31151**	**130000**	**Yes**	**10**	**22220**	**2849**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**104-SD**	**747.7**	**970**	**Yes**	**32**	**593.2**	**66.9**	**0**	**None**	**No**	**0.0003873**	**Param Intra 1 of 2**
Total Organic Carbon [TOC] (mg/L)	**104-SD**	**32**	**81**	**Yes**	**32**	**n/a**	**n/a**	**62.5**	**n/a**	**n/a**	**0.001803**	**NP Intra (NDs) 1 of 2**

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.449, Std. Dev.=0.07591, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9703, critical = 0.902. Kappa = 2.318 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:36 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

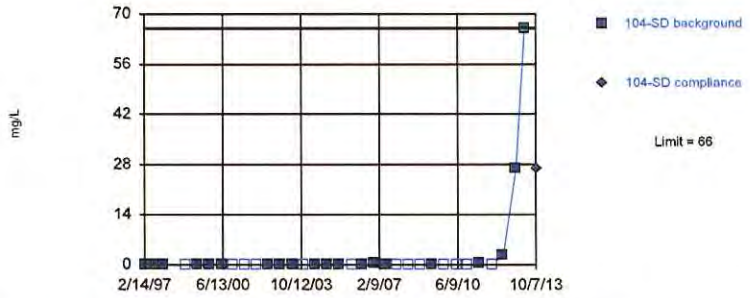
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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. 38.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 12/17/2013 10:36 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

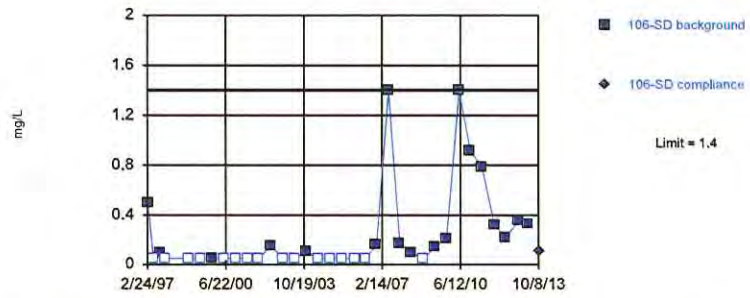
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 12/17/2013 10:36 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

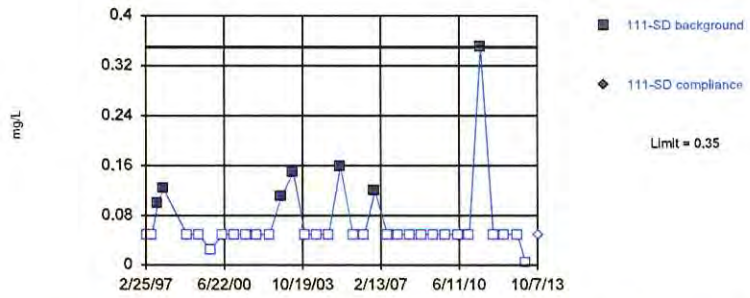
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 34 background values. 79.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Ammonia as N Analysis Run 12/17/2013 10:36 AM

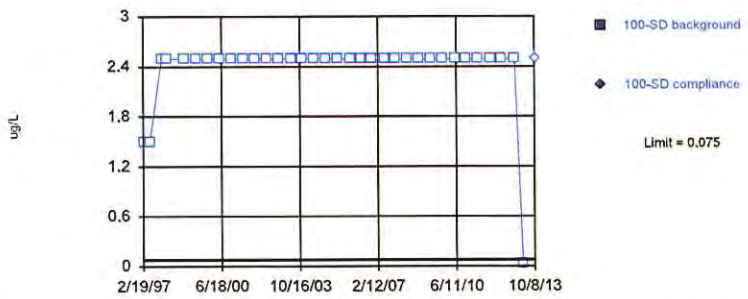
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



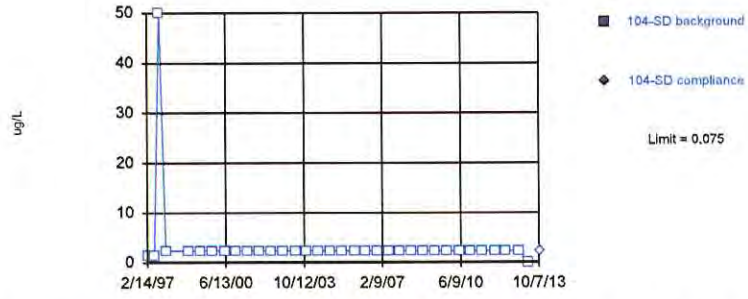
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



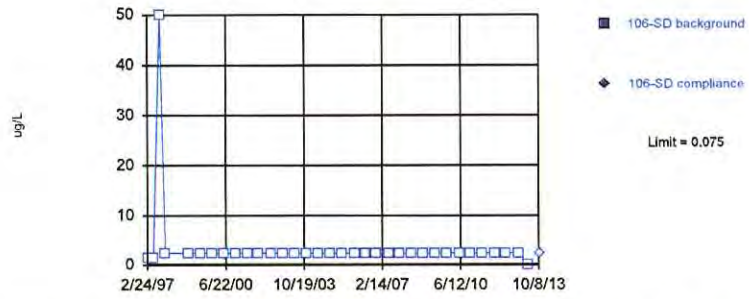
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



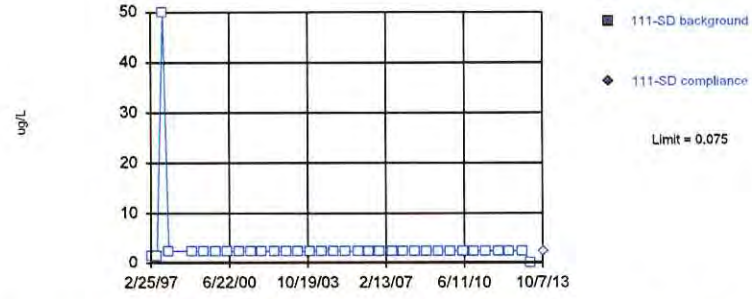
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Antimony Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

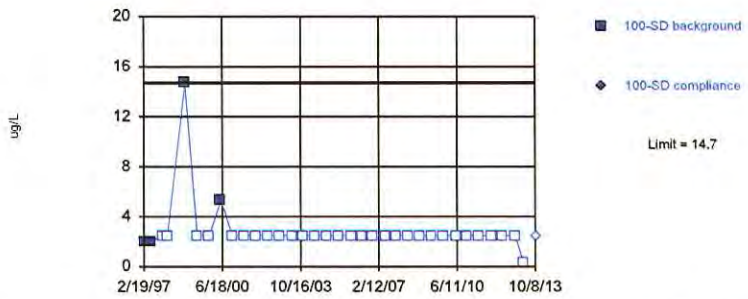
Constituent: Antimony Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



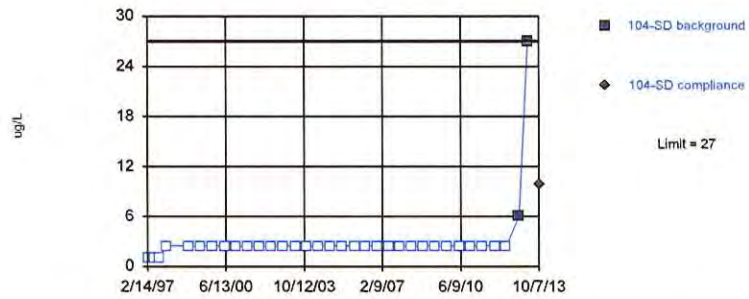
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



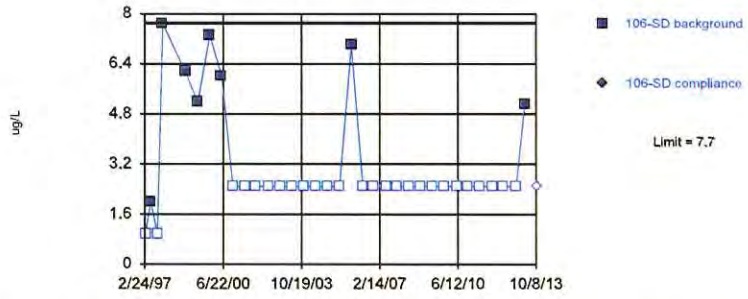
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



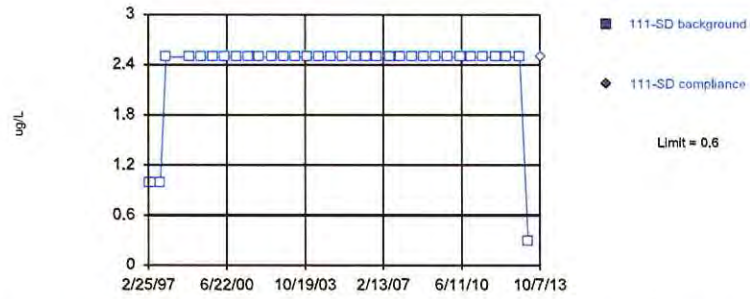
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Arsenic Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

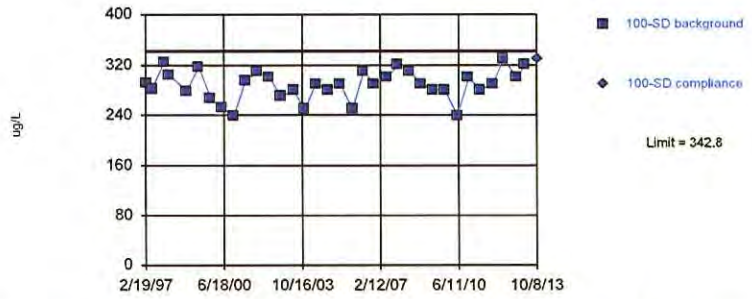
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=288.5, Std. Dev.=23.67, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9539, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Barium Total Analysis Run 12/17/2013 10:36 AM

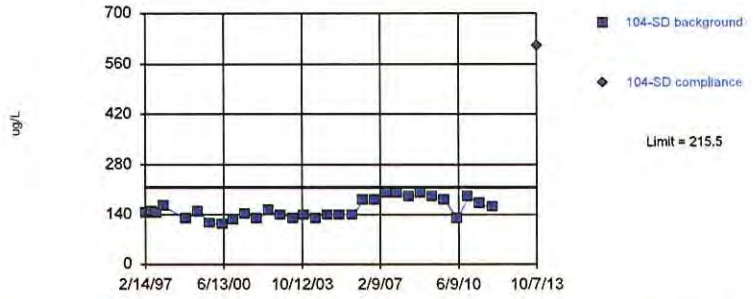
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=154.3, Std. Dev.=26.41, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9078, critical = 0.902. Kappa = 2.318 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. Three background outliers were removed: 340 (5/11/2012); 480 (11/27/2012); 2000 (4/11/2013).

Constituent: Barium Total Analysis Run 12/17/2013 10:36 AM

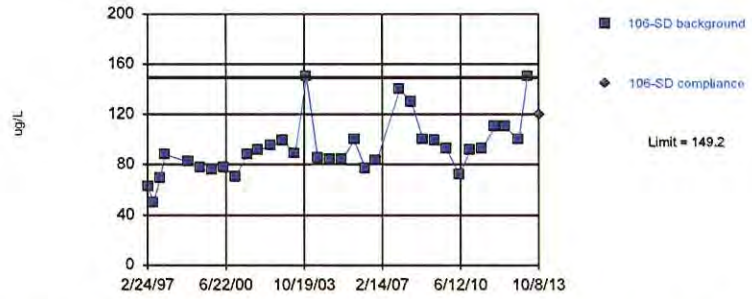
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=9.577, Std. Dev.=1.146, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9388, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 220 (5/21/2007).

Constituent: Barium Total Analysis Run 12/17/2013 10:36 AM

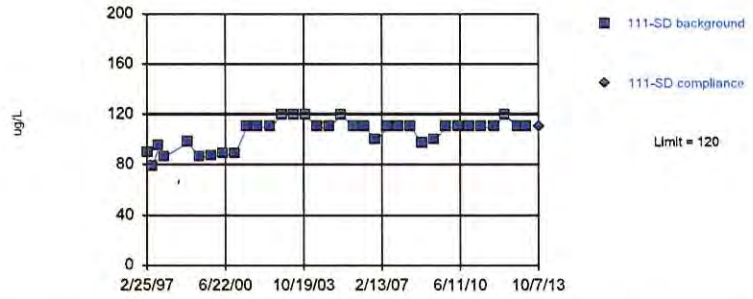
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Barium Total Analysis Run 12/17/2013 10:36 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

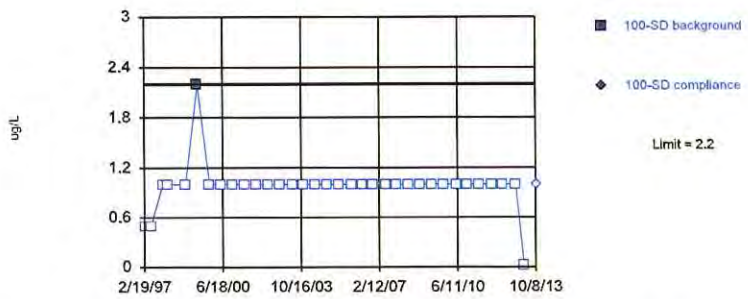
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Hollow symbols indicate censored values.

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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

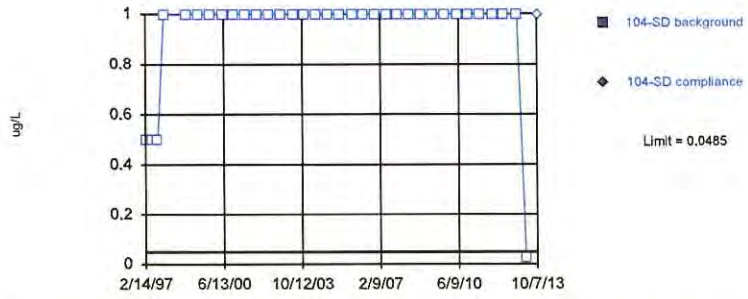
Constituent: Beryllium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

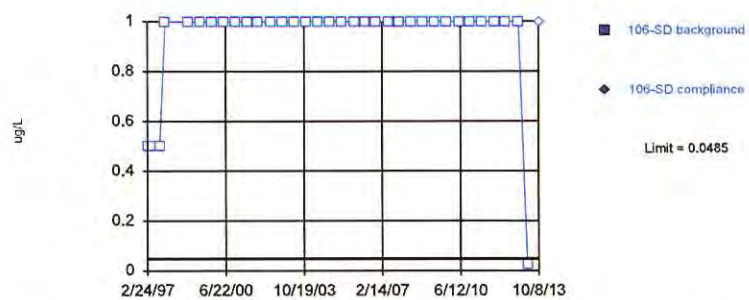
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

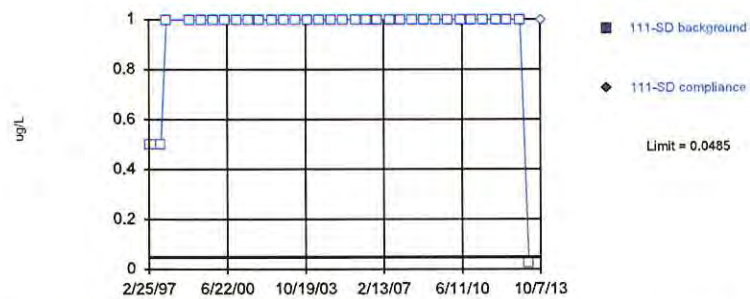
Constituent: Beryllium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

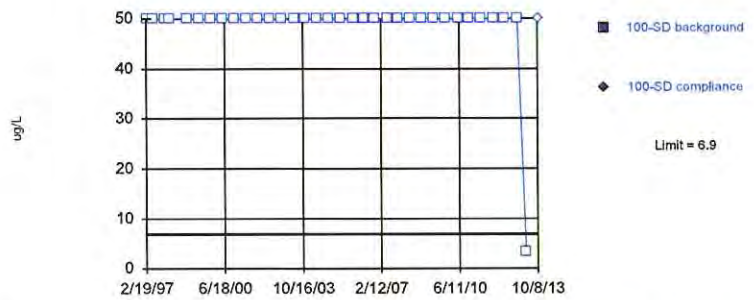
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

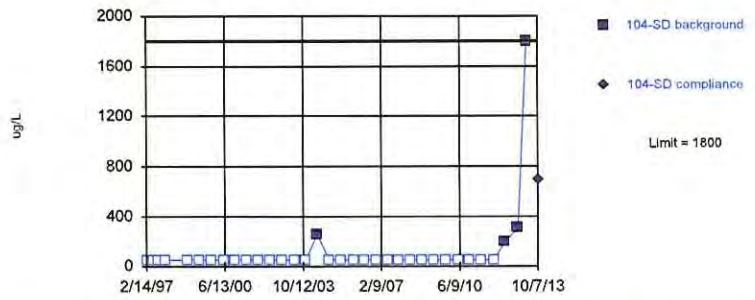
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

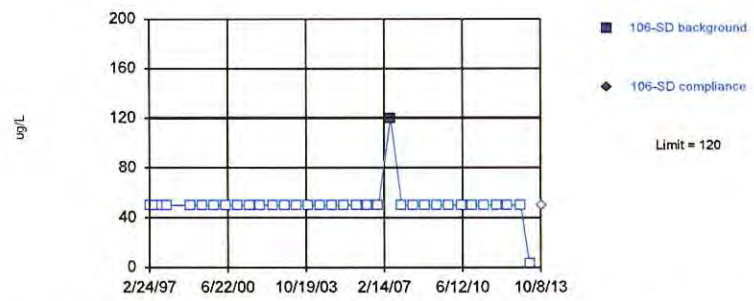
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Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

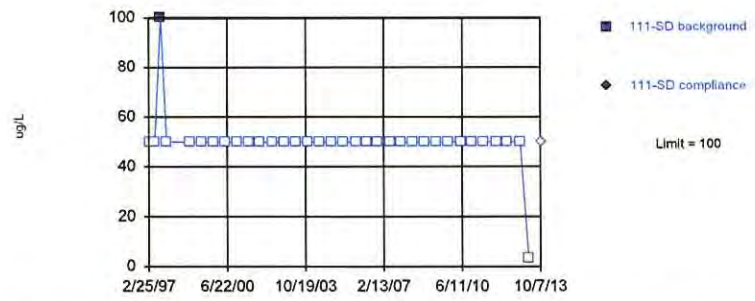
Constituent: Boron Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



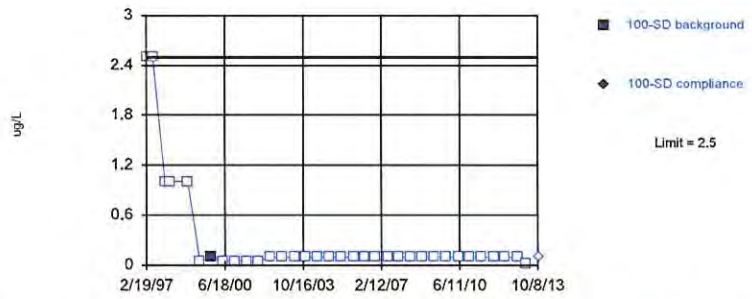
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Boron Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



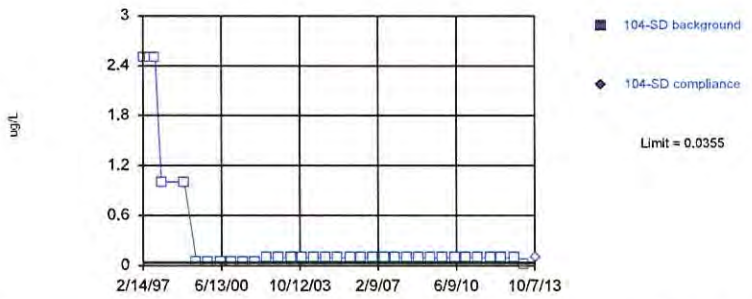
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



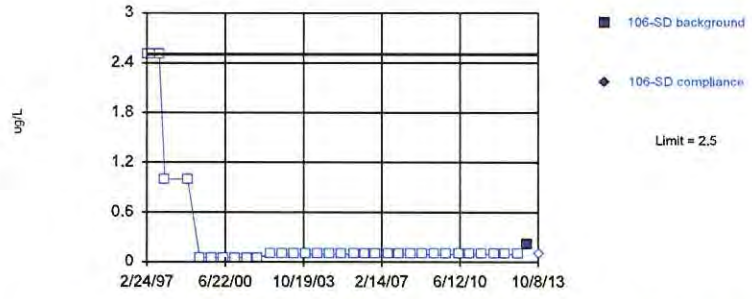
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



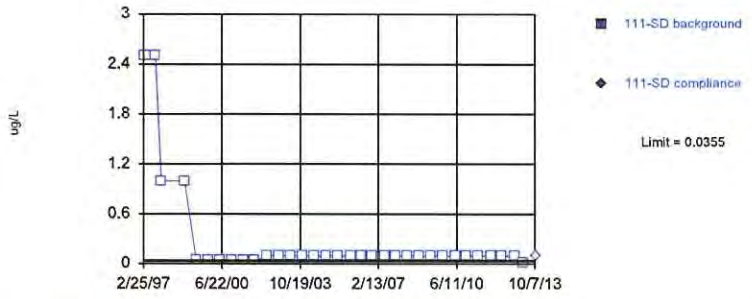
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cadmium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

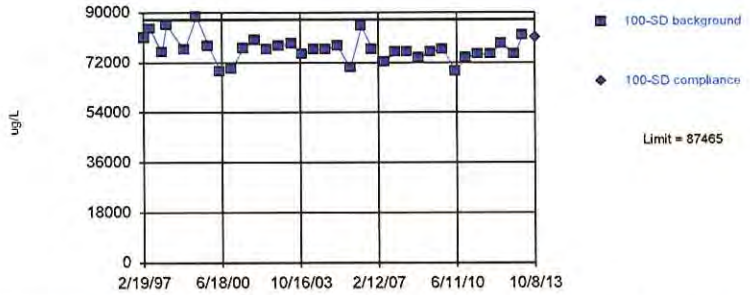
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=77026, Std. Dev.=4550, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9488, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

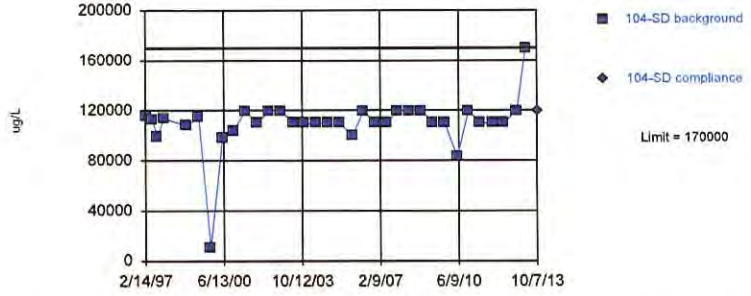
Constituent: Calcium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

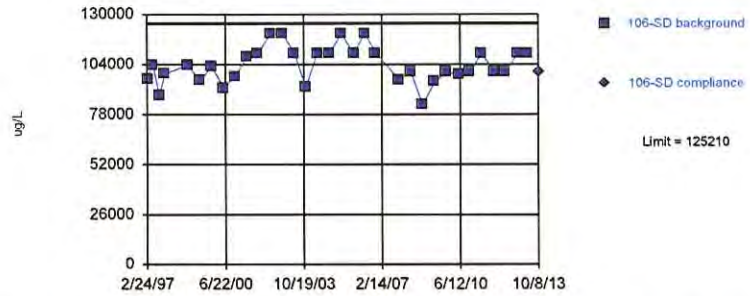
Constituent: Calcium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=103730, Std. Dev.=9331, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9479, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 140000 (5/21/2007).

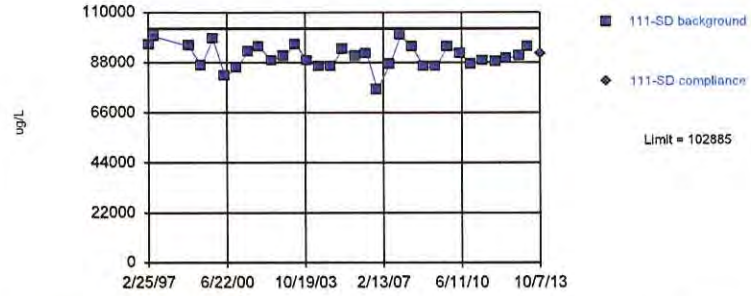
Constituent: Calcium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=90691, Std. Dev.=5279, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9636, critical = 0.904. Kappa = 2.31 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

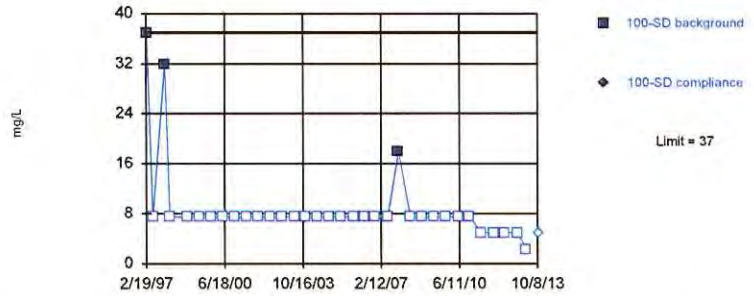
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Hollow symbols indicate censored values.

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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

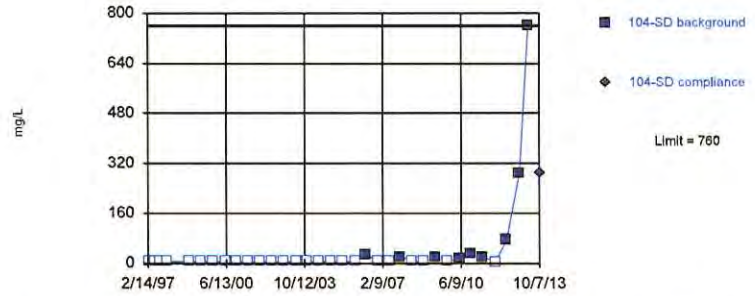
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 73.53% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

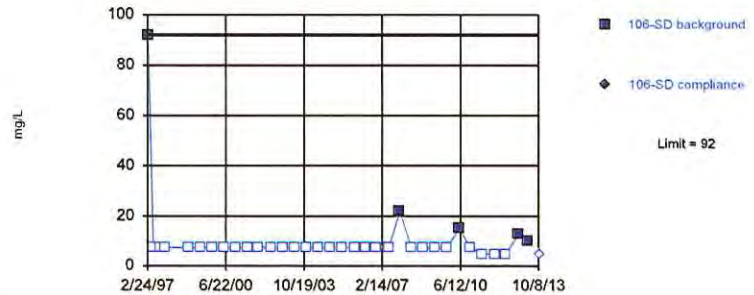
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 85.29% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

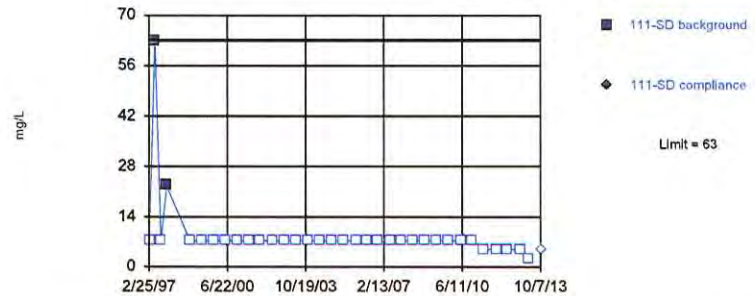
Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

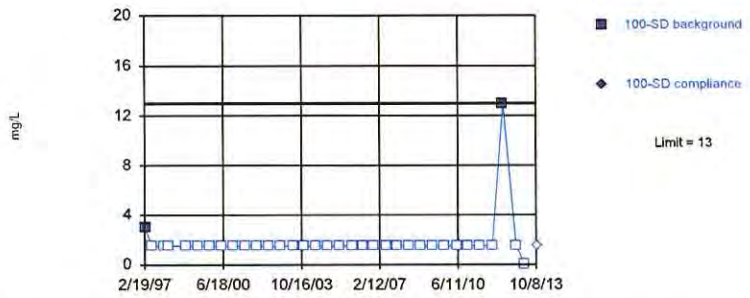
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Hollow symbols indicate censored values.

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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

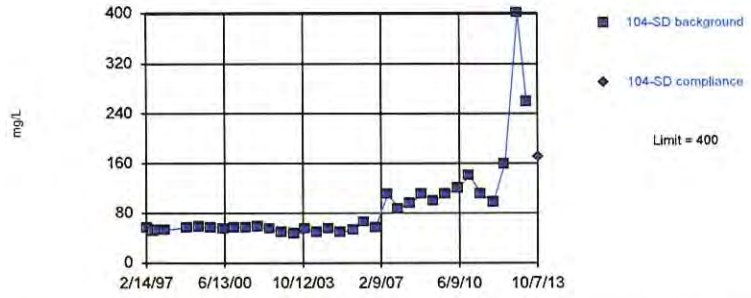
Constituent: Chloride Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

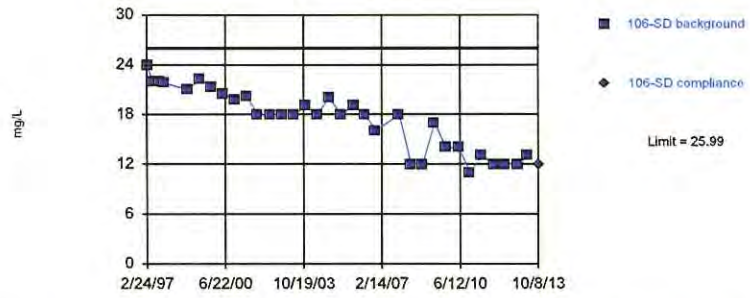
Constituent: Chloride Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=17.41, Std. Dev.=3.725, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9176, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 70 (5/21/2007).

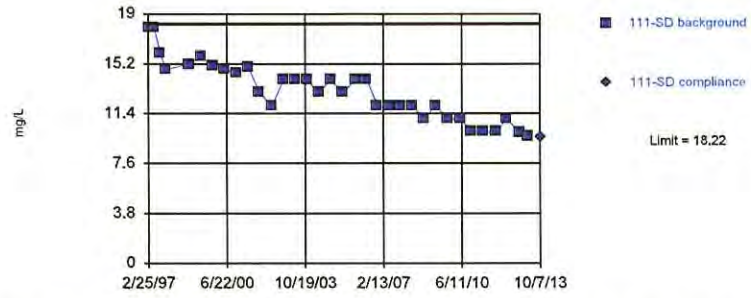
Constituent: Chloride Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=13.11, Std. Dev.=2.229, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9469, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Chloride Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

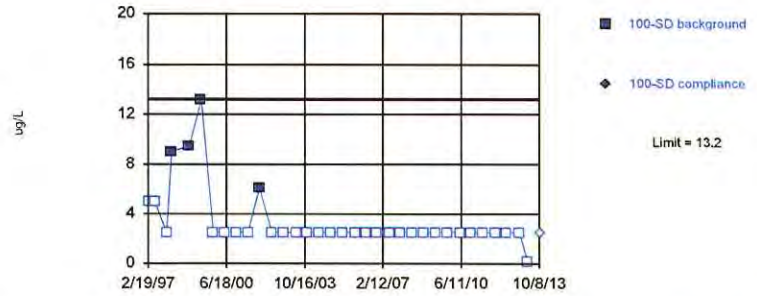
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Hollow symbols indicate censored values.

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 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

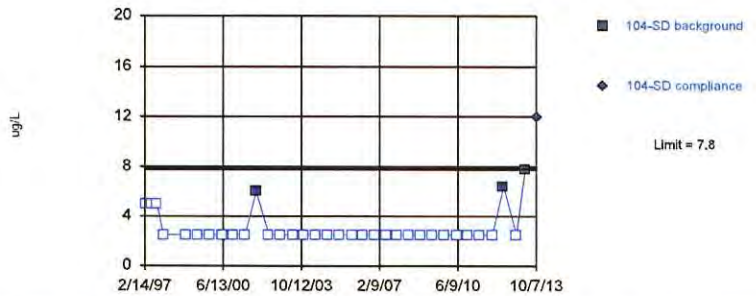
Constituent: Chromium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

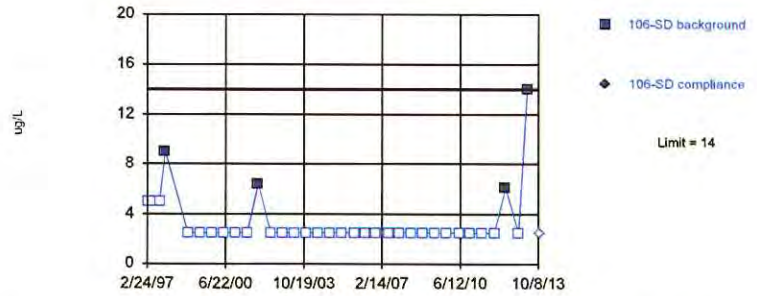
Constituent: Chromium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

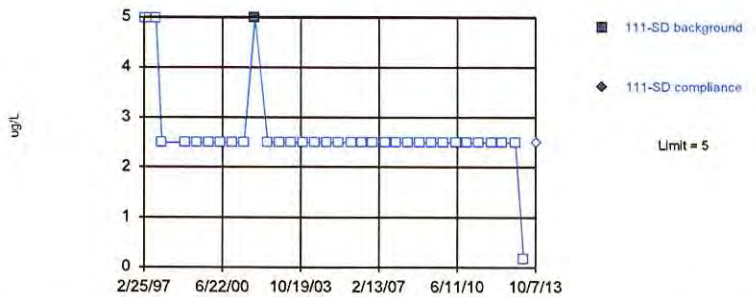
Constituent: Chromium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



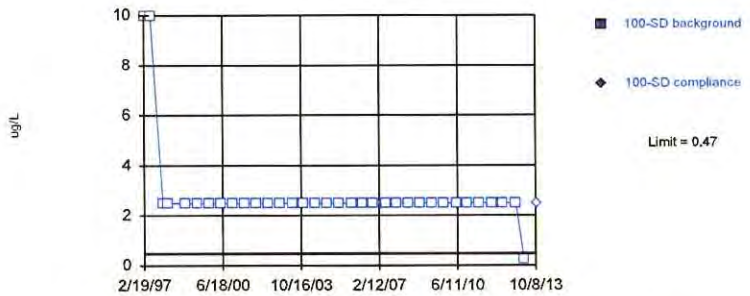
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Chromium Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



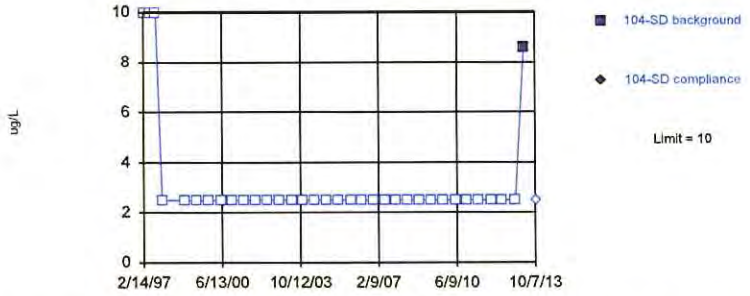
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cobalt Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



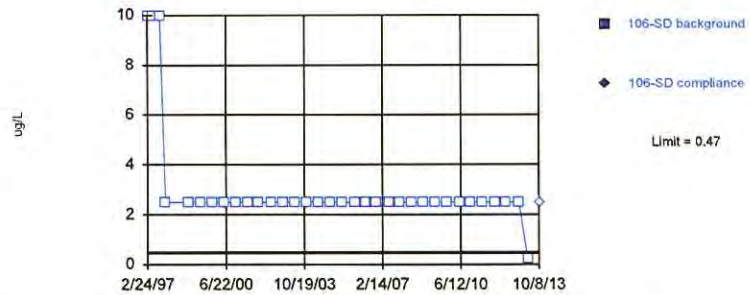
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cobalt Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



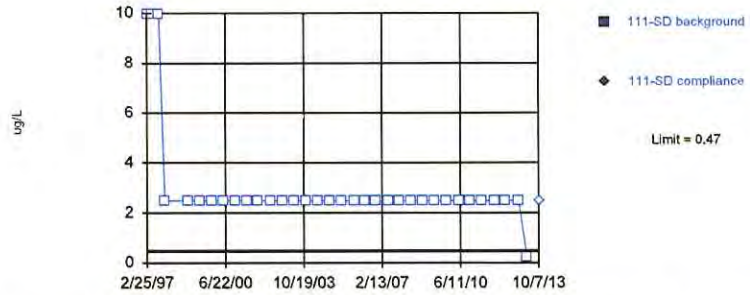
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Cobalt Total Analysis Run 12/17/2013 10:36 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

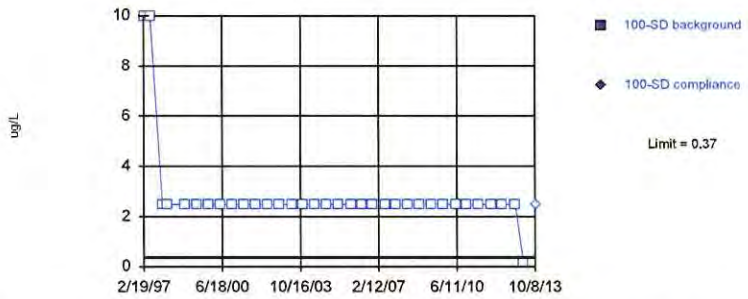
Constituent: Cobalt Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



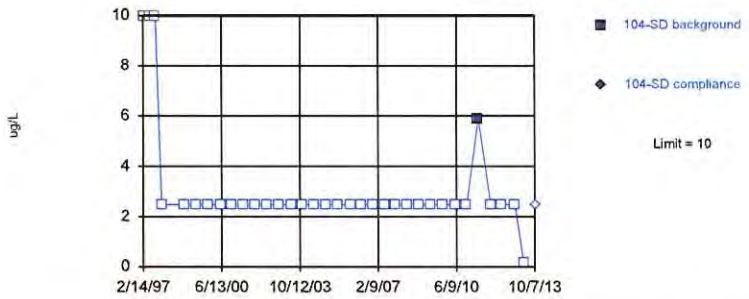
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



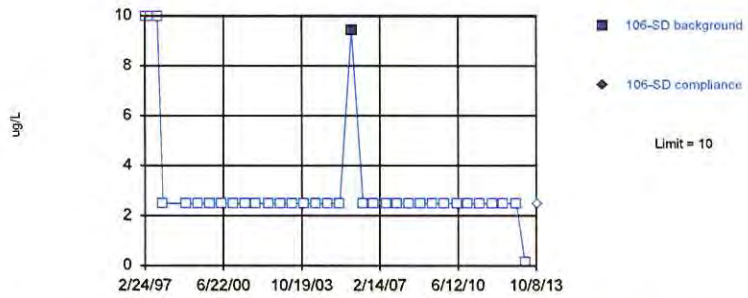
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



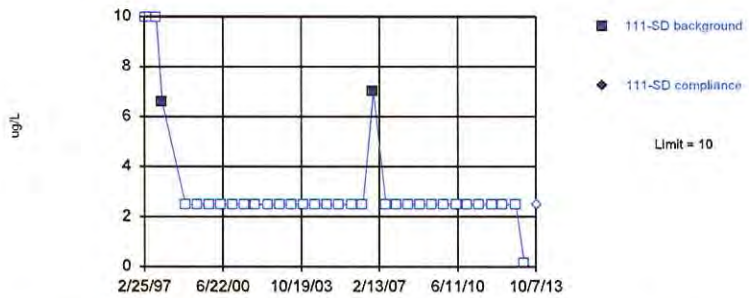
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Copper Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

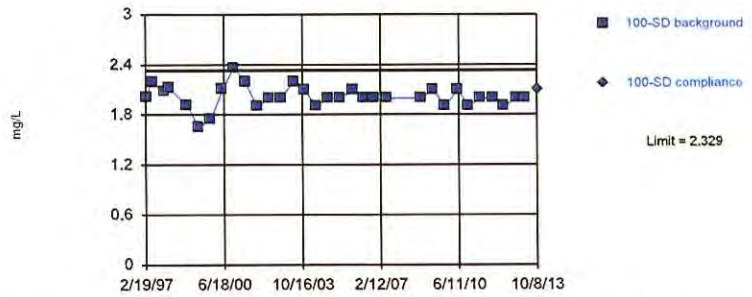
Constituent: Copper Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.017, Std. Dev.=0.135, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9359, critical = 0.904. Kappa = 2.31 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. No background outliers were found.

Constituent: Fluoride Analysis Run 12/17/2013 10:37 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

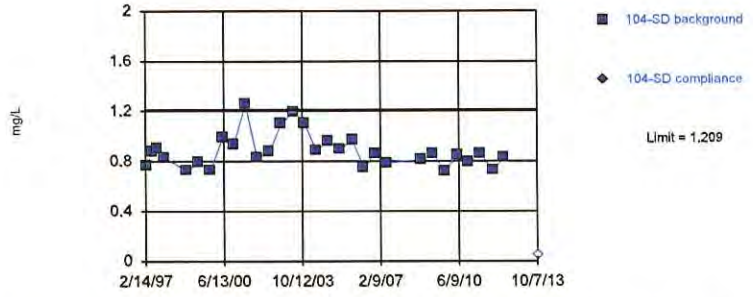
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.9378, Std. Dev.=0.06952, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9062, critical = 0.9. Kappa = 2.326 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: <0.1 (11/27/2012); 0.21 (4/11/2013).

Constituent: Fluoride Analysis Run 12/17/2013 10:37 AM

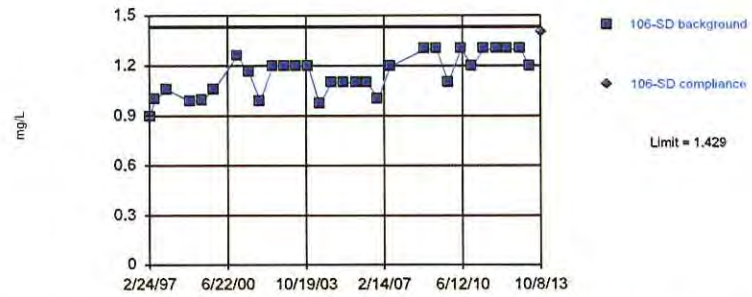
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.146, Std. Dev.=0.1218, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9092, critical = 0.9. Kappa = 2.326 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: <0.25 (8/28/1997); 2.24 (5/23/2000).

Constituent: Fluoride Analysis Run 12/17/2013 10:37 AM

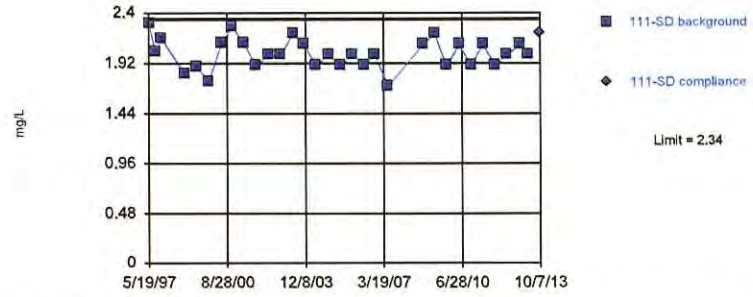
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.012, Std. Dev.=0.1418, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9644, critical = 0.902. Kappa = 2.318 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 1.2 (2/25/1997).

Constituent: Fluoride Analysis Run 12/17/2013 10:37 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

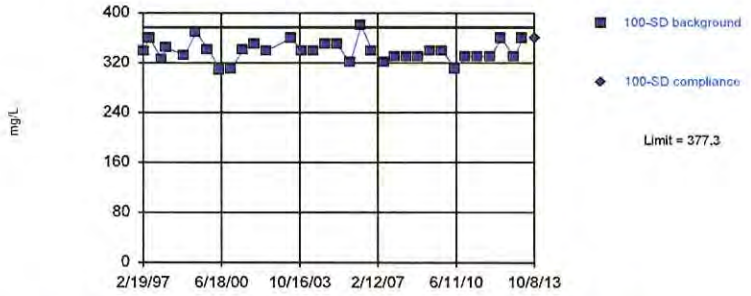
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=338.9, Std. Dev.=16.67, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9609, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 120 (11/19/2002).

Constituent: Hardness Total Analysis Run 12/17/2013 10:37 AM

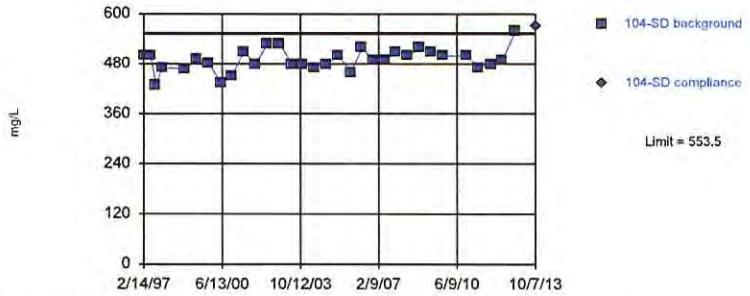
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=490.2, Std. Dev.=27.39, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9777, critical = 0.904. Kappa = 2.31 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 360 (5/20/2010); 840 (4/11/2013).

Constituent: Hardness Total Analysis Run 12/17/2013 10:37 AM

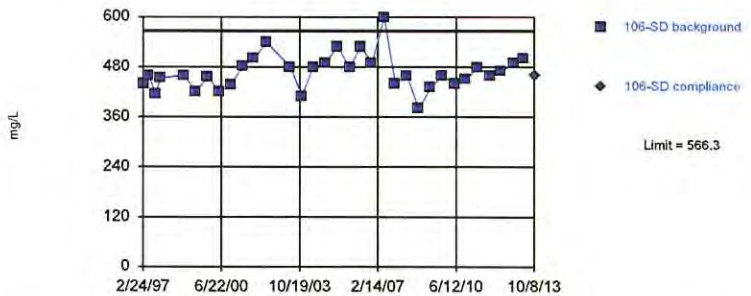
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=467.6, Std. Dev.=42.89, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9585, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 180 (11/19/2002).

Constituent: Hardness Total Analysis Run 12/17/2013 10:37 AM

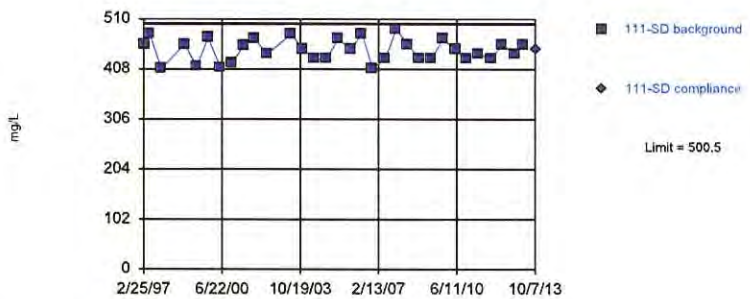
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=447.3, Std. Dev.=23.03, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9471, critical = 0.904. Kappa = 2.31 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:37 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

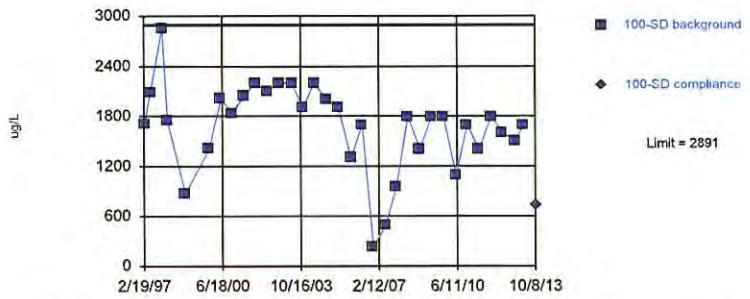
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1684, Std. Dev.=524.1, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9345, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 3550 (5/18/1999).

Constituent: Iron Total Analysis Run 12/17/2013 10:37 AM

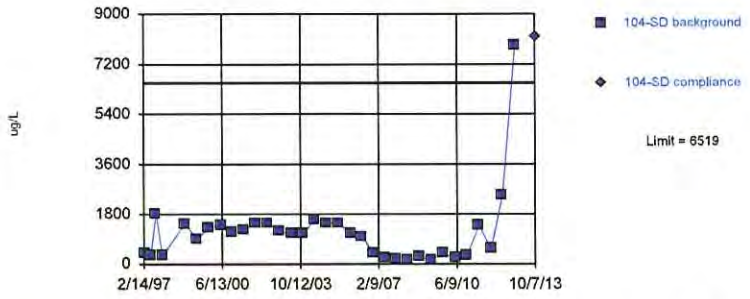
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=6.638, Std. Dev.=0.9314, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9205, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 29000 (4/11/2013).

Constituent: Iron Total Analysis Run 12/17/2013 10:37 AM

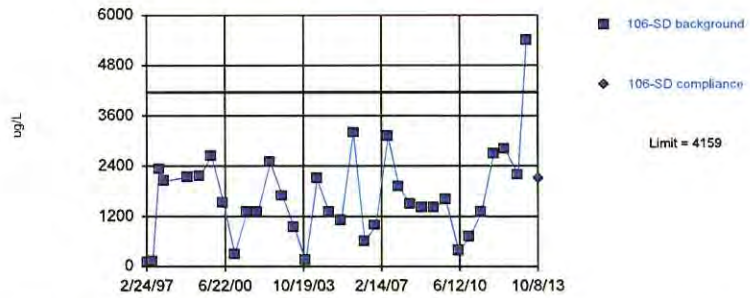
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1674, Std. Dev.=1084, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.929, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Iron Total Analysis Run 12/17/2013 10:37 AM

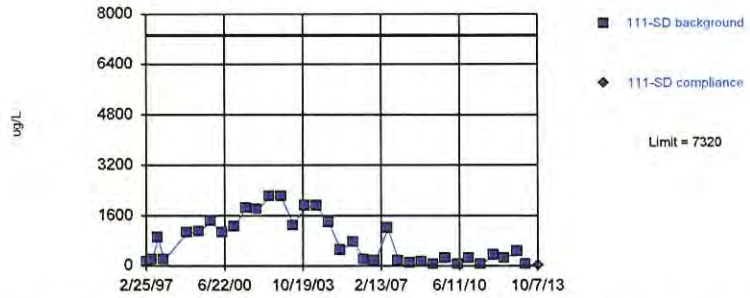
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=6.098, Std. Dev.=1.221, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9121, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Iron Total Analysis Run 12/17/2013 10:37 AM

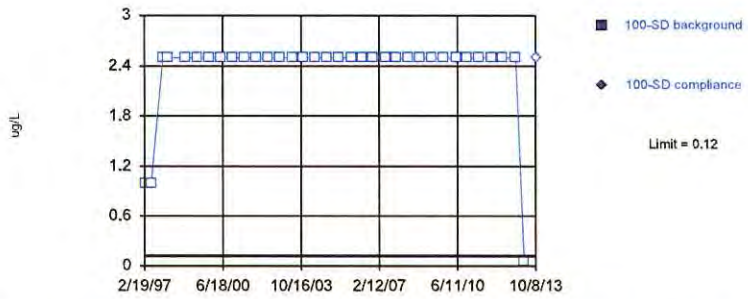
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

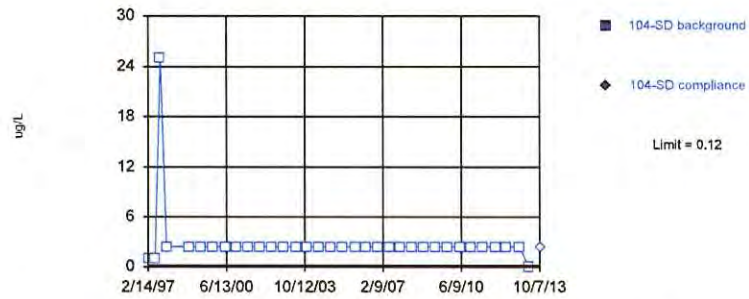
Constituent: Lead Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

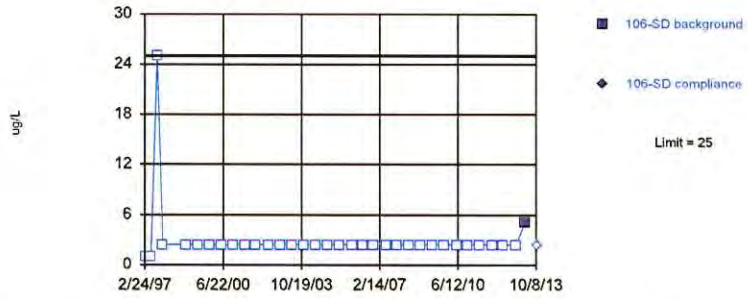
Constituent: Lead Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

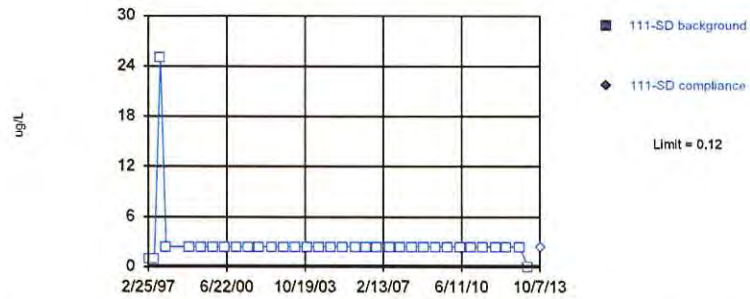
Constituent: Lead Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Lead Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

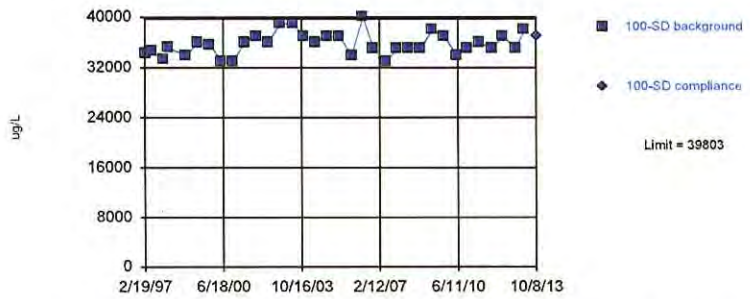
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=35744, Std. Dev.=1769, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9526, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Magnesium Total Analysis Run 12/17/2013 10:37 AM

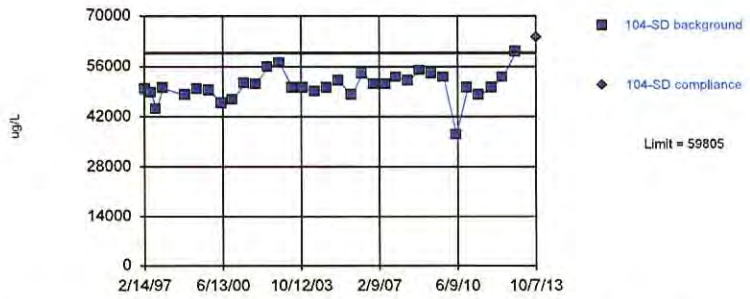
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50524, Std. Dev.=4032, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 100000 (4/11/2013).

Constituent: Magnesium Total Analysis Run 12/17/2013 10:37 AM

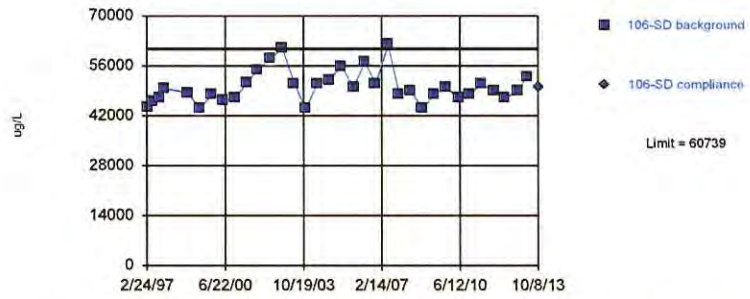
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=223.6, Std. Dev.=9.955, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9179, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Magnesium Total Analysis Run 12/17/2013 10:37 AM

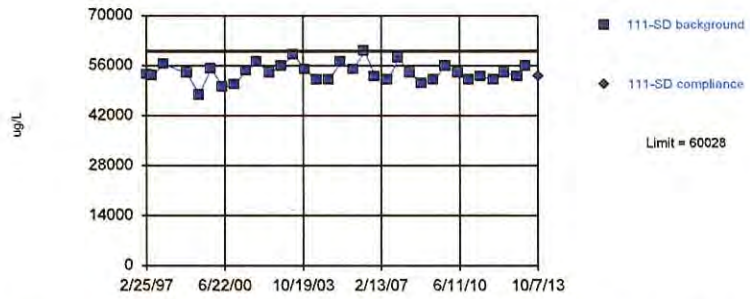
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=53997, Std. Dev.=2620, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9846, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 3810 (8/21/1997).

Constituent: Magnesium Total Analysis Run 12/17/2013 10:37 AM

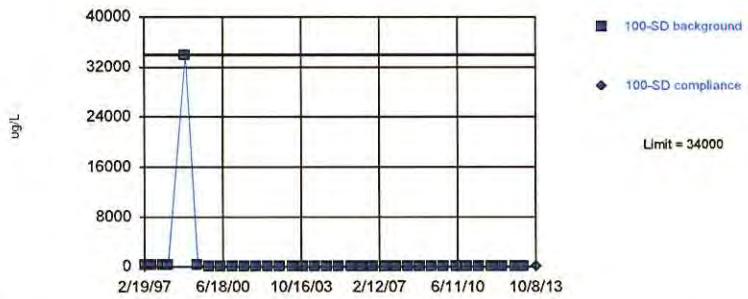
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 12/17/2013 10:37 AM

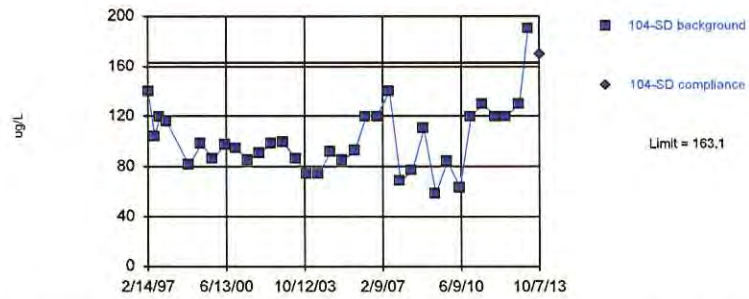
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=101.9, Std. Dev.=26.67, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9376, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Manganese Total Analysis Run 12/17/2013 10:37 AM

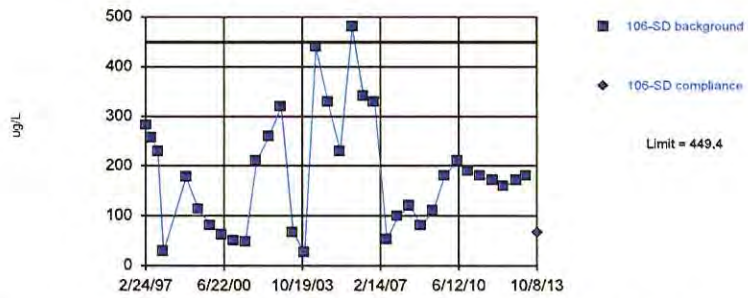
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=184.2, Std. Dev.=115.6, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9381, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Manganese Total Analysis Run 12/17/2013 10:37 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

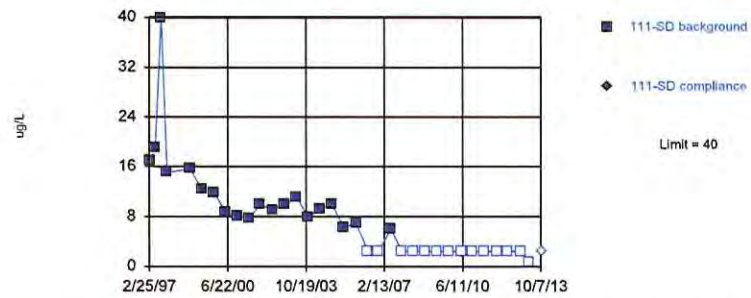
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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. 41.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Manganese Total Analysis Run 12/17/2013 10:37 AM

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

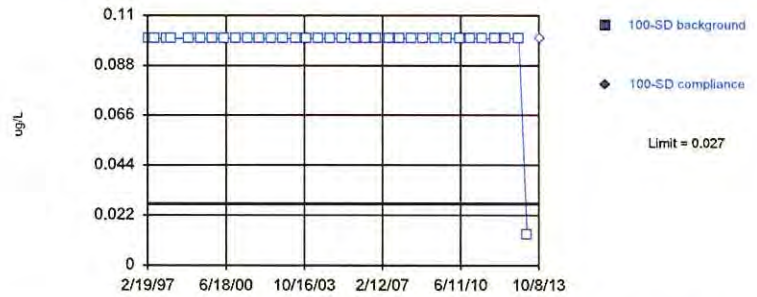
HERST & ASSOCIATES, INC.®

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

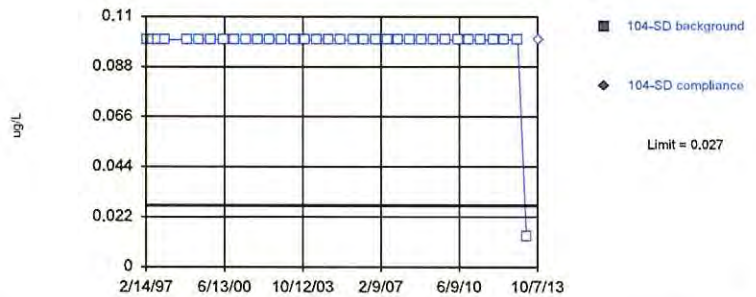
Constituent: Mercury Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

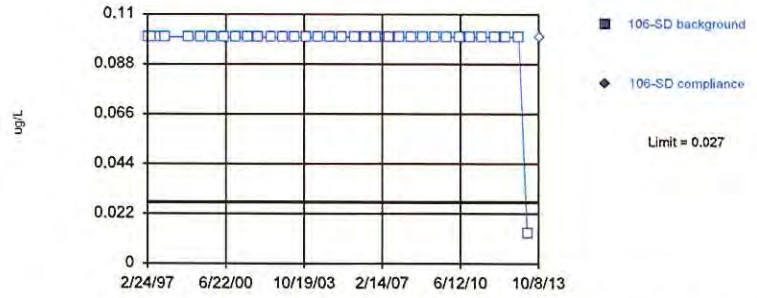
Constituent: Mercury Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

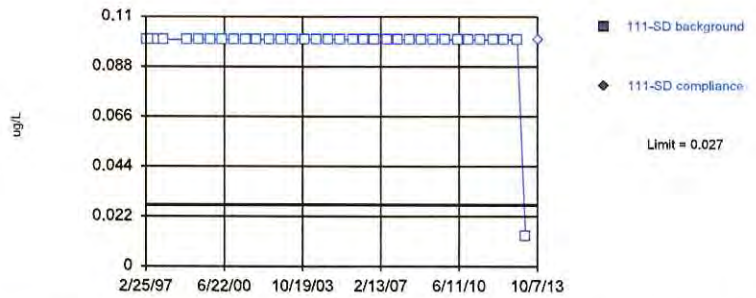
Constituent: Mercury Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

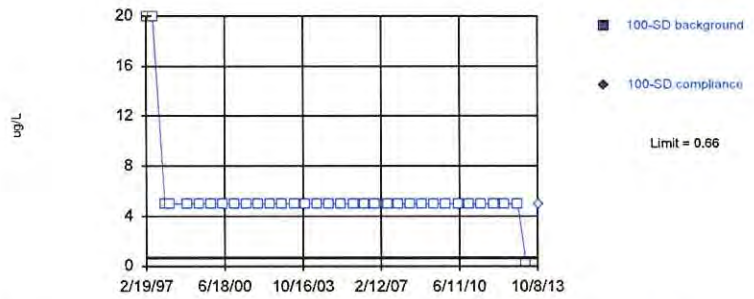
Constituent: Mercury Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



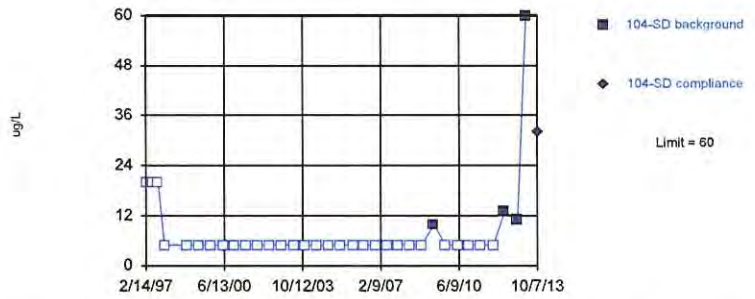
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



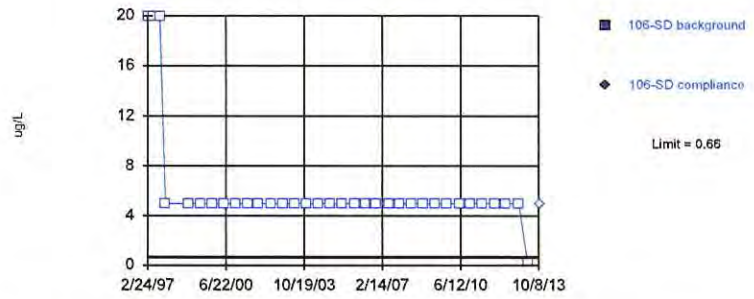
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



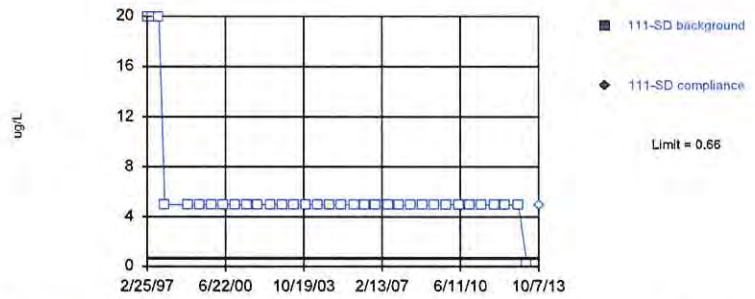
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



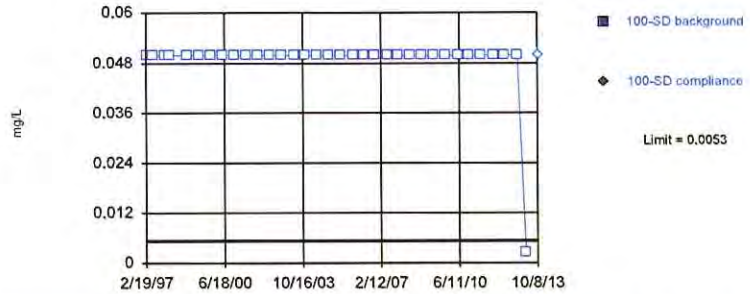
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nickel Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



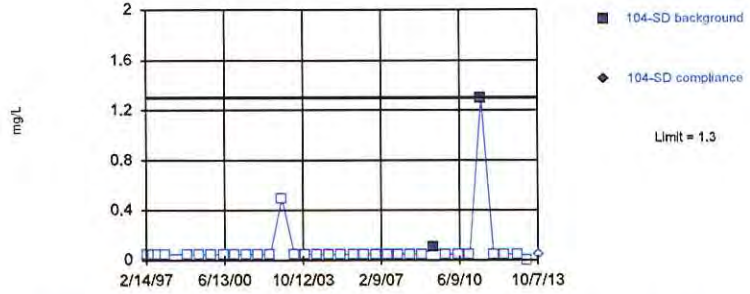
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



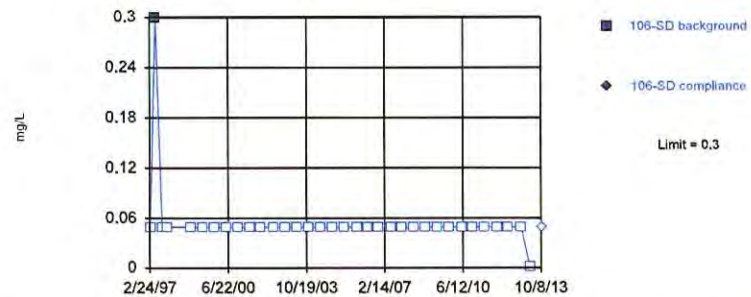
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



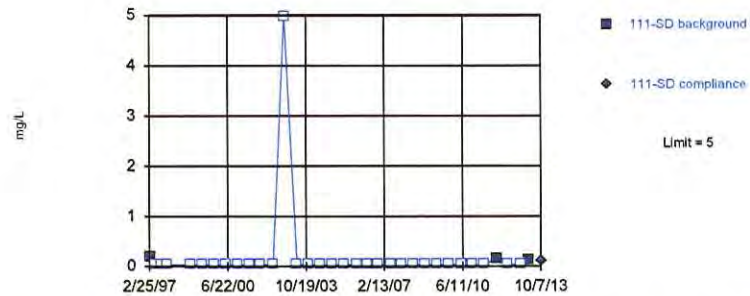
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 91.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

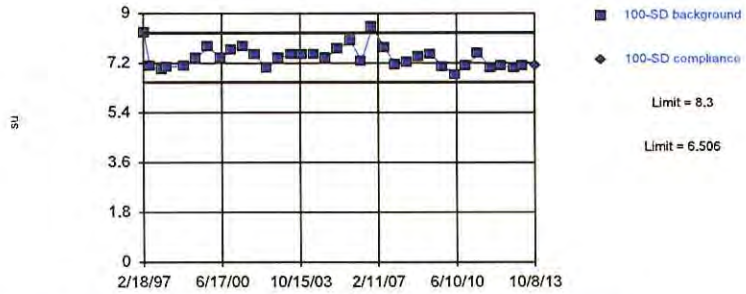
Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.403, Std. Dev.=0.3911, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9212, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:37 AM

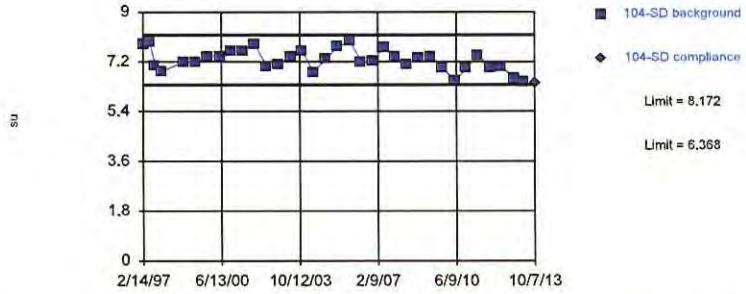
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.27, Std. Dev.=0.393, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9705, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:37 AM

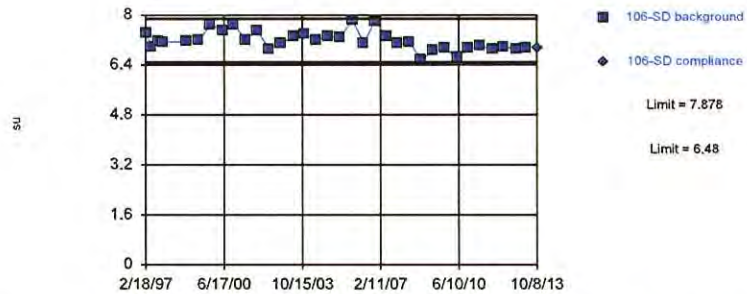
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.179, Std. Dev.=0.3046, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9626, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 12/17/2013 10:37 AM

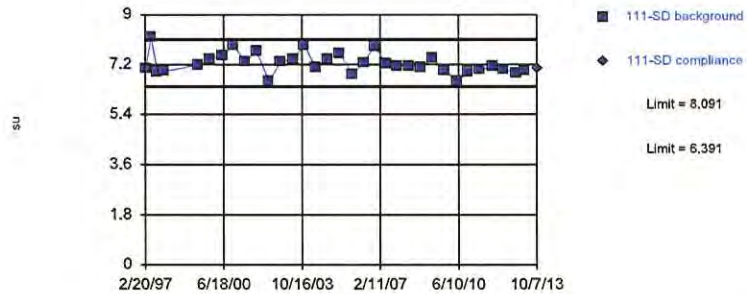
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.241, Std. Dev.=0.3693, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9503, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:37 AM

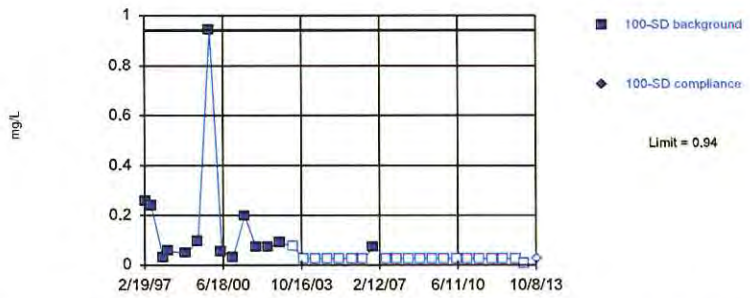
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

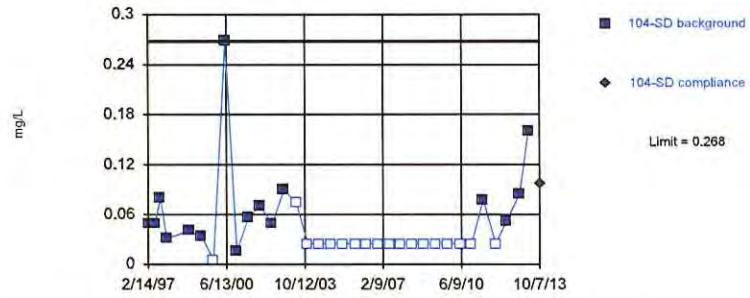
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

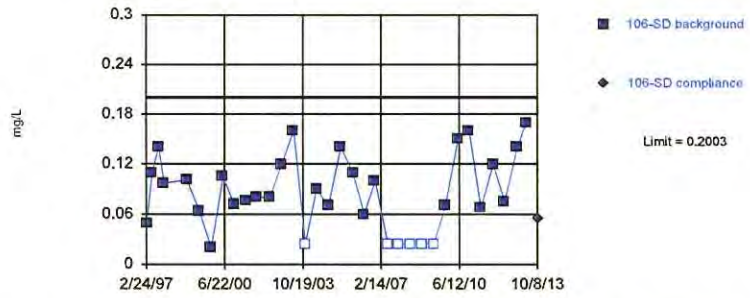
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Aitchison`s Adjustment): Mean=0.08226, Std. Dev.=0.05144, n=34, 17.65% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9384, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

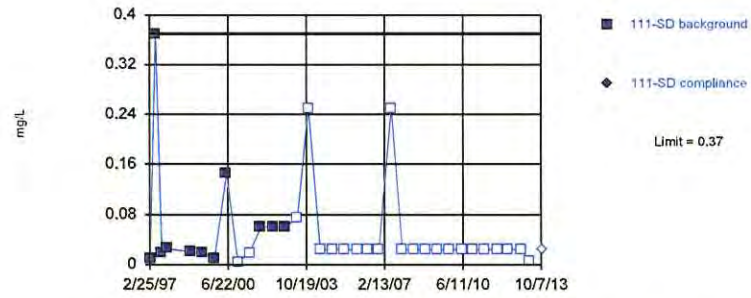
Constituent: Phosphorus Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 67.65% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Phosphorus Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

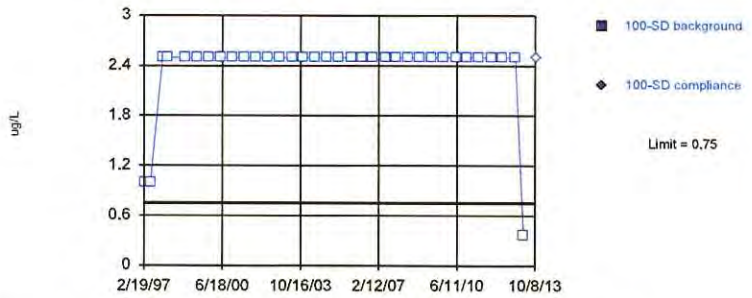
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

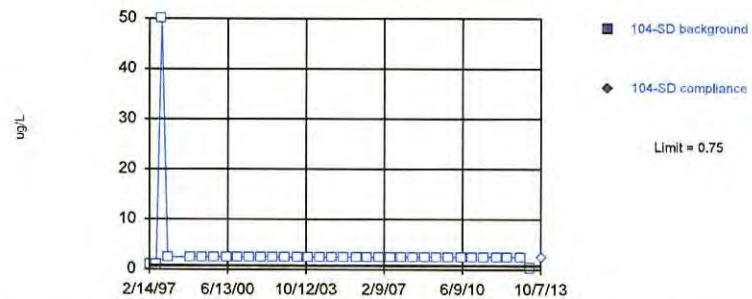
Constituent: Selenium Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

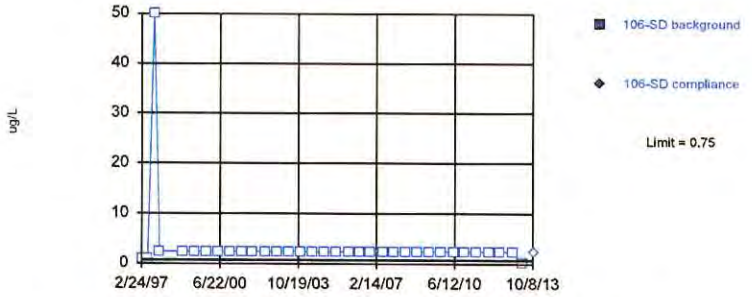
Constituent: Selenium Total Analysis Run 12/17/2013 10:37 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

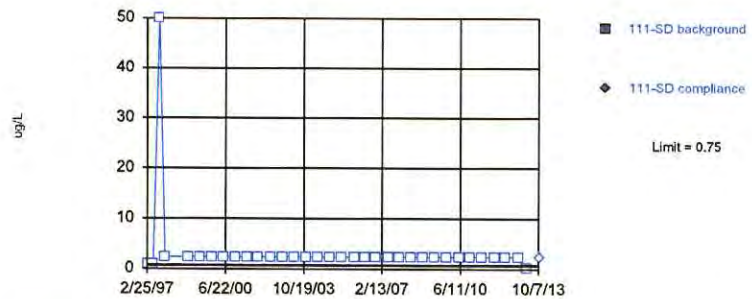
Constituent: Selenium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

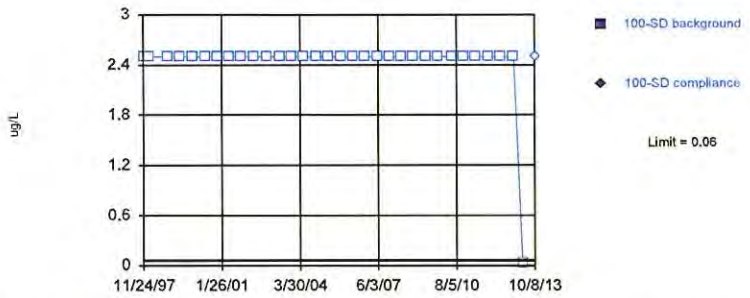
Constituent: Selenium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



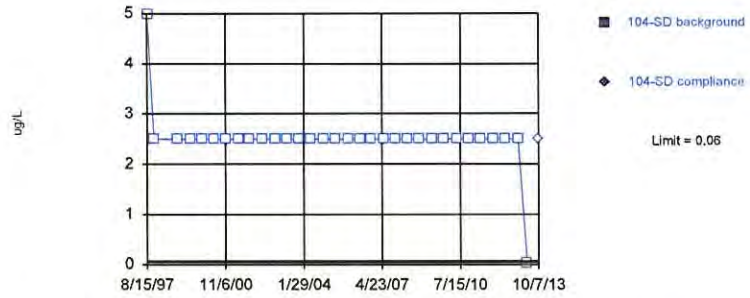
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



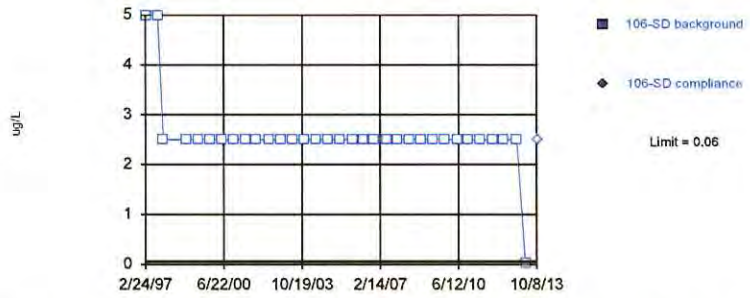
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



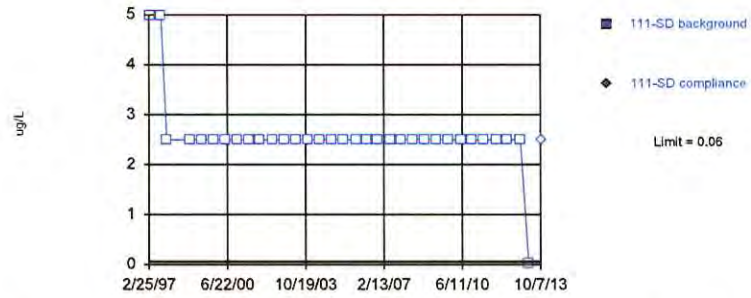
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 33) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Silver Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 33) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

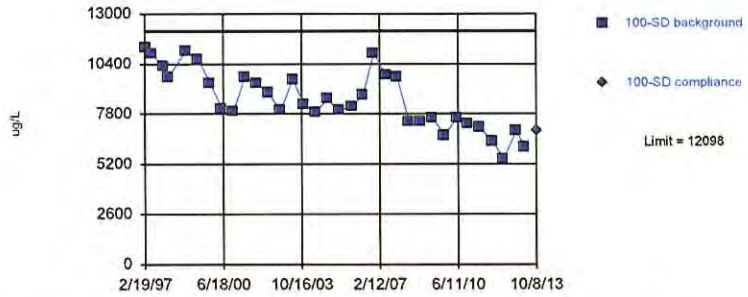
Constituent: Silver Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8571, Std. Dev.=1538, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9657, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sodium Total Analysis Run 12/17/2013 10:38 AM

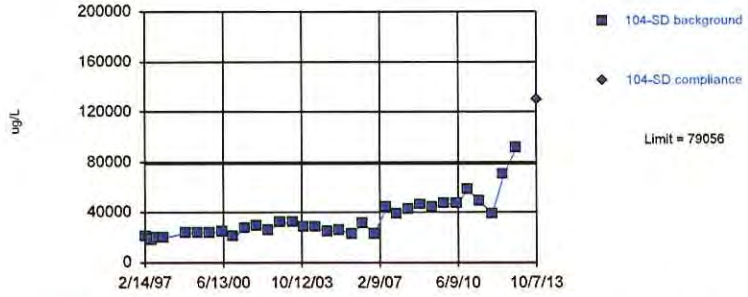
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=10.37, Std. Dev.=0.3948, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9314, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 320000 (4/11/2013).

Constituent: Sodium Total Analysis Run 12/17/2013 10:38 AM

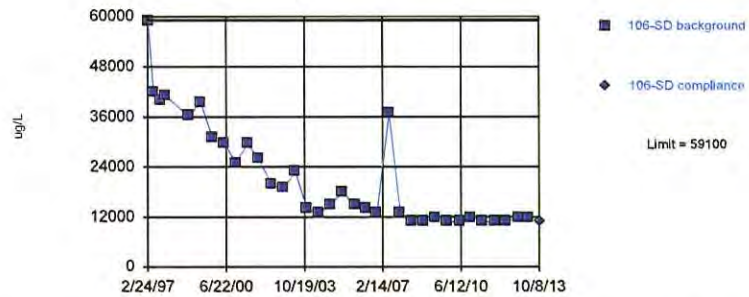
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sodium Total Analysis Run 12/17/2013 10:38 AM

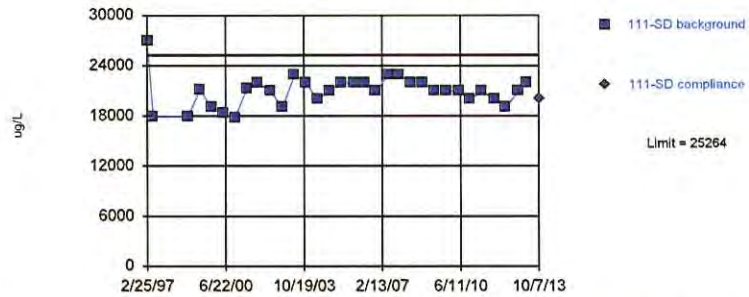
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=20988, Std. Dev.=1851, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9104, critical = 0.904. Kappa = 2.31 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:38 AM

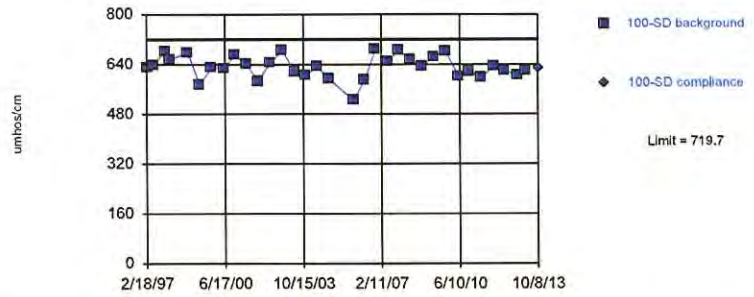
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=632.6, Std. Dev.=37.84, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9616, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:38 AM

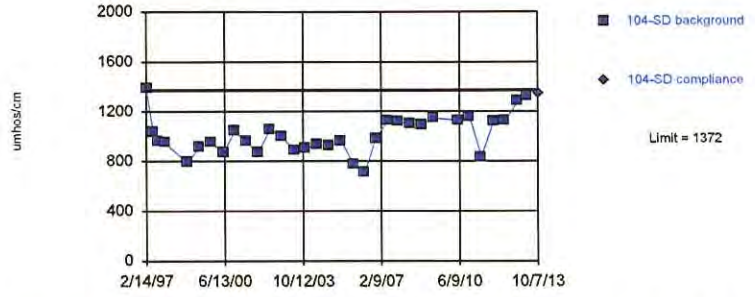
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1014, Std. Dev.=155.4, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9726, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:38 AM

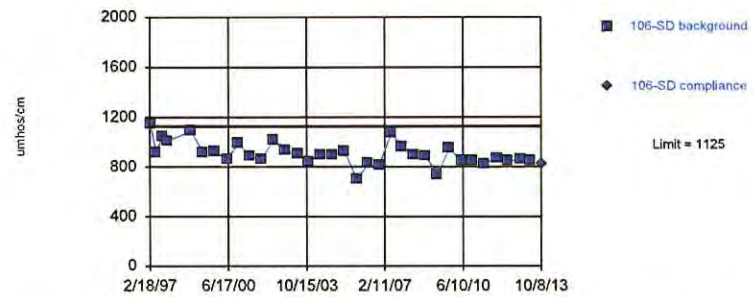
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=909.2, Std. Dev.=94.13, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9602, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 10:38 AM

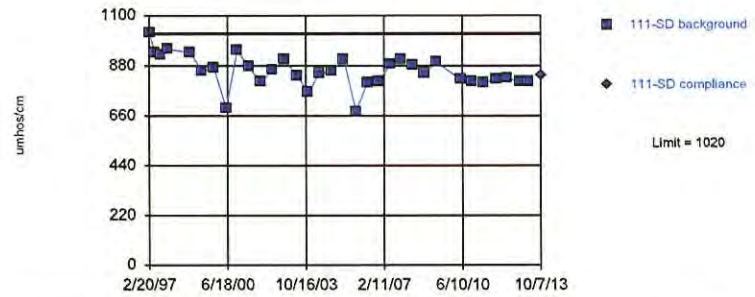
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=856, Std. Dev.=71.34, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9652, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:38 AM

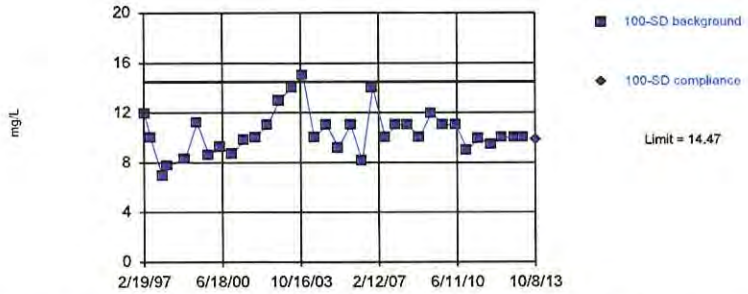
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=10.38, Std. Dev.=1.783, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9453, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:38 AM

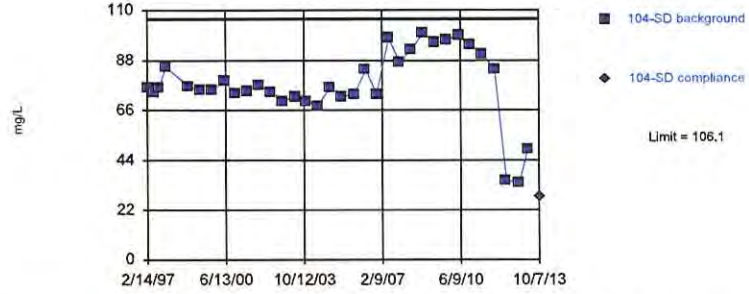
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=6224, Std. Dev.=2194, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9158, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:38 AM

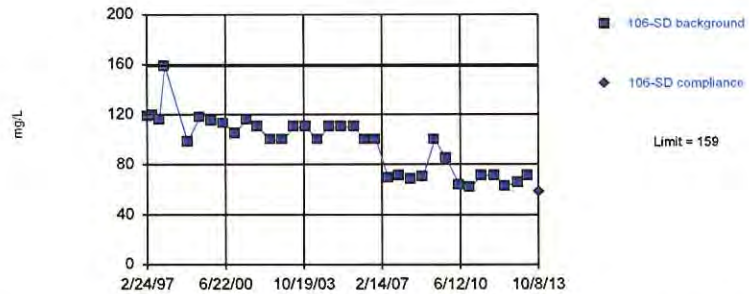
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:38 AM

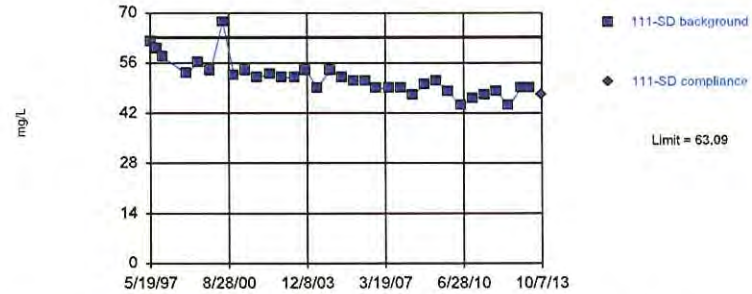
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=51.72, Std. Dev.=4.938, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9149, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 70 (2/25/1997).

Constituent: Sulfate as SO4 Analysis Run 12/17/2013 10:38 AM

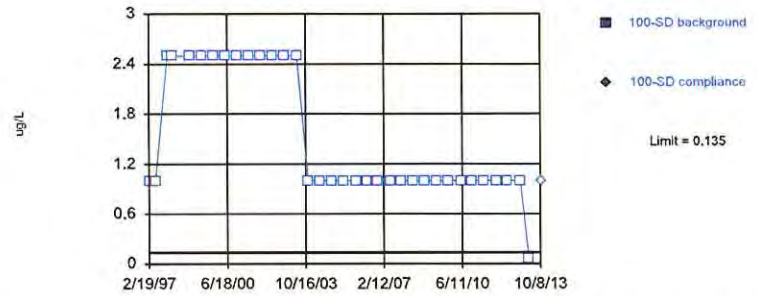
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

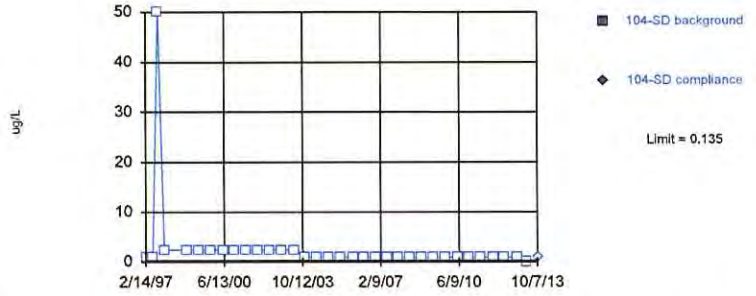
Constituent: Thallium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

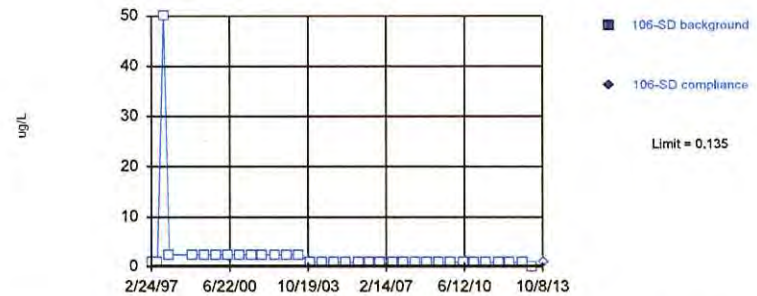
Constituent: Thallium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

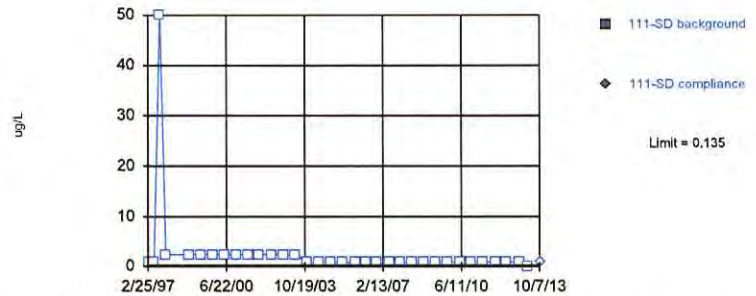
Constituent: Thallium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Thallium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

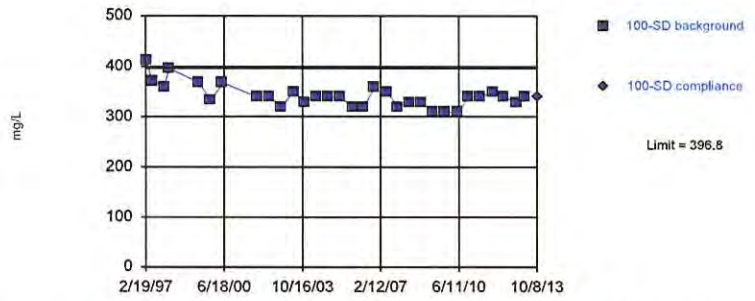
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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=342.2, Std. Dev.=23.53, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.906, critical = 0.902. Kappa = 2.318 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 10:38 AM

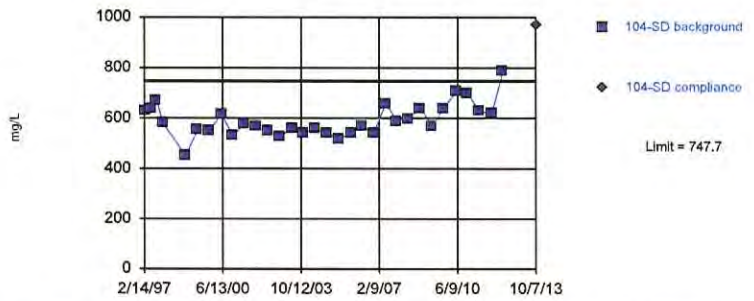
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=593.2, Std. Dev.=66.9, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9462, critical = 0.904. Kappa = 2.31 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: 1800 (11/27/2012); 1300 (4/11/2013).

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:38 AM

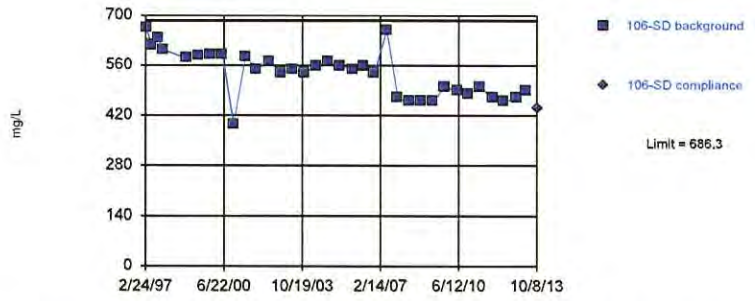
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=538.7, Std. Dev.=64.33, n=34. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9638, critical = 0.908. Kappa = 2.294 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:38 AM

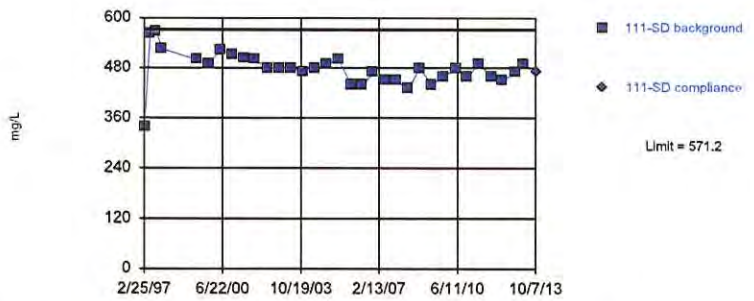
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=477.8, Std. Dev.=40.59, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9241, critical = 0.906. Kappa = 2.302 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 634 (11/12/1998).

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 10:38 AM

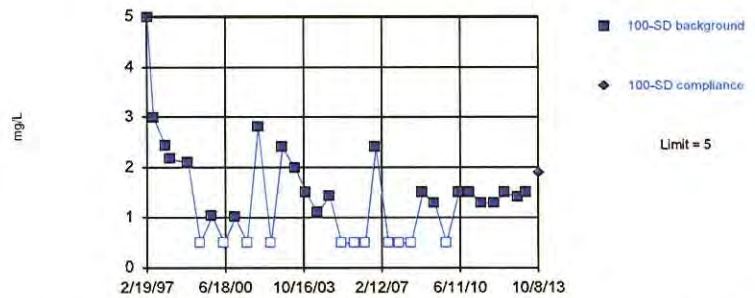
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 32.35% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

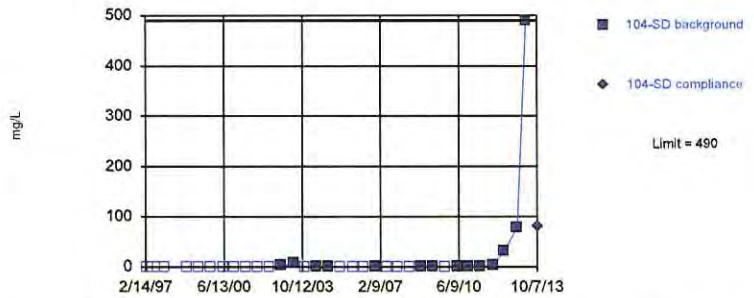
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

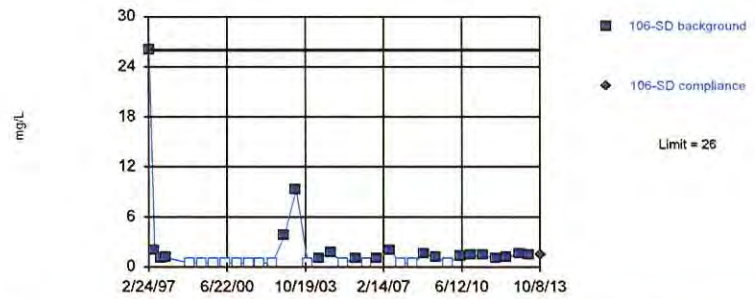
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 41.18% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

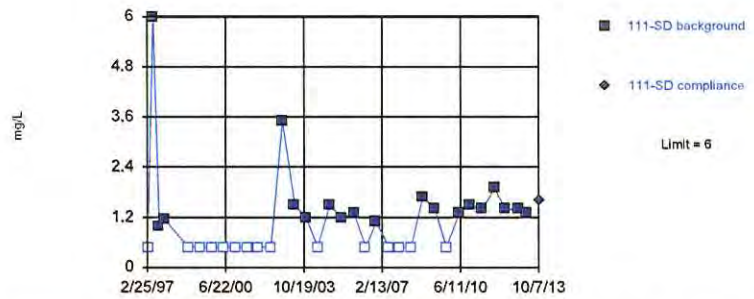
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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. 44.12% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

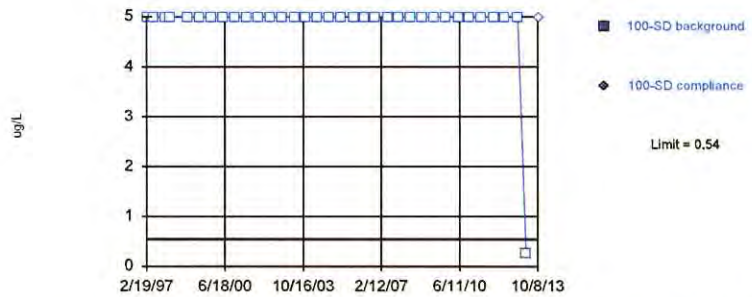
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

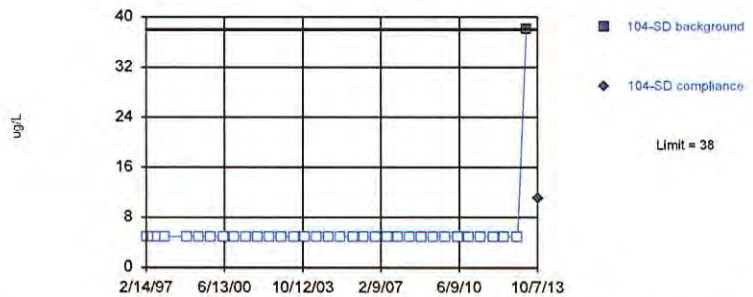
Constituent: Vanadium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 97.06% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

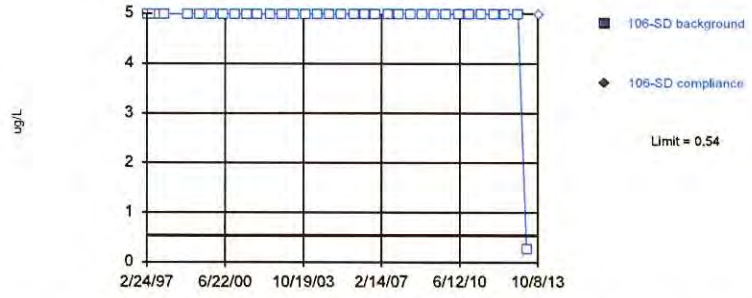
Constituent: Vanadium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

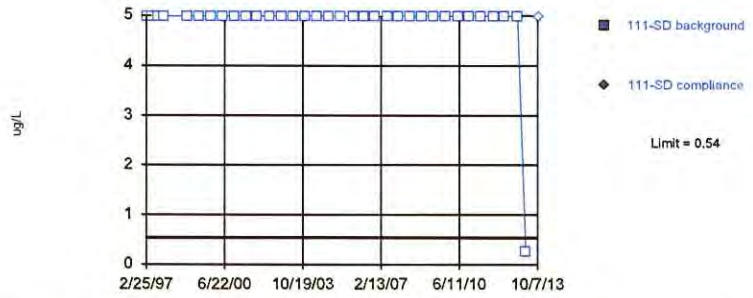
Constituent: Vanadium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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%. All background values (n = 34) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Vanadium Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

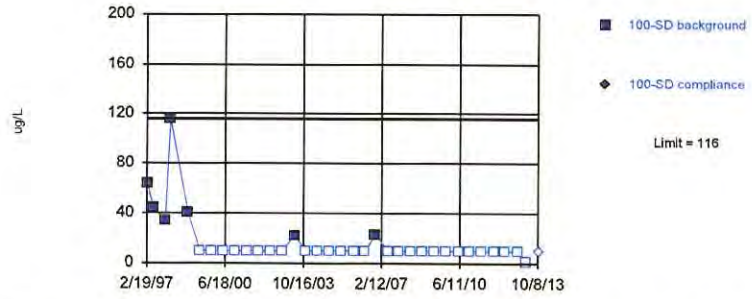
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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

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 34 background values. 79.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

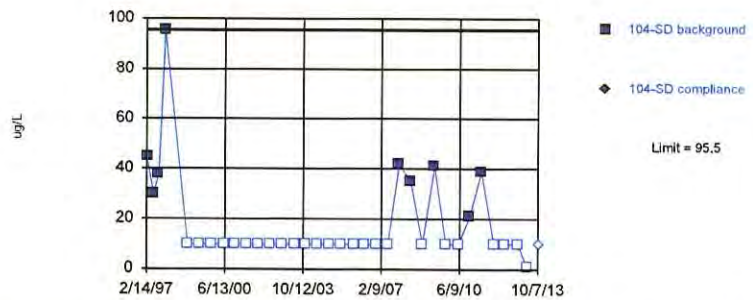
Constituent: Zinc Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 73.53% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

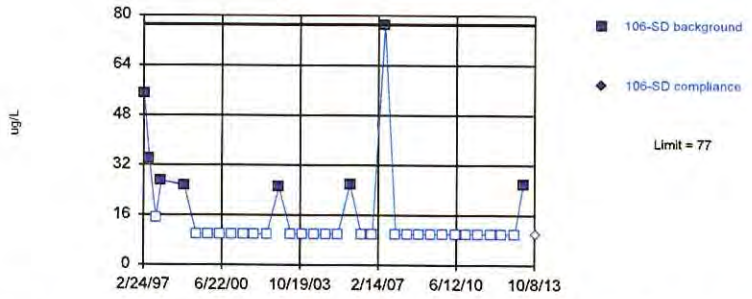
Constituent: Zinc Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

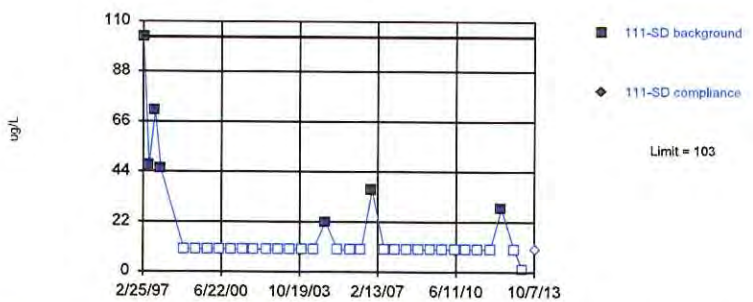
Constituent: Zinc Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 34 background values. 79.41% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

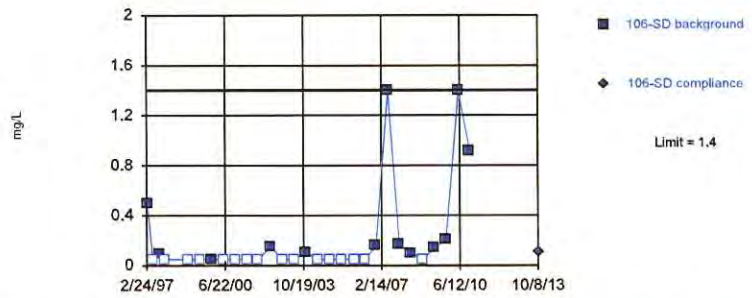
Constituent: Zinc Total Analysis Run 12/17/2013 10:38 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, 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 29 background values. 55.17% NDs. Well-constituent pair annual alpha = 0.00434. Individual comparison alpha = 0.002172 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

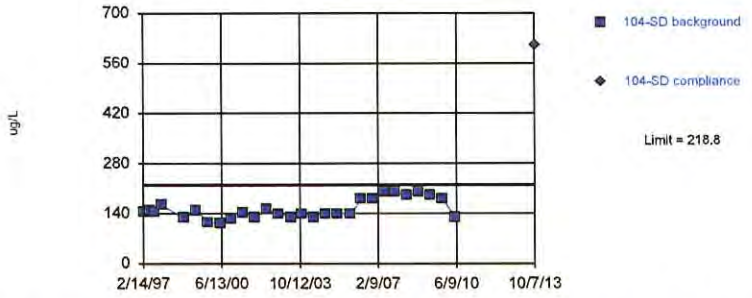
Constituent: Ammonia as N Analysis Run 12/17/2013 12:14 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=12.29, Std. Dev.=1.062, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8976, critical = 0.896. Kappa = 2.352 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

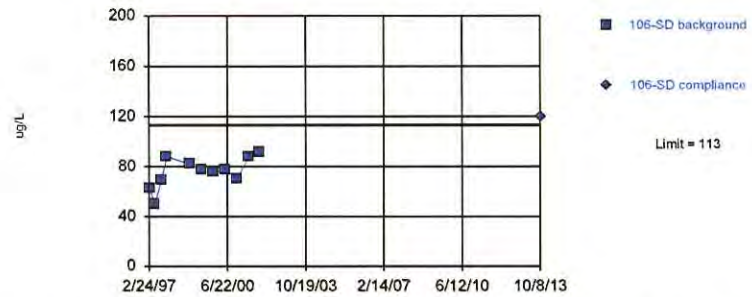
Constituent: Barium Total Analysis Run 12/17/2013 12:14 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=75.8, Std. Dev.=12.33, n=11. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9524, critical = 0.85. Kappa = 3.013 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Dixon's Outlier Test was performed on the background data. No background outliers were found.

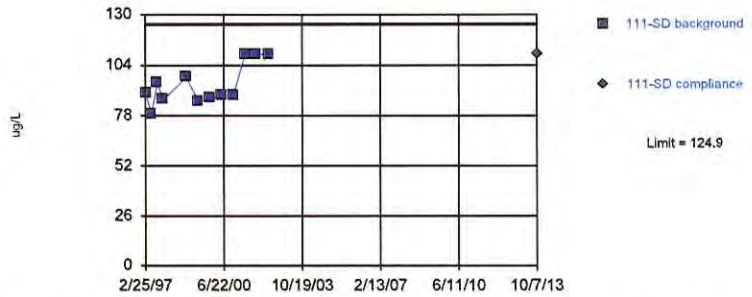
Constituent: Barium Total Analysis Run 12/17/2013 12:15 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=94.03, Std. Dev.=10.7, n=12. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8608, critical = 0.859. Kappa = 2.89 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

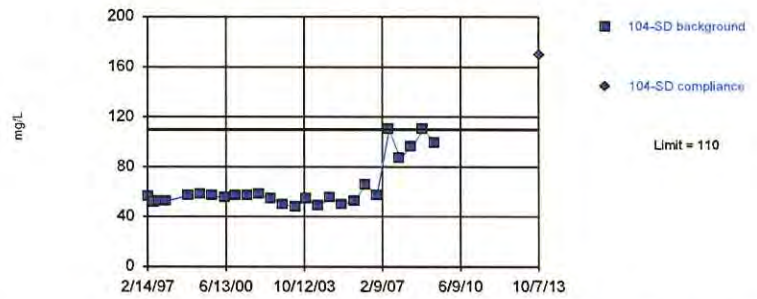
Constituent: Barium Total Analysis Run 12/17/2013 12:16 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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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 = 0.005327. Individual comparison alpha = 0.002667 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

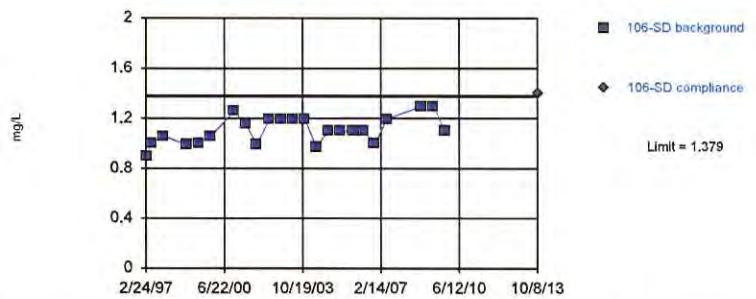
Constituent: Chloride Analysis Run 12/17/2013 12:16 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.108, Std. Dev.=0.1113, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9504, critical = 0.881. Kappa = 2.432 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. Two background outliers were removed: <0.25 (8/28/1997); 2.24 (5/23/2000).

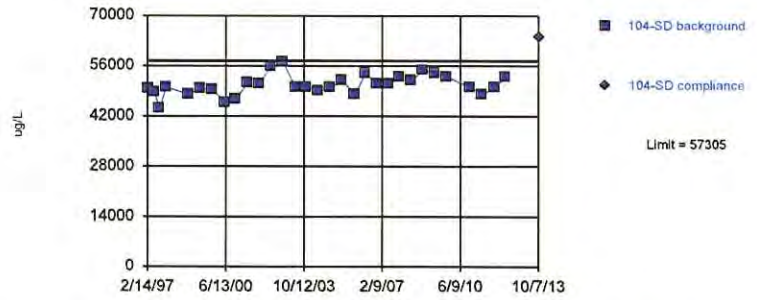
Constituent: Fluoride Analysis Run 12/17/2013 12:17 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50655, Std. Dev.=2869, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9803, critical = 0.902. Kappa = 2.318 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Rosner's Outlier Test was performed on the background data. One background outlier was removed: 37000 (5/20/2010).

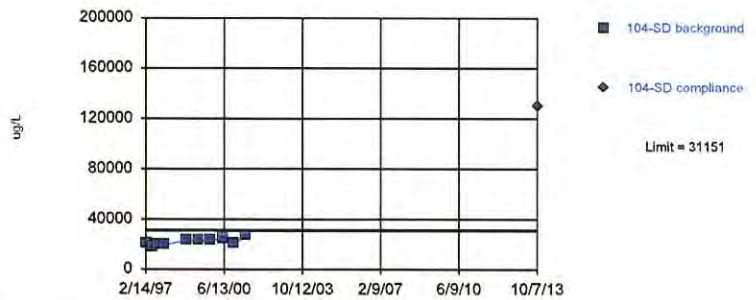
Constituent: Magnesium Total Analysis Run 12/17/2013 12:17 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=22220, Std. Dev.=2849, n=10. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9397, critical = 0.842. Kappa = 3.135 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. The EPA 1989 Outlier Test was performed on the background data. No background outliers were found.

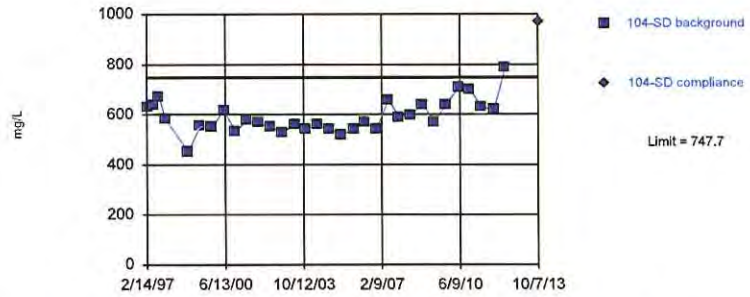
Constituent: Sodium Total Analysis Run 12/17/2013 12:17 PM View: 1
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=593.2, Std. Dev.=66.9, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9462, critical = 0.904. Kappa = 2.31 (c=34, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. 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 12/17/2013 12:18 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

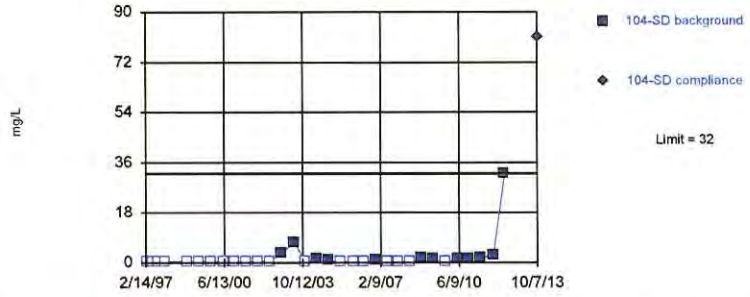
Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

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 = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated.

Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 12:18 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

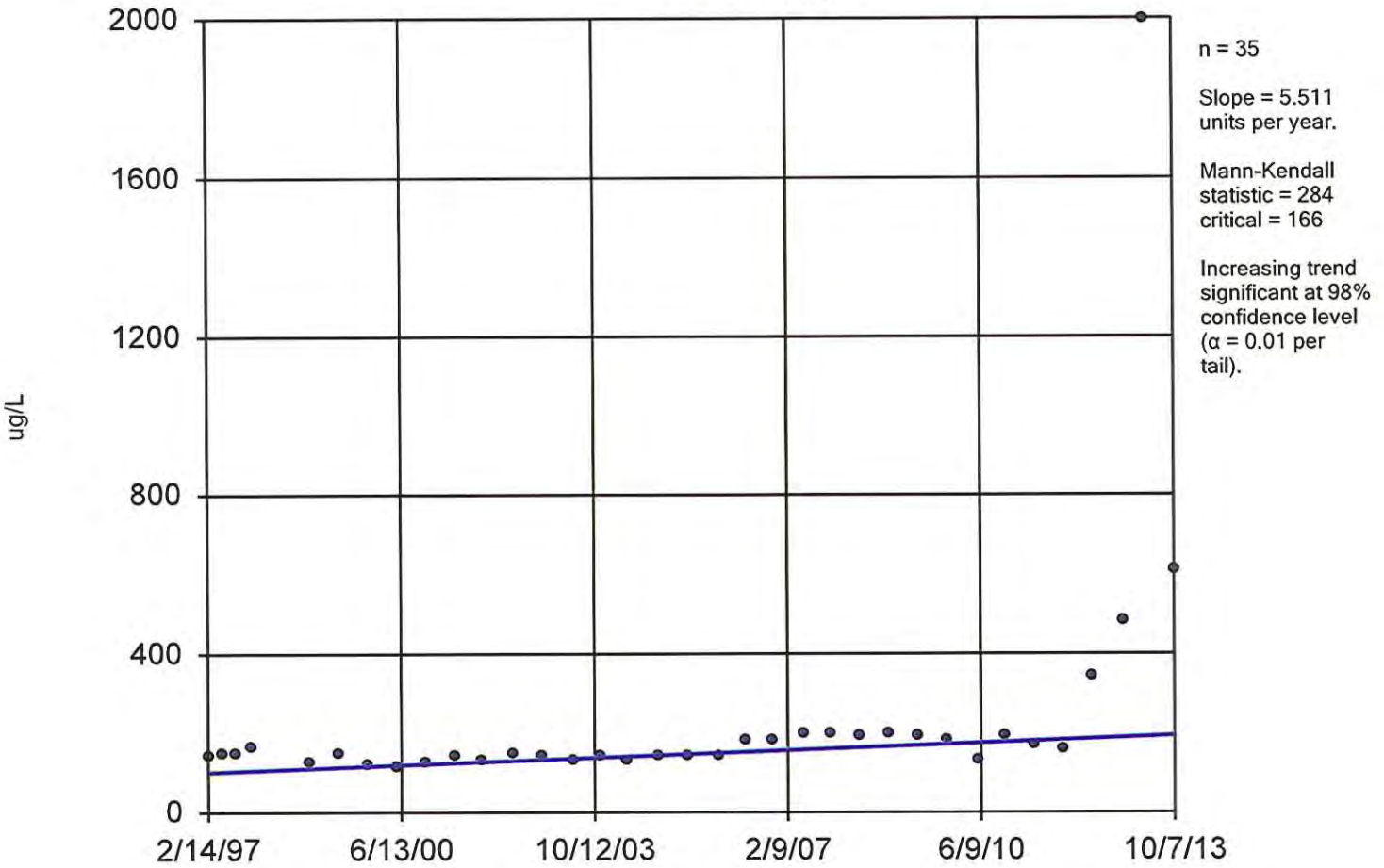
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TREND EVALUATION OF EXCEEDING CONSTITUENTS
SALEM FORMATION

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates. UG

Sen's Slope Estimator

104-SD (bg)



Constituent: Barium Total Analysis Run 12/17/2013 3:39 PM View: 1

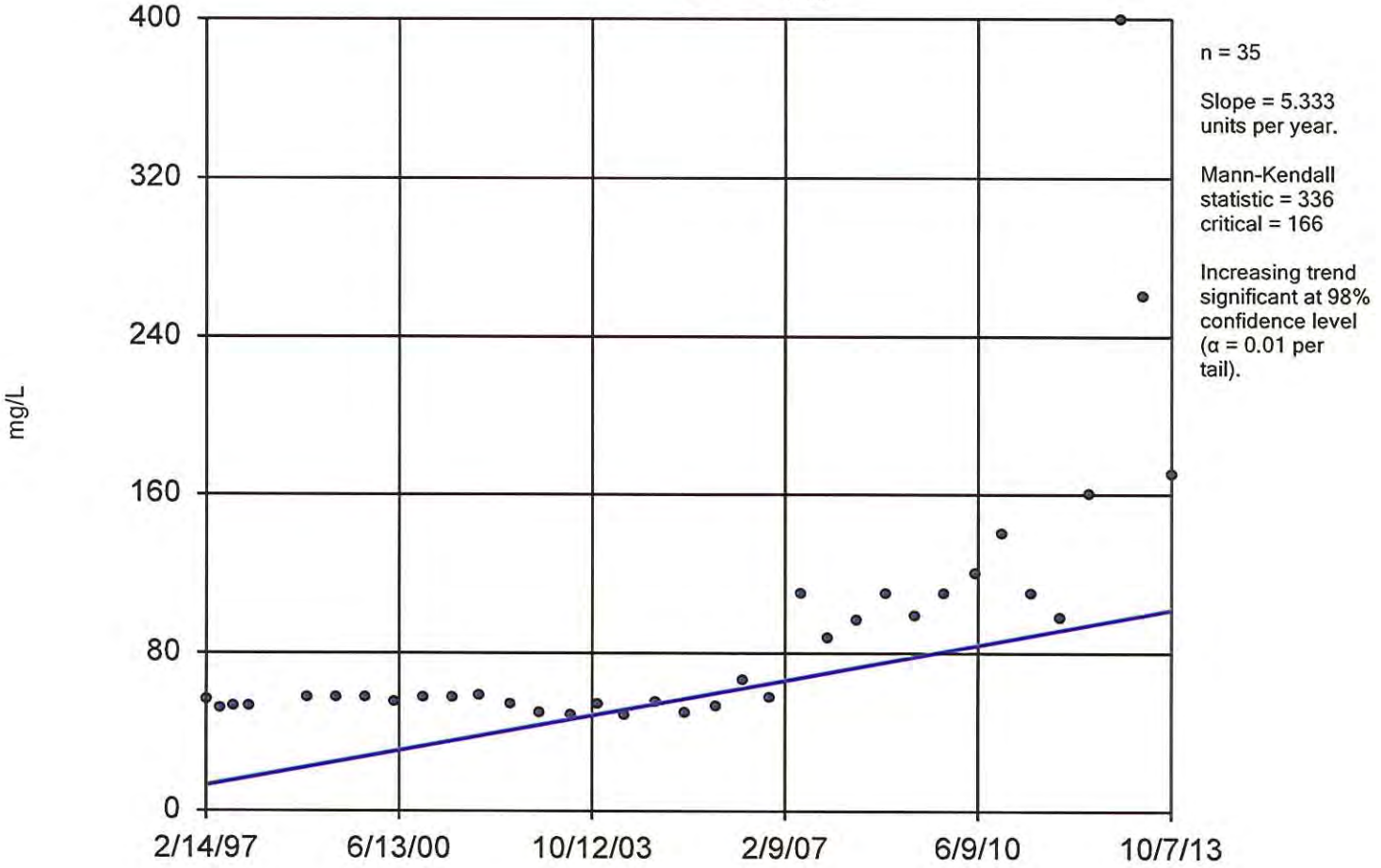
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Sen's Slope Estimator

104-SD (bg)



Constituent: Chloride Analysis Run 12/17/2013 3:39 PM View: 1

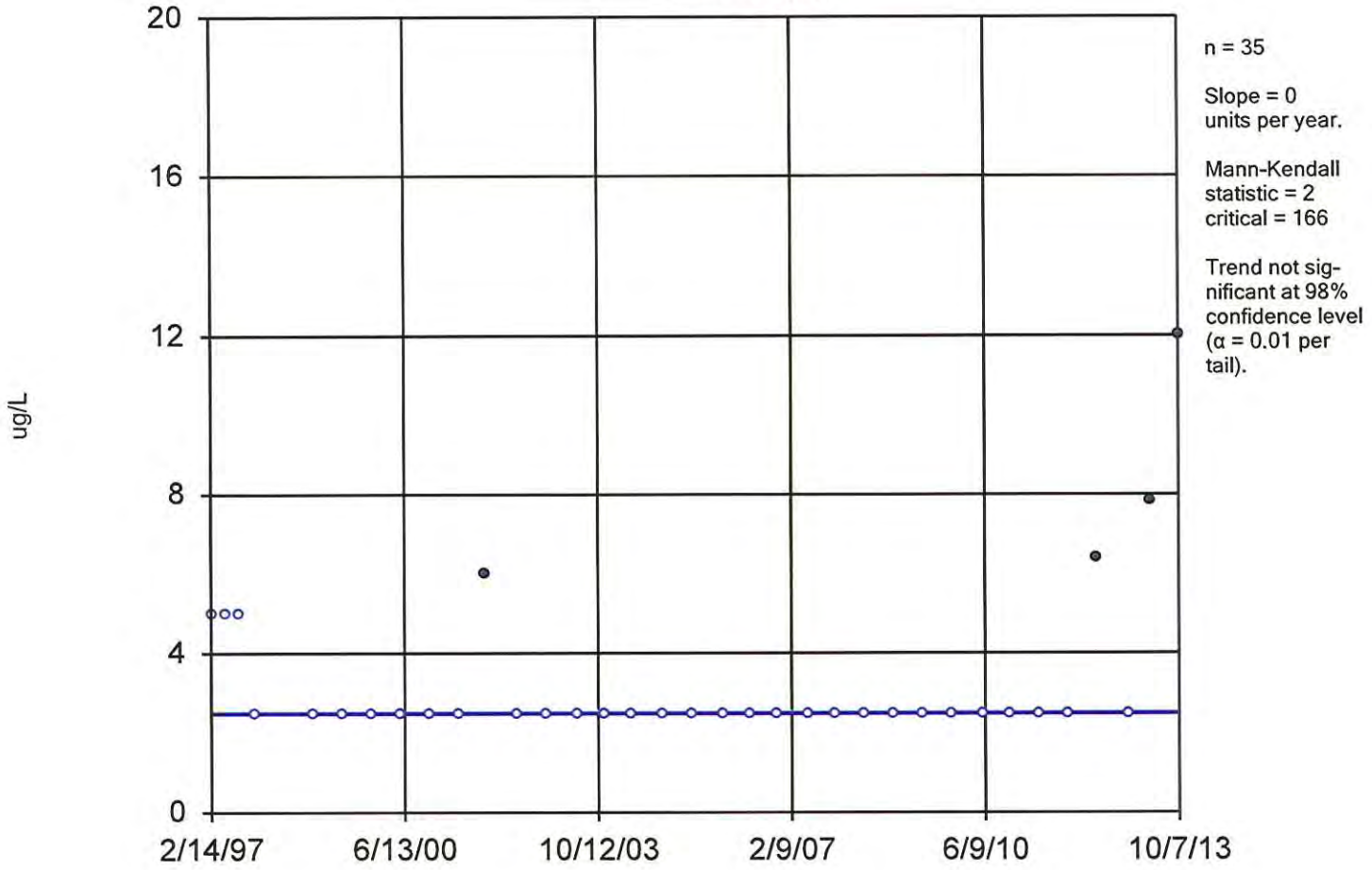
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)



Constituent: Chromium Total Analysis Run 12/17/2013 3:39 PM View: 1

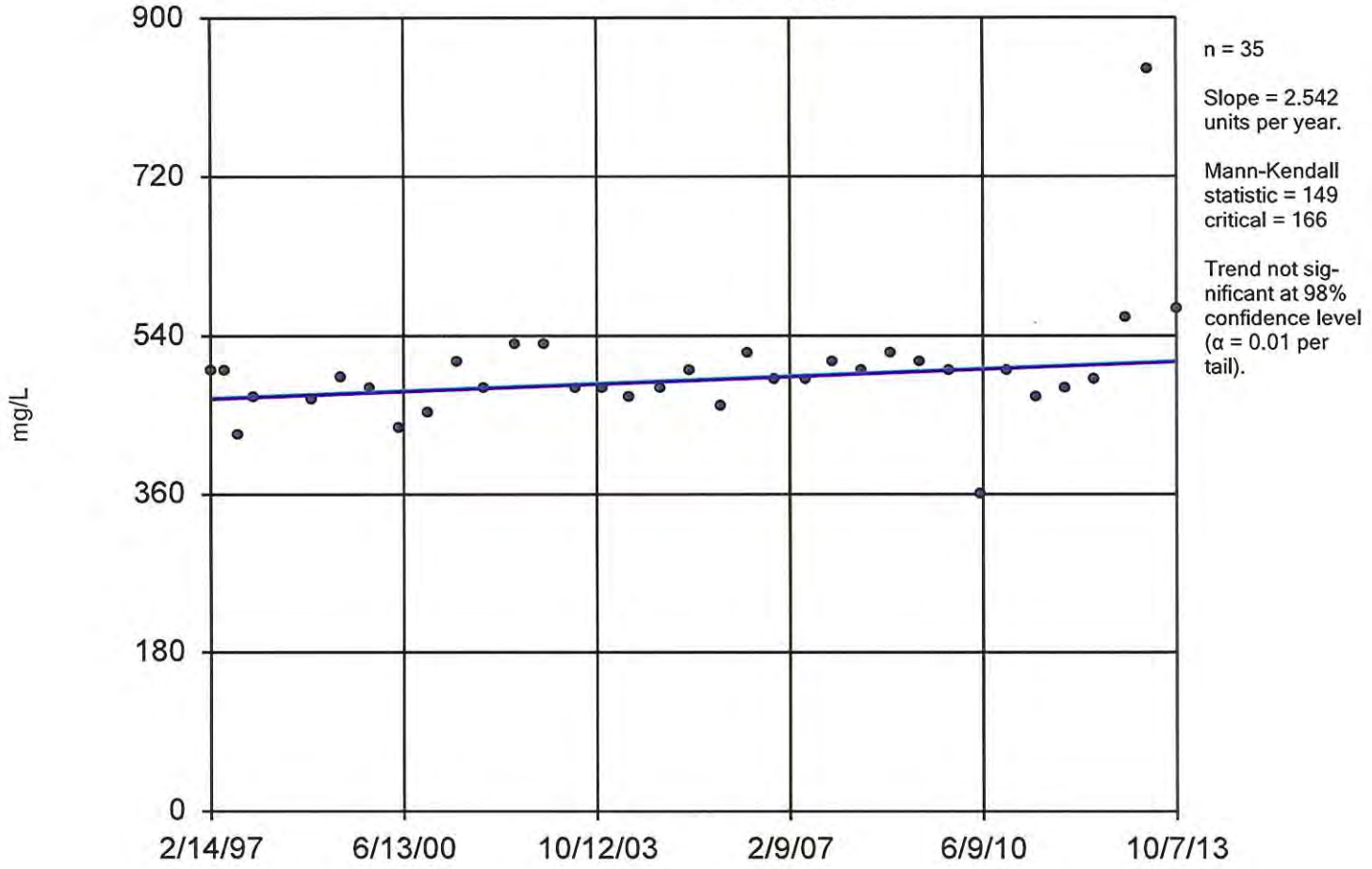
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates. UG

Sen's Slope Estimator

104-SD (bg)



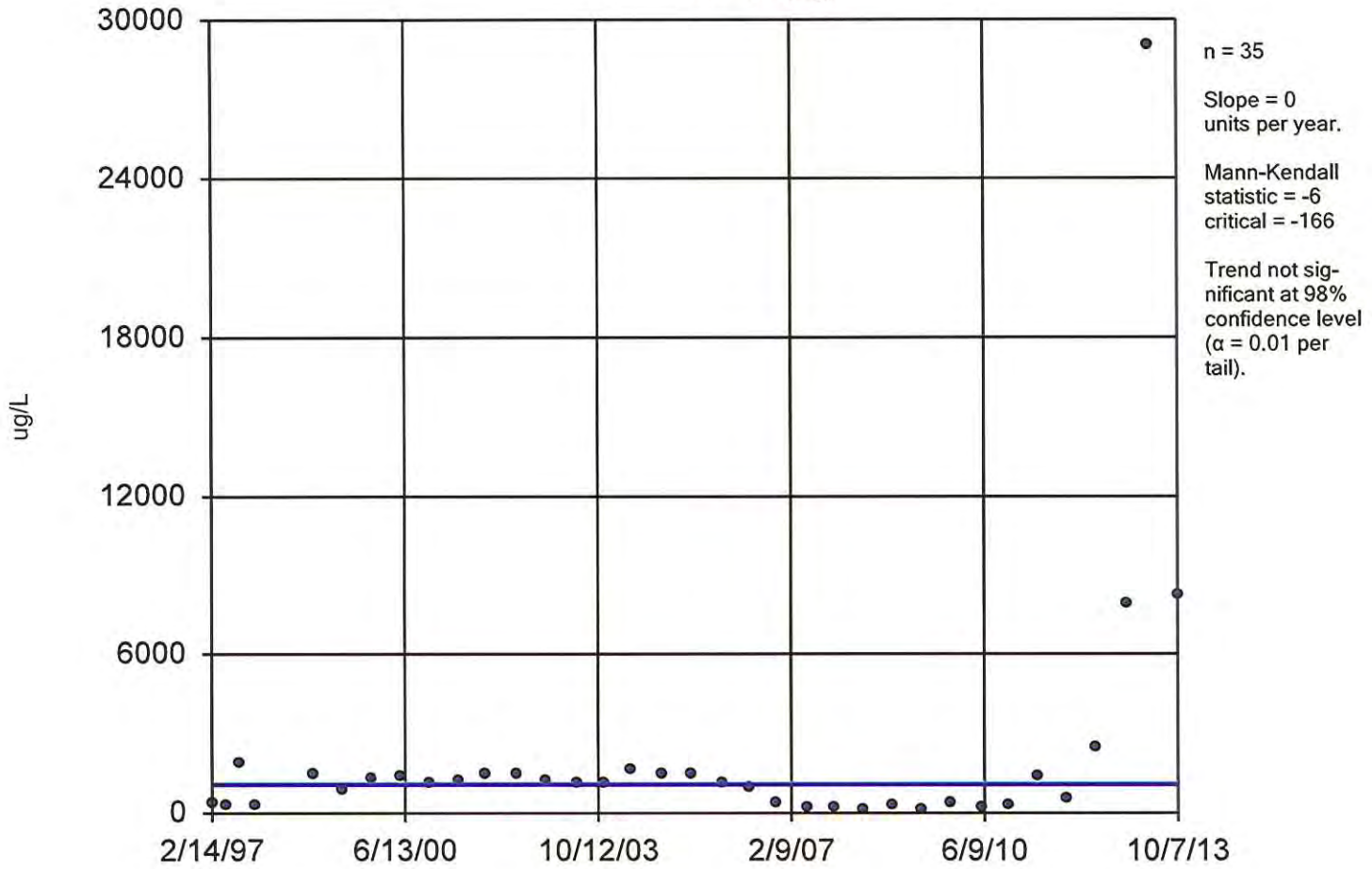
Constituent: Hardness Total Analysis Run 12/17/2013 3:40 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

HERST & ASSOCIATES, INC.®

Sen's Slope Estimator

104-SD (bg)



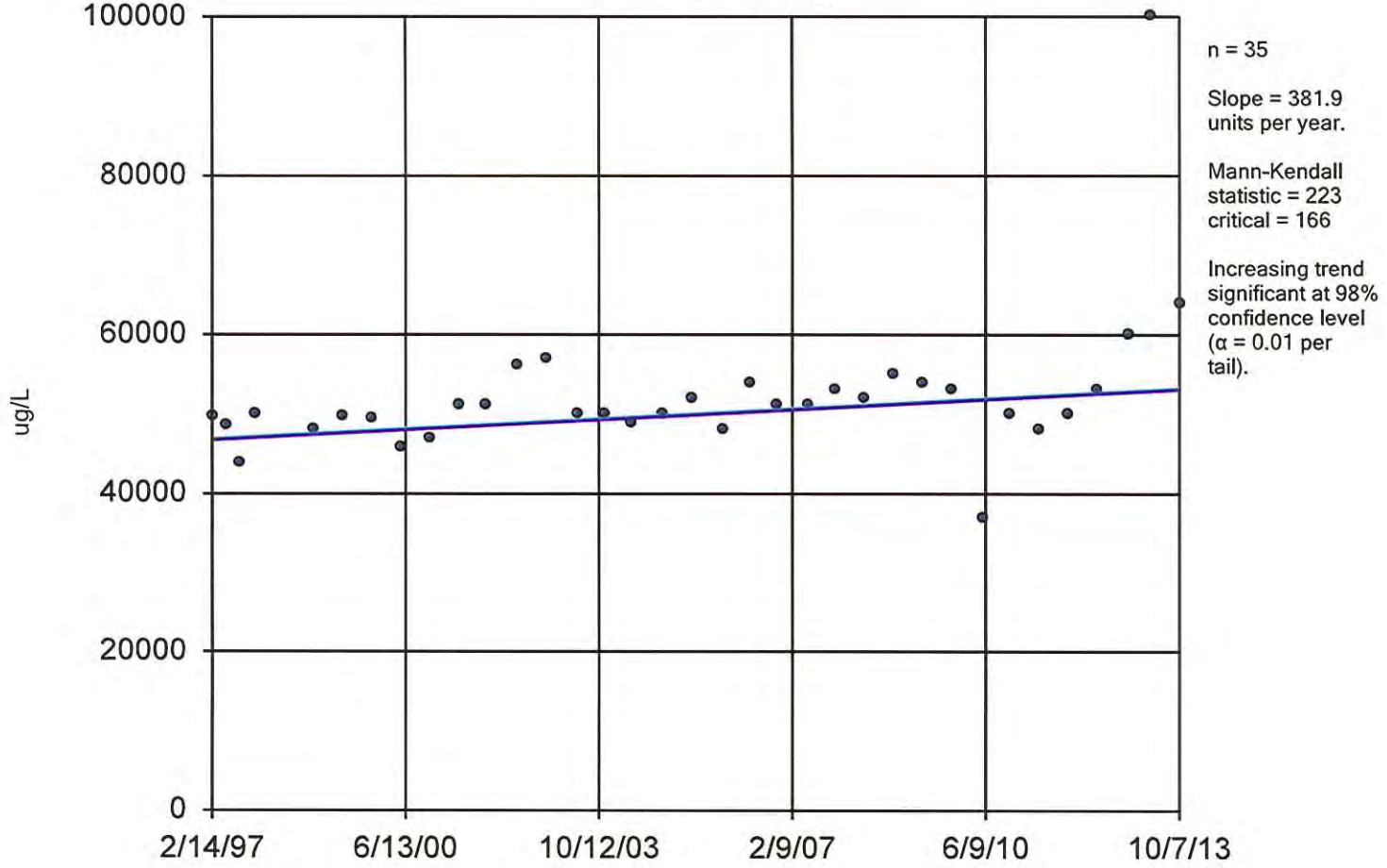
Constituent: Iron Total Analysis Run 12/17/2013 3:40 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

104-SD (bg)



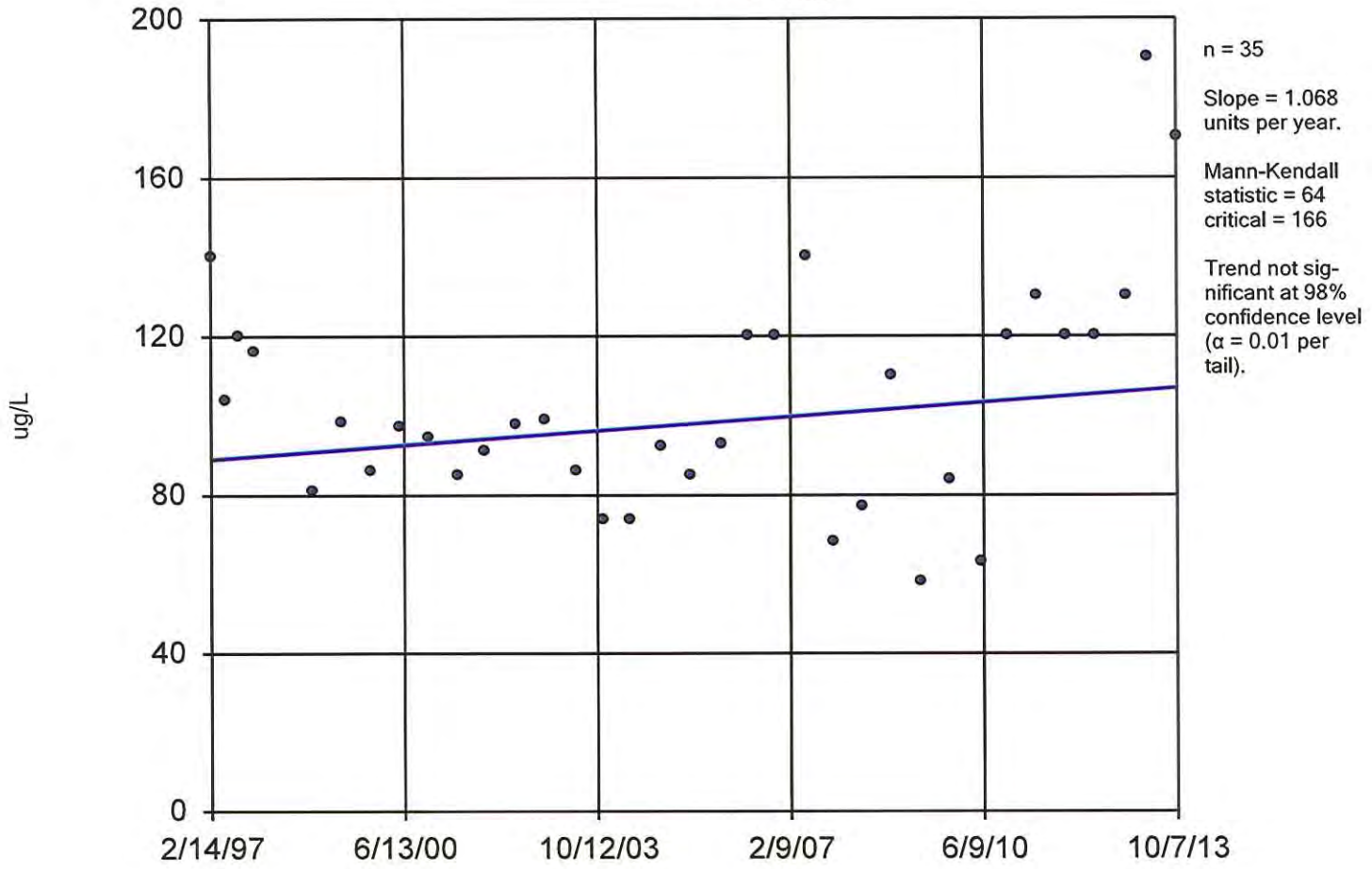
Constituent: Magnesium Total Analysis Run 12/17/2013 3:40 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

104-SD (bg)



Constituent: Manganese Total Analysis Run 12/17/2013 3:40 PM View: 1

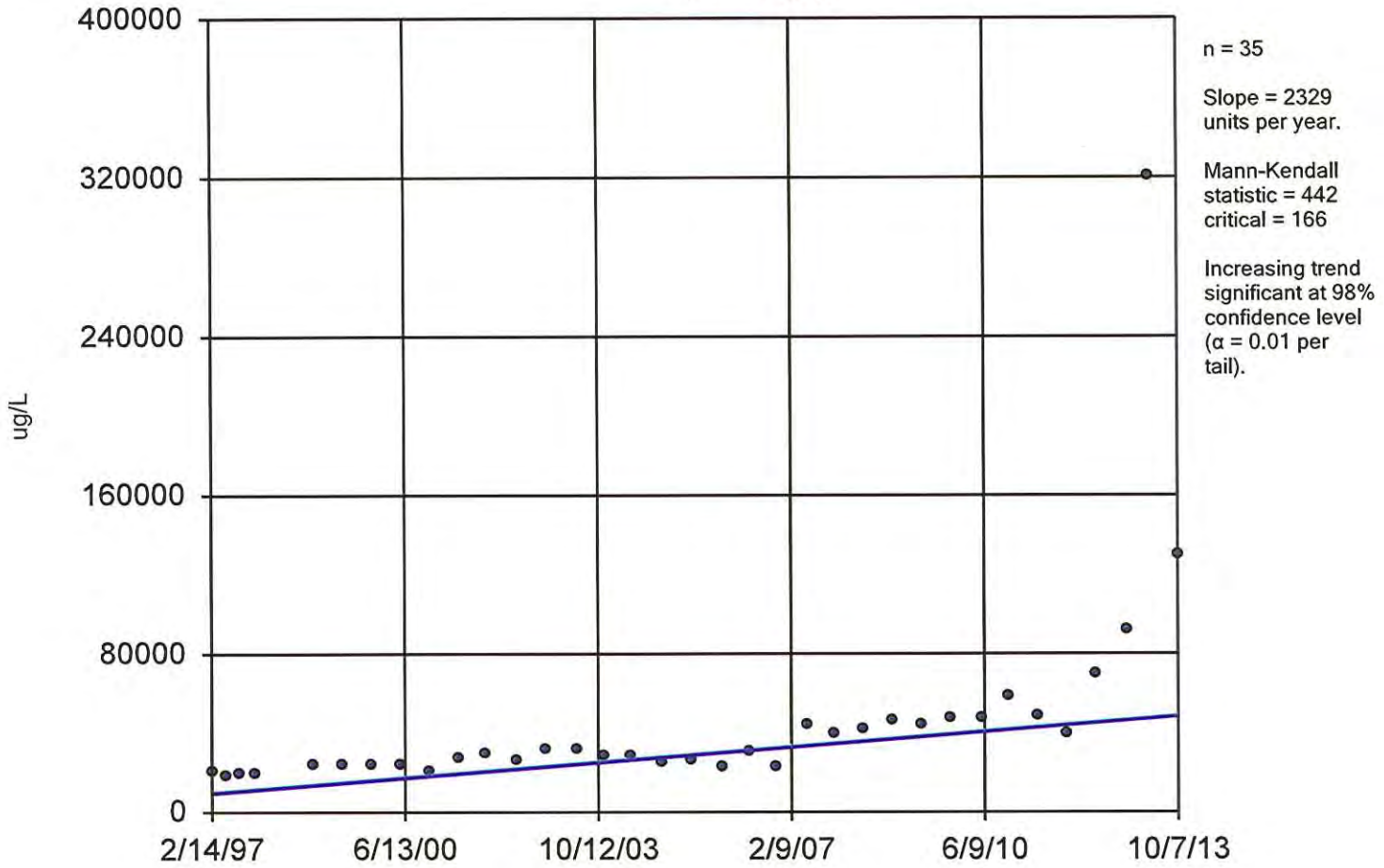
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

104-SD (bg)



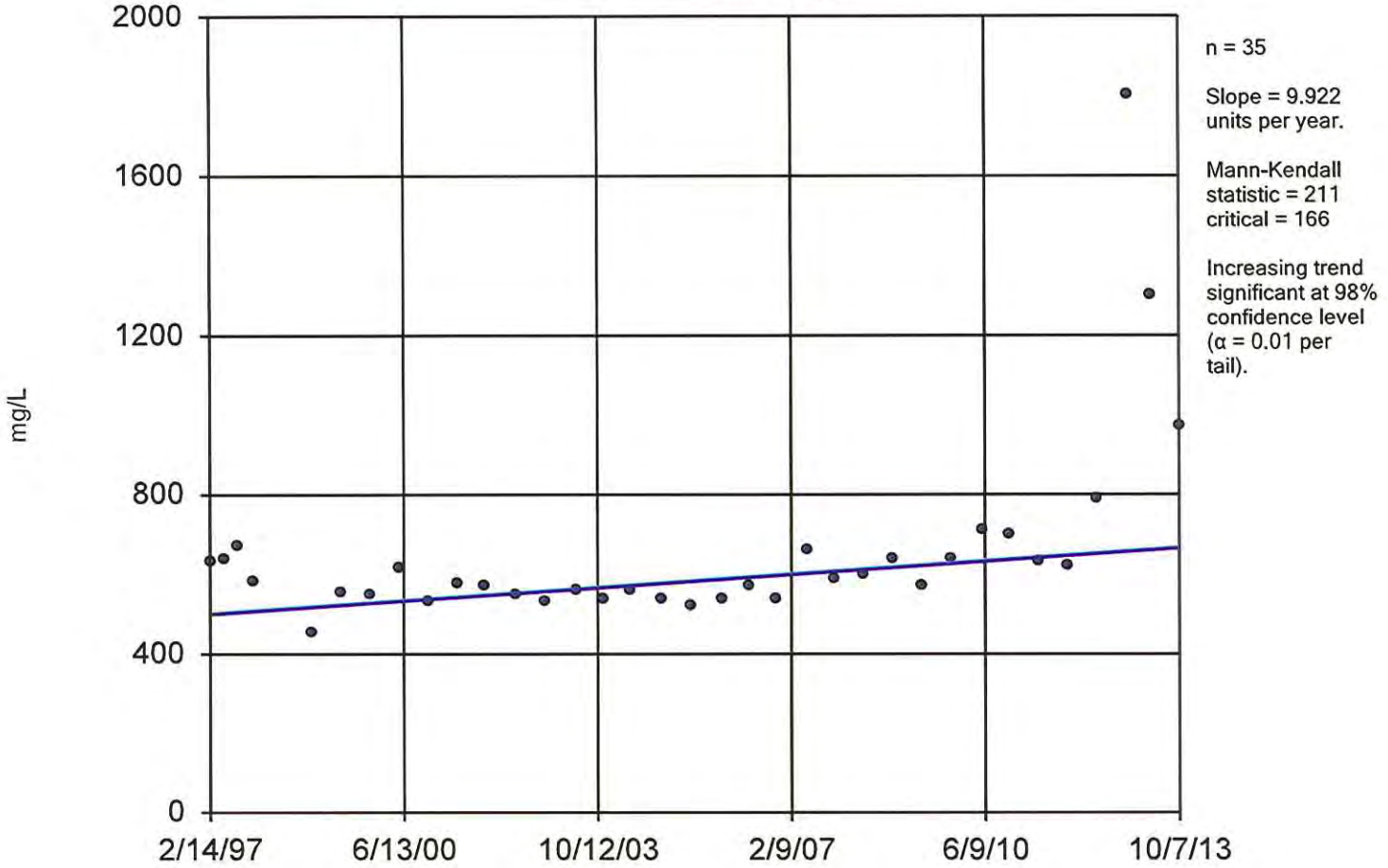
Constituent: Sodium Total Analysis Run 12/17/2013 3:40 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

104-SD (bg)



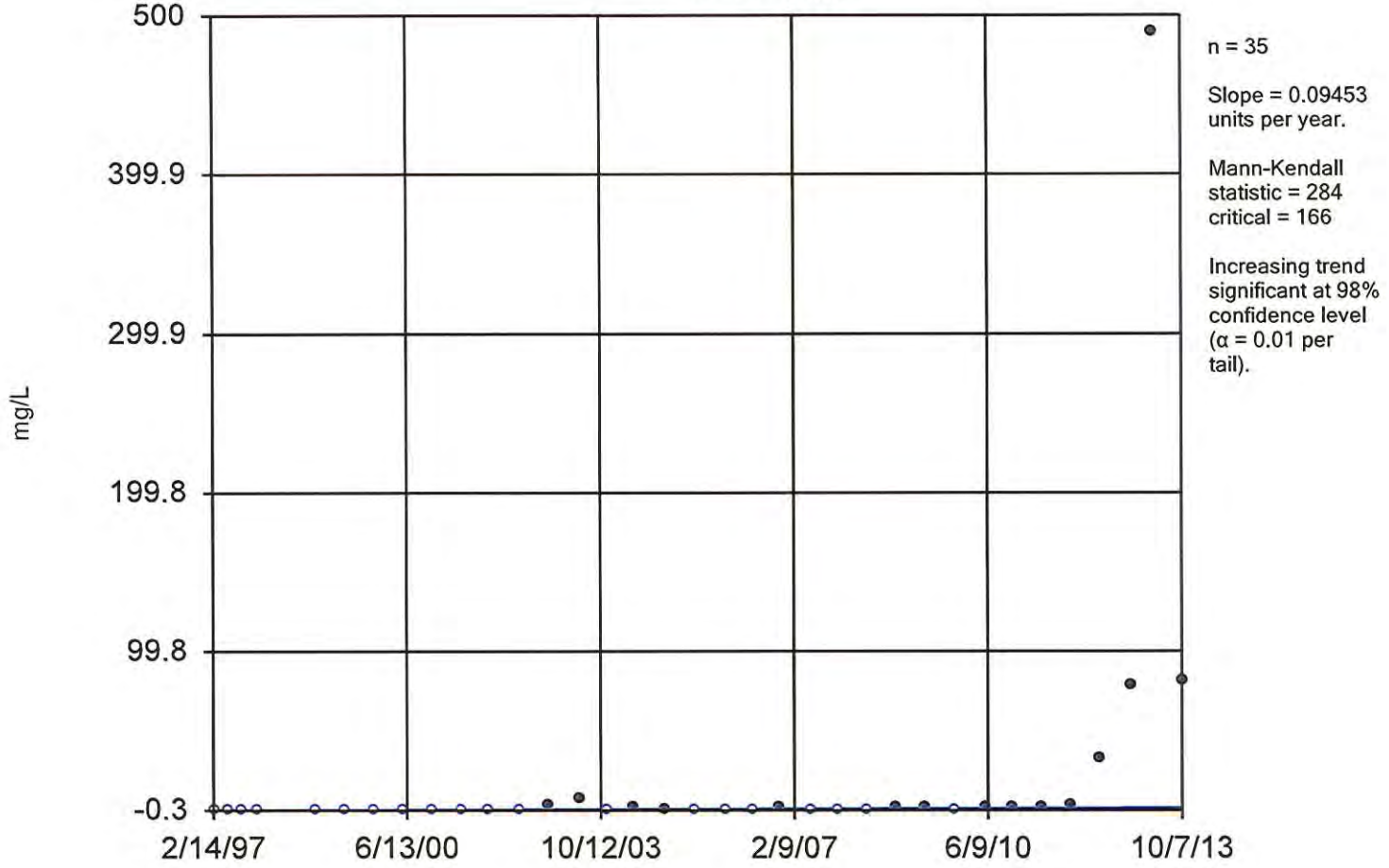
Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 3:41 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

104-SD (bg)



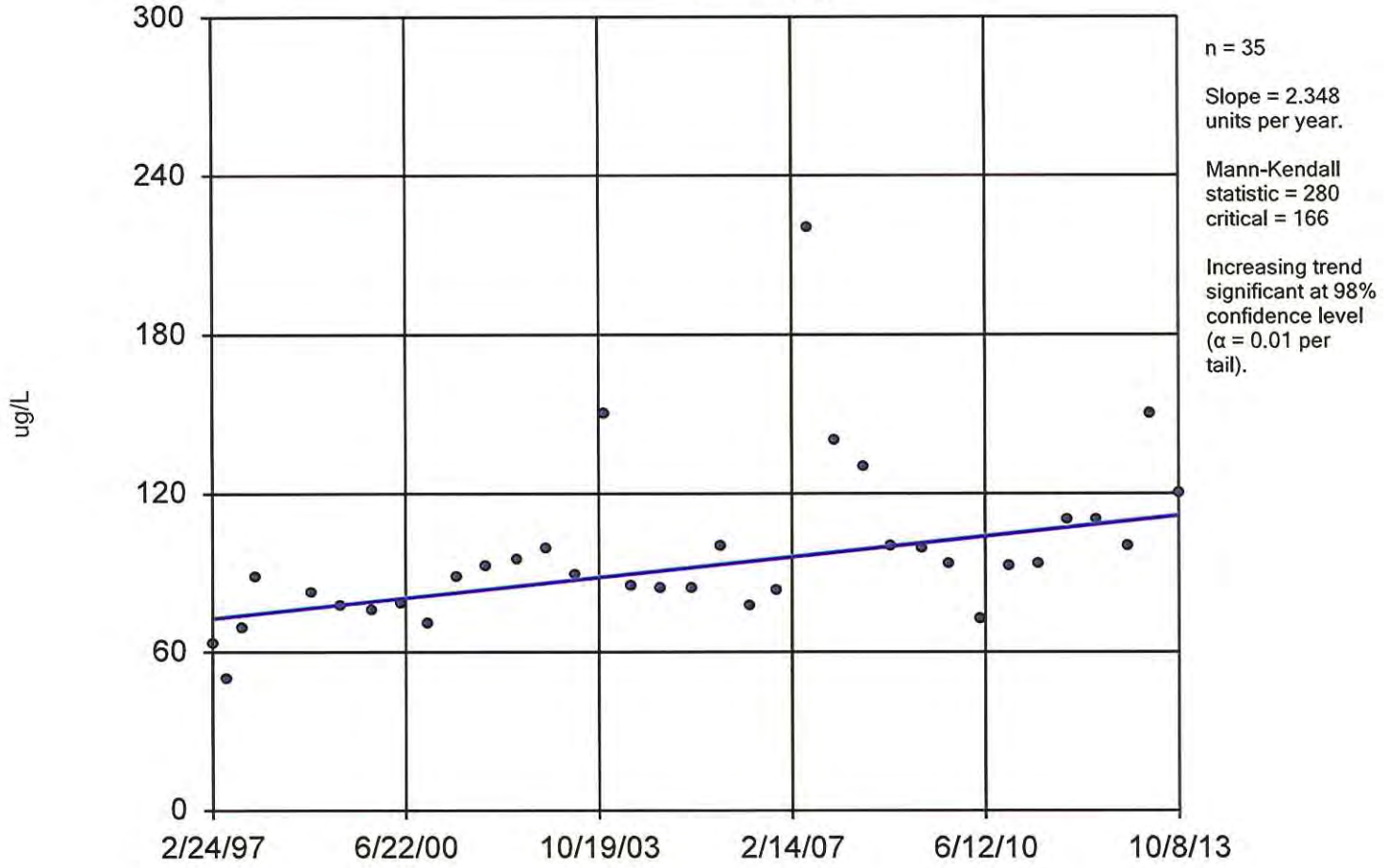
Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 3:41 PM View: 1

Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Sen's Slope Estimator

106-SD (bg)



Constituent: Barium Total Analysis Run 12/17/2013 3:41 PM View: 1

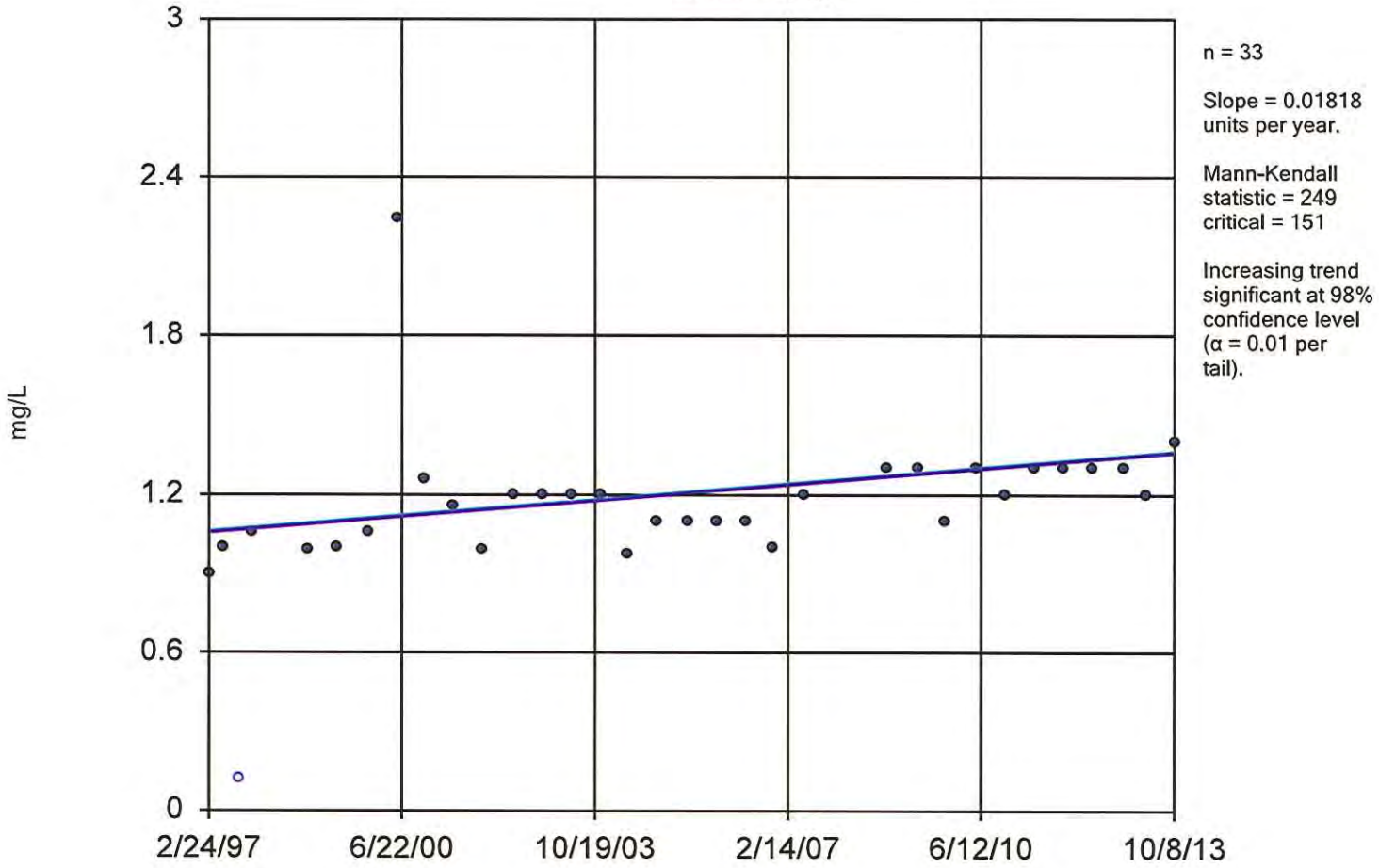
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

Sen's Slope Estimator

106-SD (bg)



Constituent: Fluoride Analysis Run 12/17/2013 3:41 PM View: 1

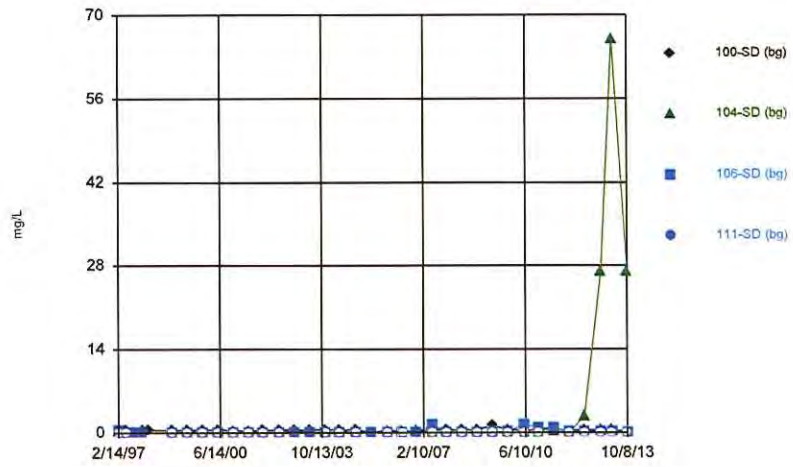
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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TIME SERIES TREND ANALYSIS
SALEM FORMATION

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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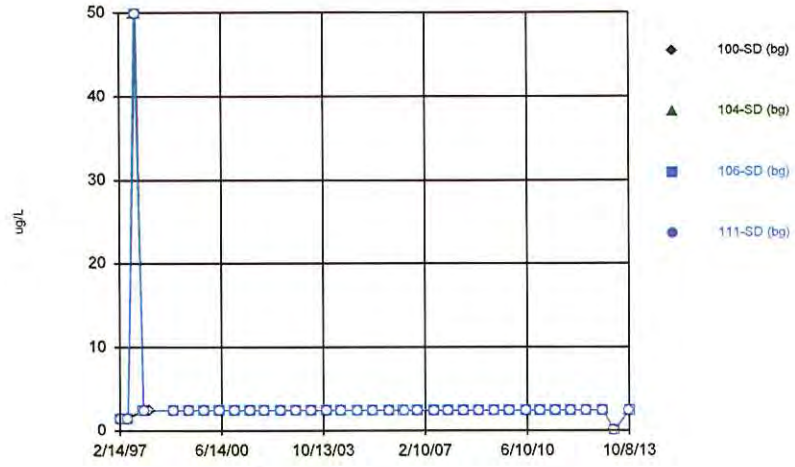
Time Series



Constituent: Ammonia as N Analysis Run 12/17/2013 11:52 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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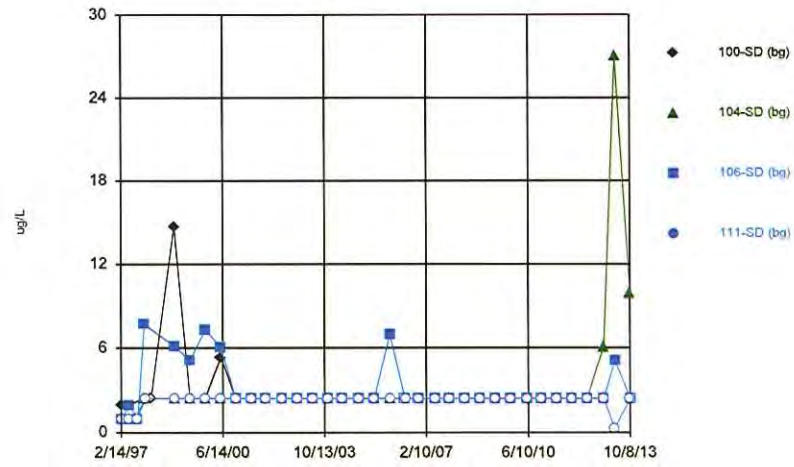
Time Series



Constituent: Antimony Total Analysis Run 12/17/2013 11:52 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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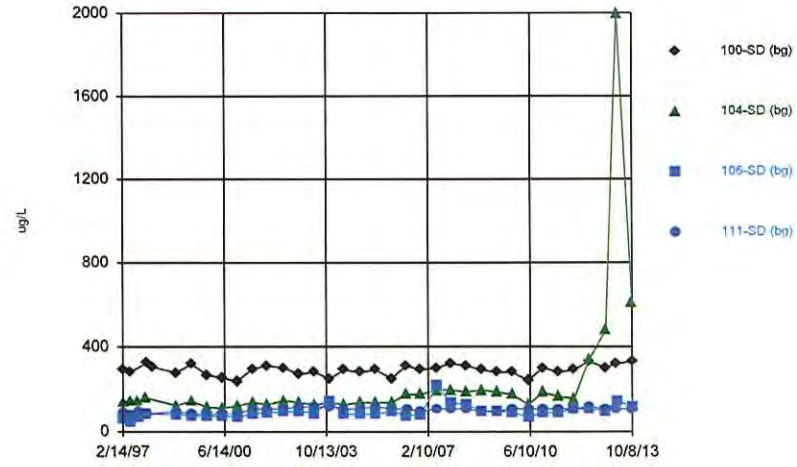
Time Series



Constituent: Arsenic Total Analysis Run 12/17/2013 11:52 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

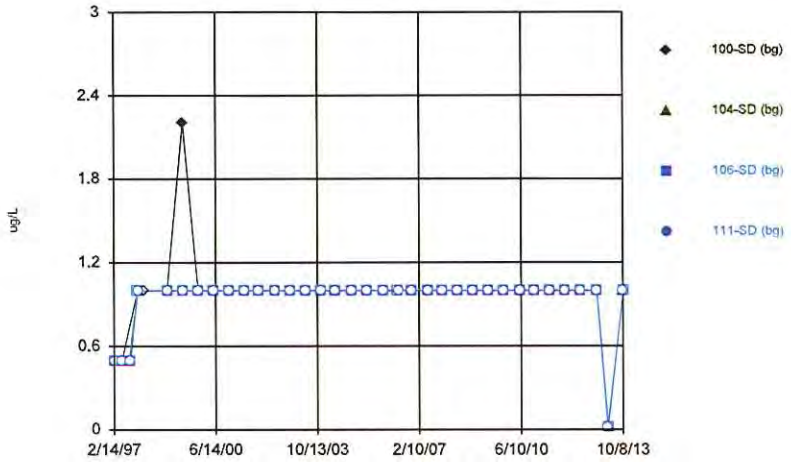
Time Series



Constituent: Barium Total Analysis Run 12/17/2013 11:52 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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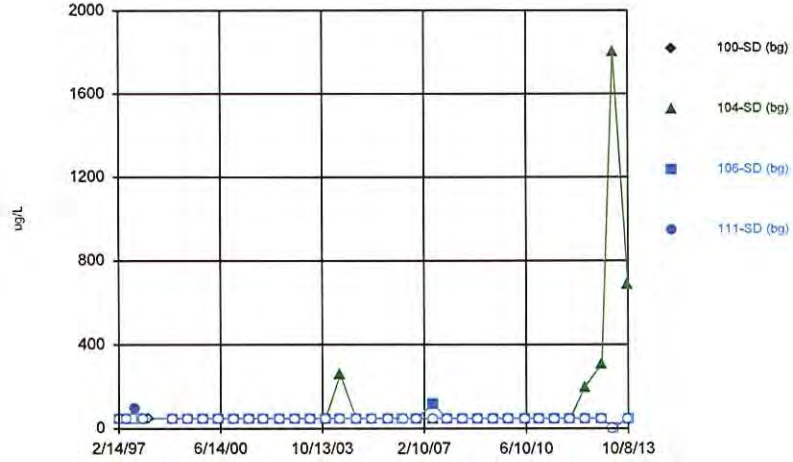
Time Series



Constituent: Beryllium Total Analysis Run 12/17/2013 11:52 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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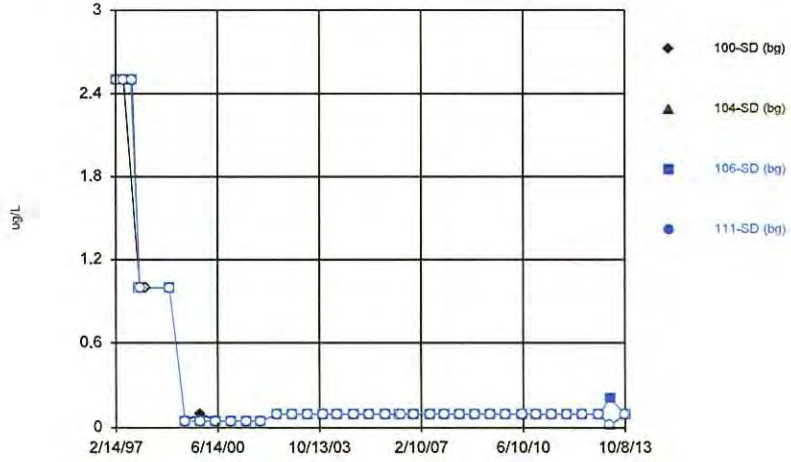
Time Series



Constituent: Boron Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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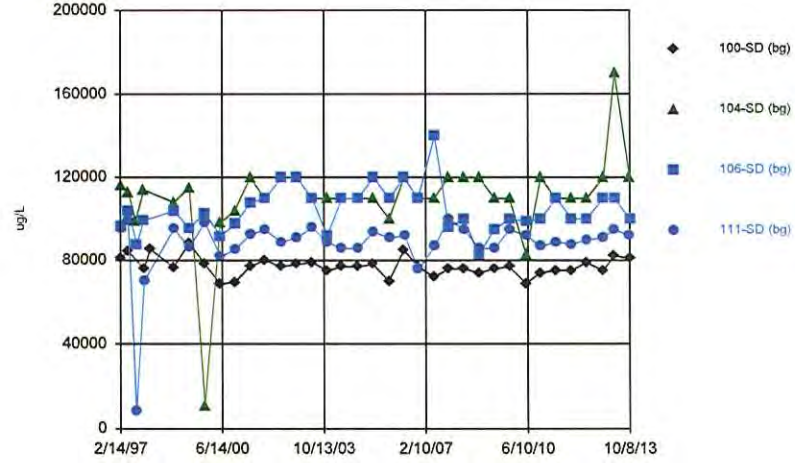
Time Series



Constituent: Cadmium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Time Series

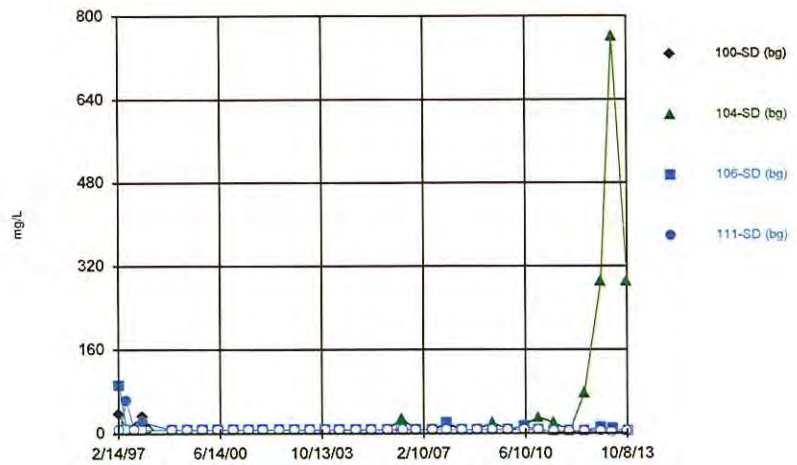


Constituent: Calcium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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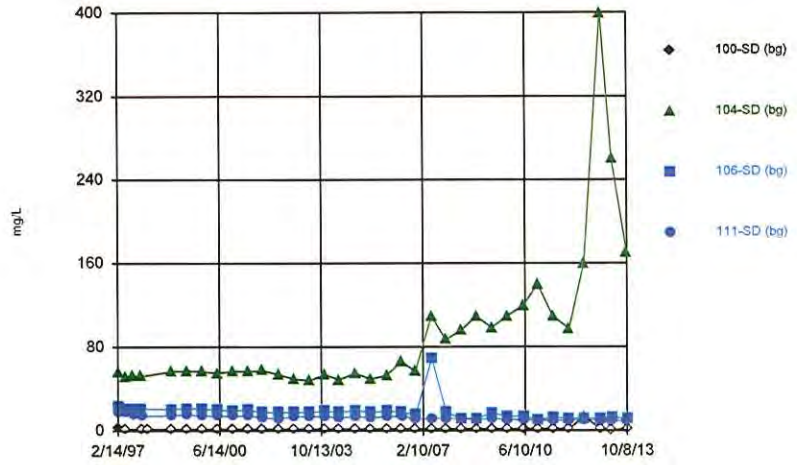
Time Series



Constituent: Chemical Oxygen Demand [COD] Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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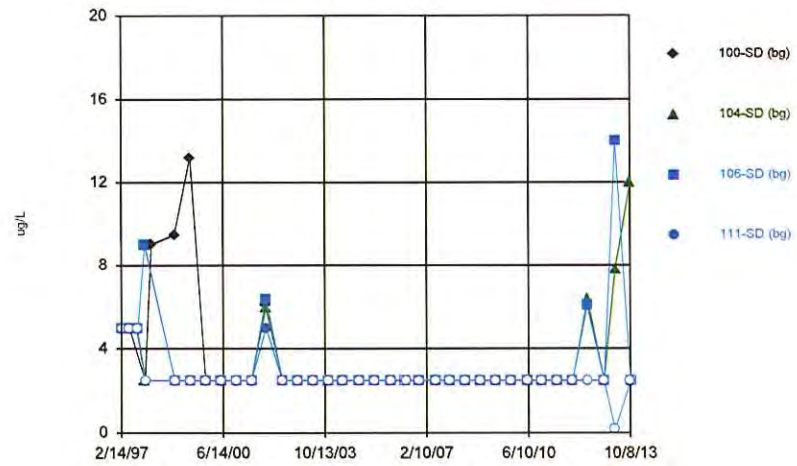
Time Series



Constituent: Chloride Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

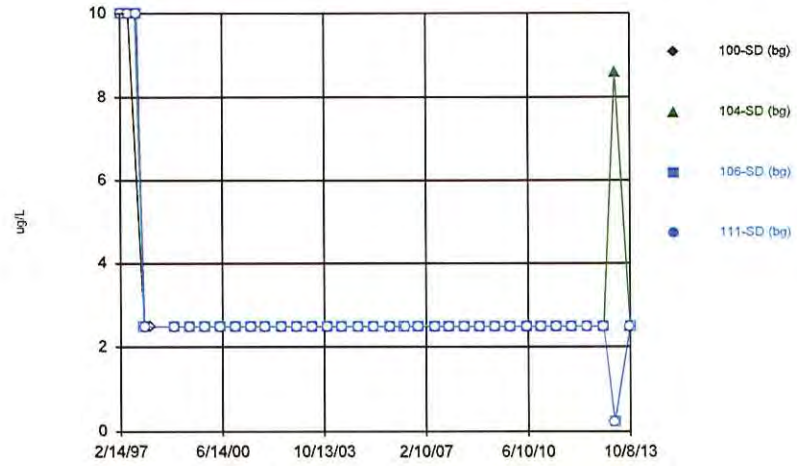
Time Series



Constituent: Chromium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

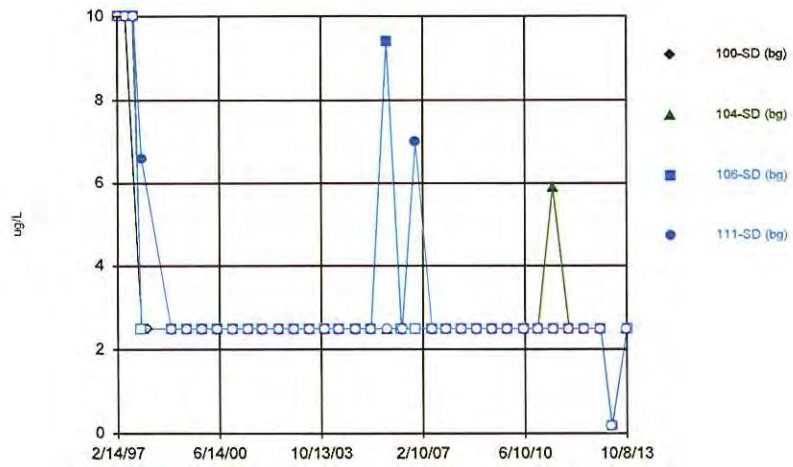
Time Series



Constituent: Cobalt Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

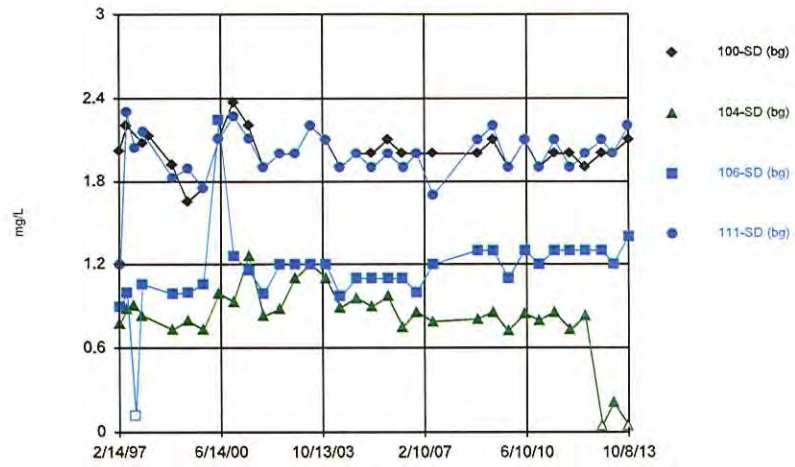
Time Series



Constituent: Copper Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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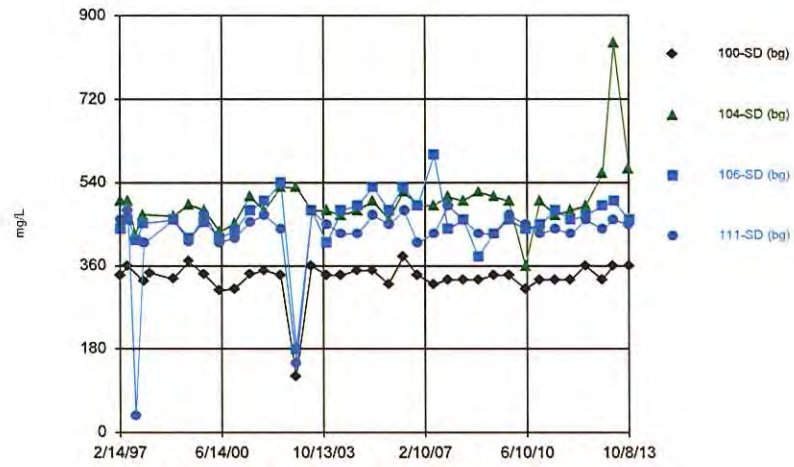
Time Series



Constituent: Fluoride Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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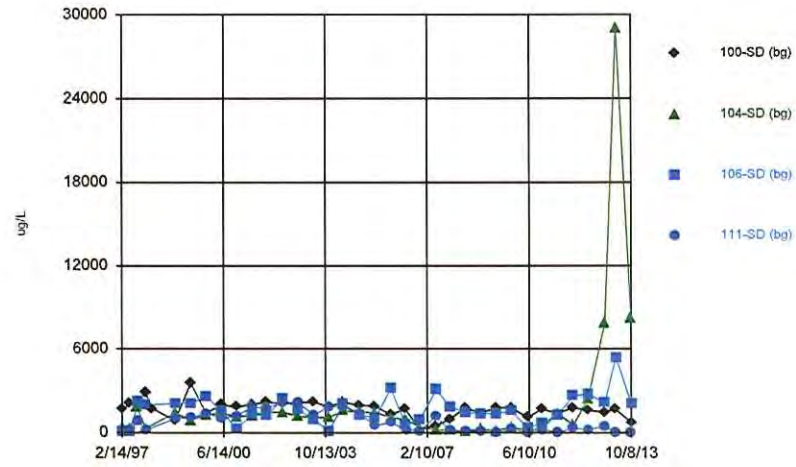
Time Series



Constituent: Hardness Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

Time Series

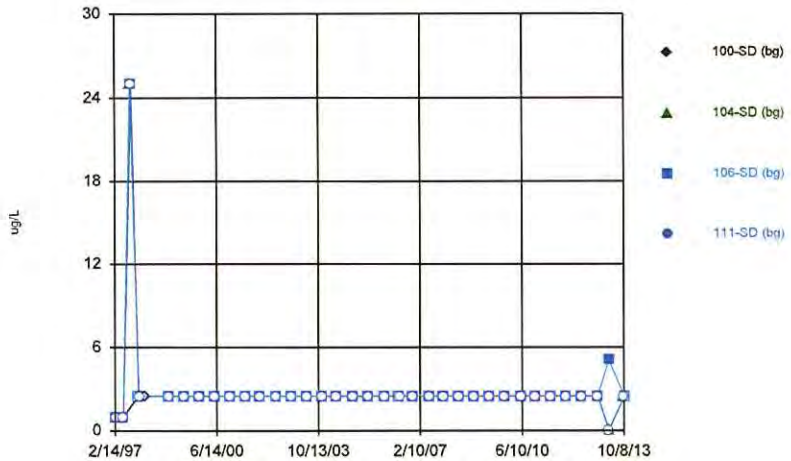


Constituent: Iron Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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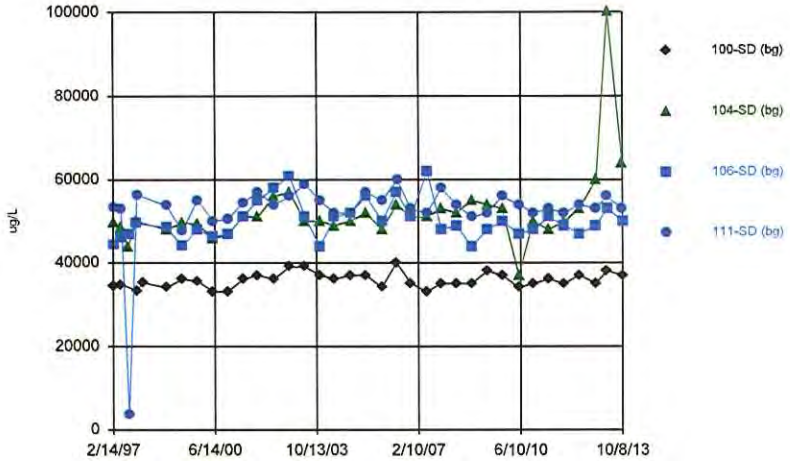
Time Series



Constituent: Lead Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

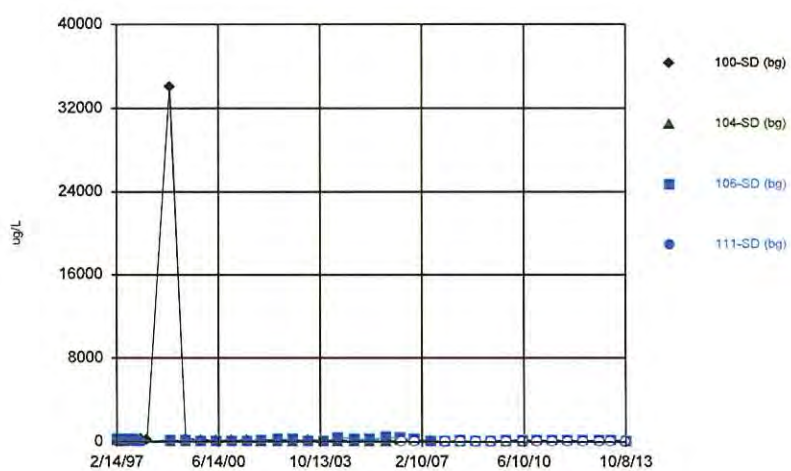
Time Series



Constituent: Magnesium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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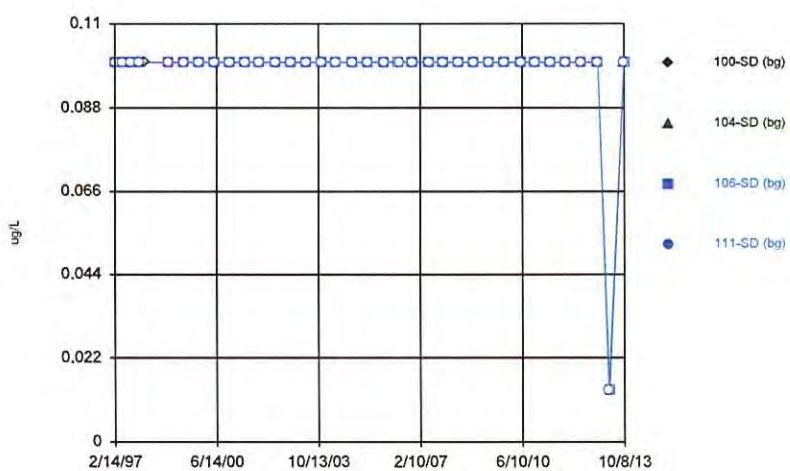
Time Series



Constituent: Manganese Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Time Series

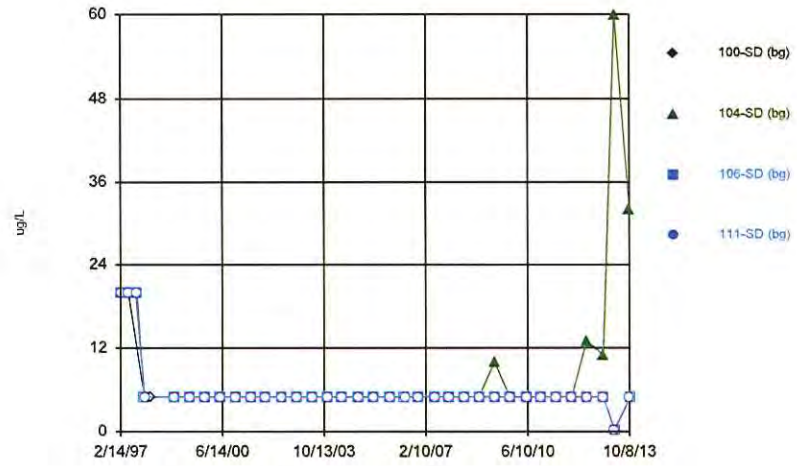


Constituent: Mercury Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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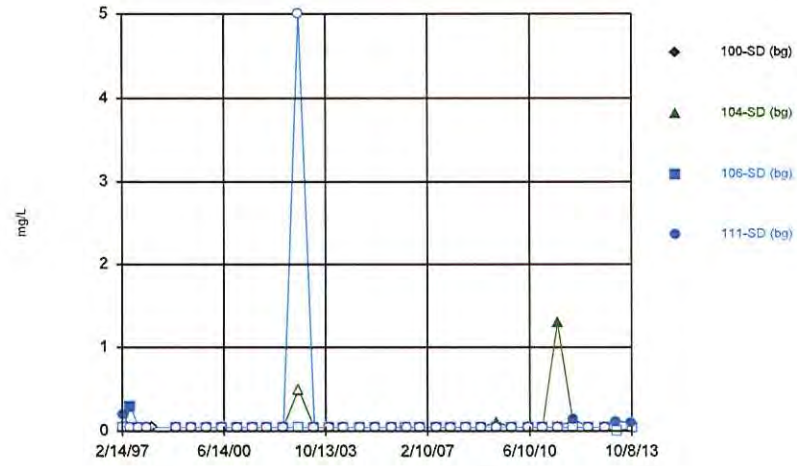
Time Series



Constituent: Nickel Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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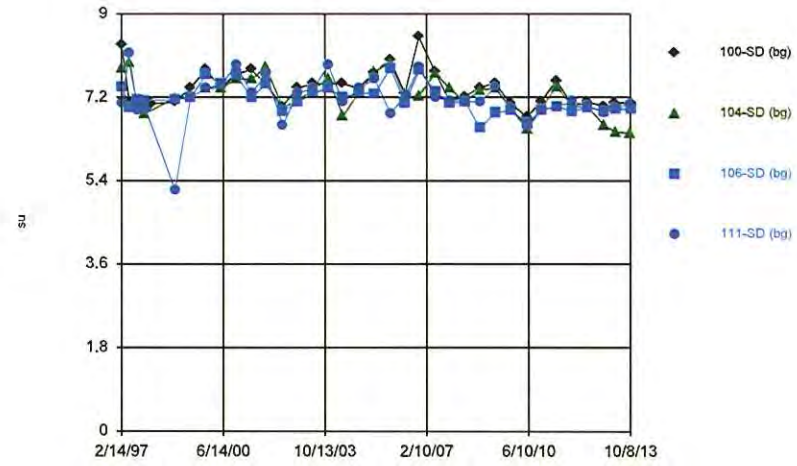
Time Series



Constituent: Nitrate/Nitrite Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

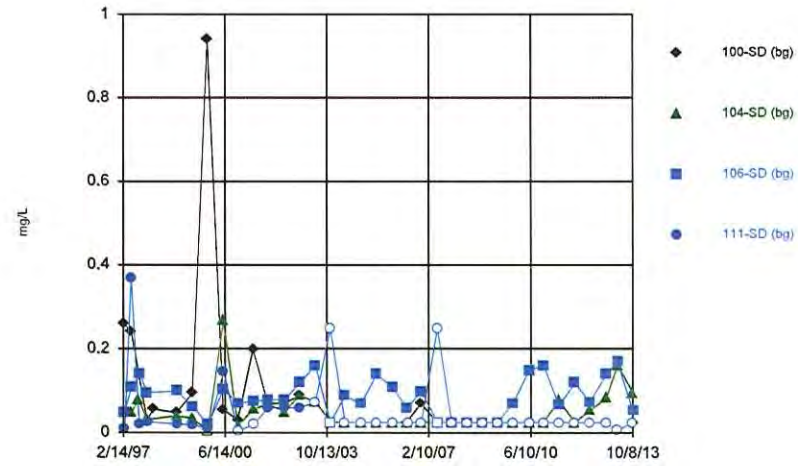
Time Series



Constituent: pH [Field] Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
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Time Series

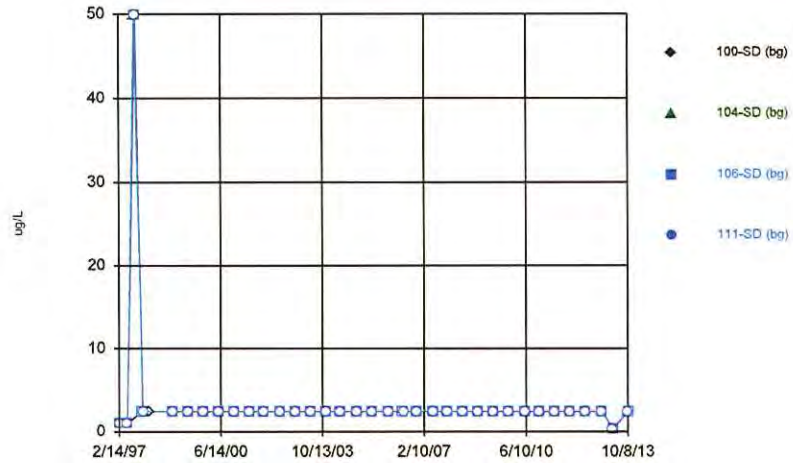


Constituent: Phosphorus Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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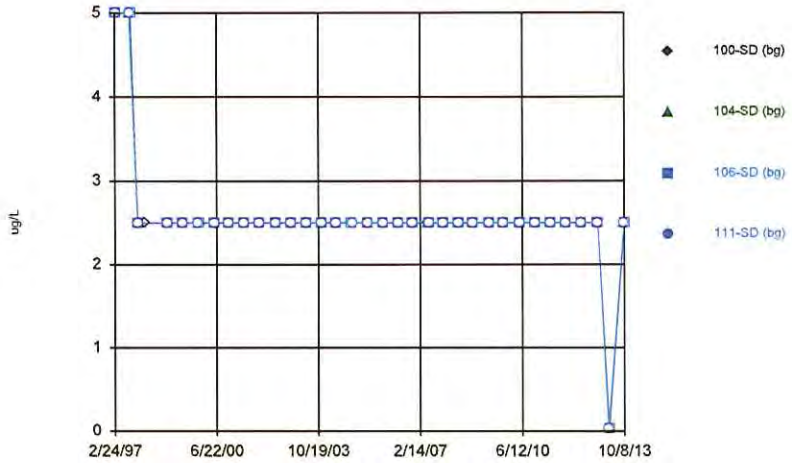
Time Series



Constituent: Selenium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

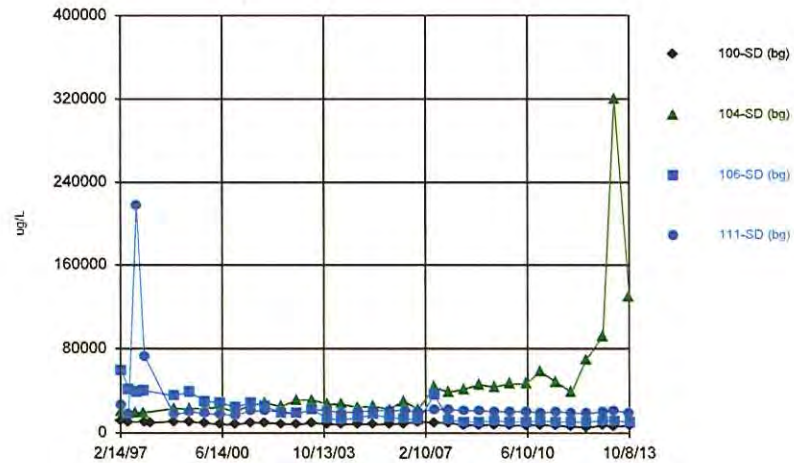
Time Series



Constituent: Silver Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

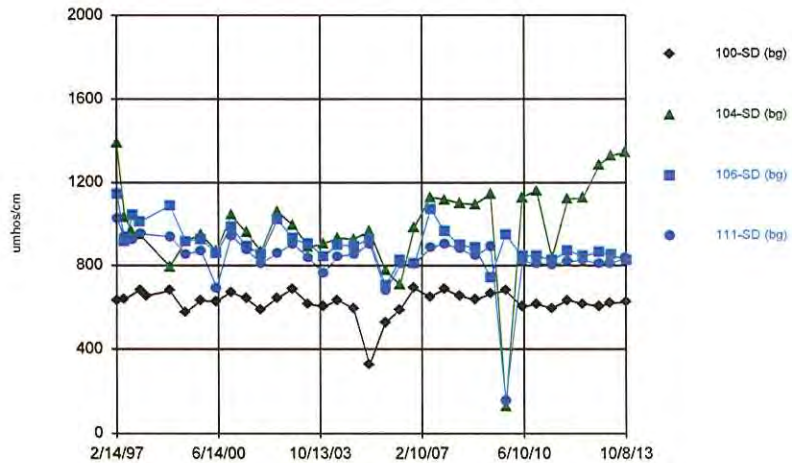
Time Series



Constituent: Sodium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

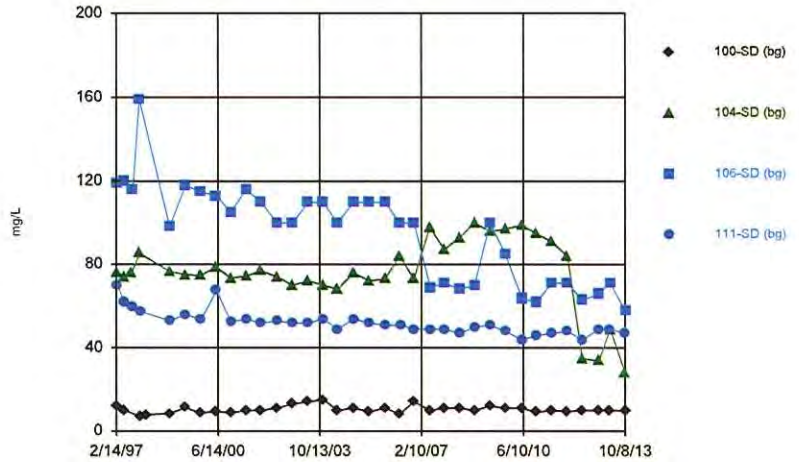
Time Series



Constituent: Specific Conductance [Field] Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

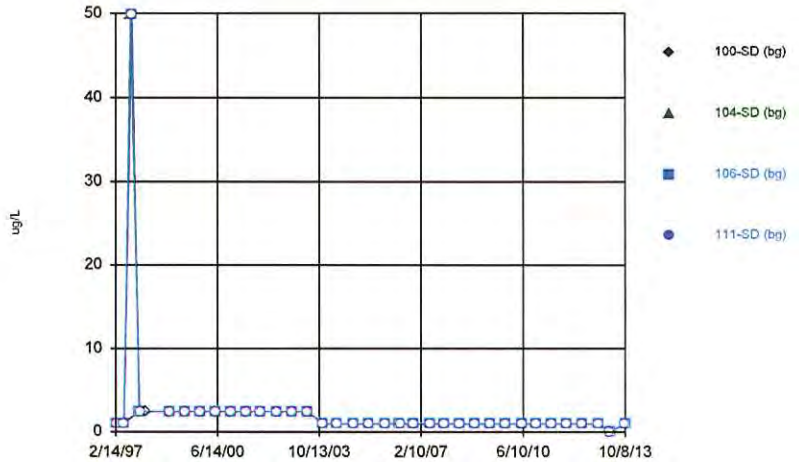
Time Series



Constituent: Sulfate as SO4 Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

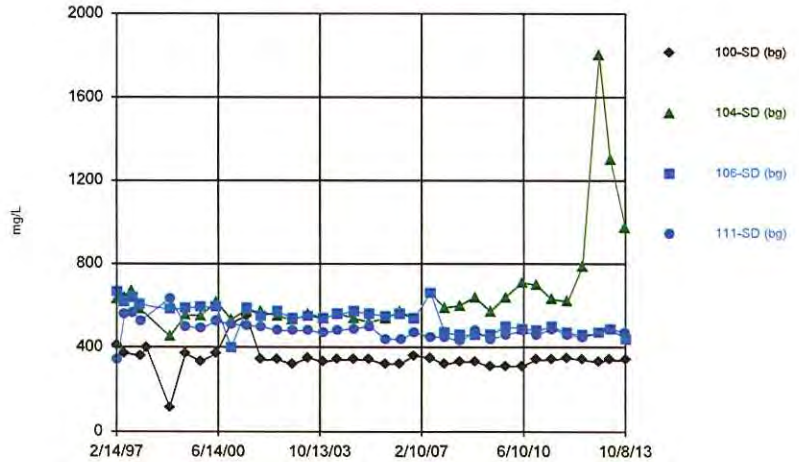
Time Series



Constituent: Thallium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG

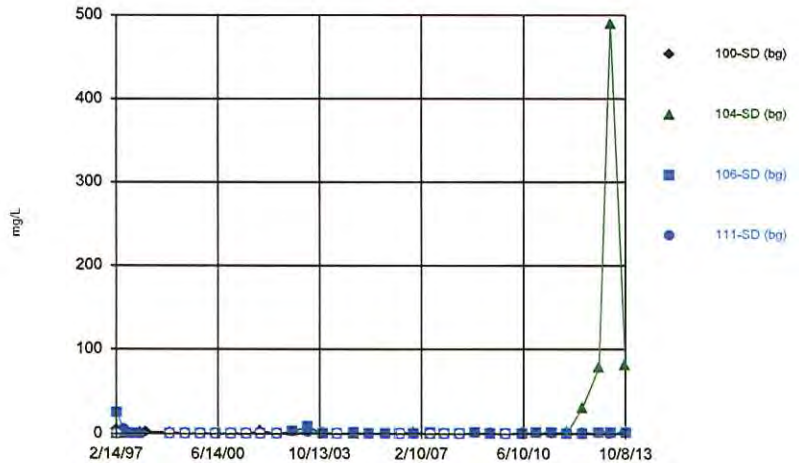
Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

Sanitas™ v.9.4.29 Sanitas software licensed to Herst Associates, UG
Hollow symbols indicate censored values.

Time Series

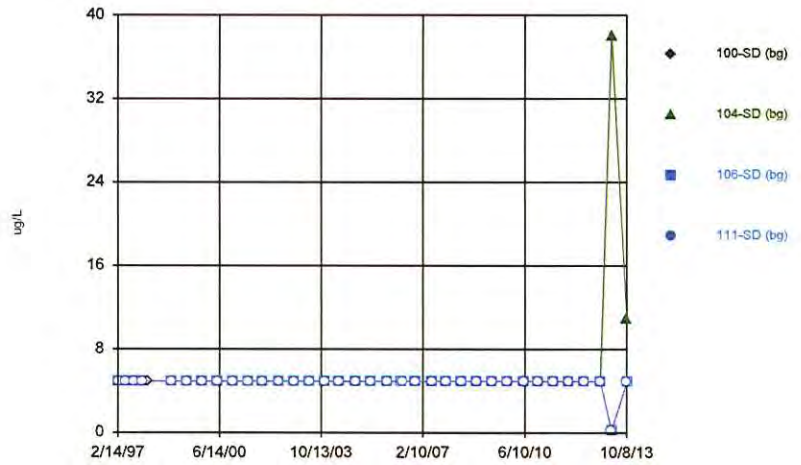


Constituent: Total Organic Carbon [TOC] Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Hollow symbols indicate censored values.

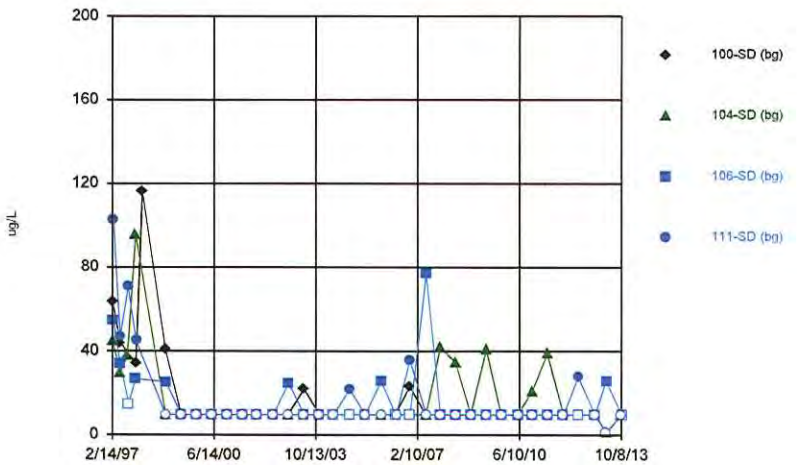
Time Series



Constituent: Vanadium Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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Time Series



Constituent: Zinc Total Analysis Run 12/17/2013 11:53 AM
Facility: Bridgeton LF Client: Bridgeton LF Data File: BRIDGE

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APPENDIX F
LABORATORY ANALYTICAL REPORT

Pace Analytical®

Pace Analytical Services, Inc.

Quality Assurance Report # 65365

Pace Analytical Services, INC.

7901 W. Morris St.
Indianapolis, IN 46231
(317)243-8304

Visit us at : www.pacelabs.com

Report To:

HERST AND ASSOCIATES

4630 South Highway 94

North Outer Road
St. Charles, MO 63304

Attn : Jon Wilkinson

Submitter/Project Information

Submitter : MO-ALLIED-BRIDGETON LANDFILL
Project : GROUNDWATER - BRIDGETON LANDFILL

Christopher Boyle - Project Manager
chris.boyle@heritage-enviro.com
(317)390-3128

NELAP ACCREDITED TNI LABORATORY

Pace Analytical®

Pace Analytical Services, Inc.

Sample Summary

COC ID# : 15635

COC Doc # : 01097669

Date/Time Sampled	Date Complete	LabSampleID	Client SampleID
10/07/2013 10:07:00	10/31/2013	A997746	PZ-111-SD
10/07/2013 11:31:00	10/31/2013	A997747	PZ-106-SS
10/07/2013 12:58:00	10/31/2013	A997748	PZ-104-SD
10/08/2013 09:51:00	10/31/2013	A997749	PZ-100-SD
10/08/2013 09:20:00	10/31/2013	A997750	FB @ PZ-100-SD
10/08/2013 10:34:00	10/31/2013	A997751	PZ-100-SS
10/08/2013 11:26:00	10/31/2013	A997752	PZ-114-AS
10/08/2013 12:11:00	10/31/2013	A997753	PZ-115-SS
10/08/2013 14:04:00	10/31/2013	A997754	PZ-110-SS
10/08/2013 15:02:00	10/31/2013	A997755	PZ-106-SD

COC Doc # : 01097670

Date/Time Sampled	Date Complete	LabSampleID	Client SampleID
10/09/2013 09:26:00	10/31/2013	A997756	PZ-109-SS
10/09/2013 10:22:00	10/31/2013	A997757	PZ-205-SS
10/09/2013 11:22:00	10/31/2013	A997758	PZ-105-SS
10/09/2013 12:30:00	10/31/2013	A997759	PZ-104-SS
10/09/2013 13:44:00	10/31/2013	A997760	PZ-201A-SS
10/09/2013	10/31/2013	A997761	DUPLICATE
10/09/2013	10/31/2013	A997762	TRIP BLANK

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-100-SD

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 485.72

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Date/Time Initiated: 10/8/13 0937

Initial Water Level (feet): 35.61

Initial Water Level Previous Event (feet): 36.61

Ground Water Elevation (ft, msl): 450.11

Ground Water Elevation Previous Event (ft, msl): 449.11

Well Total Depth (feet): Top of Pump = 96.48

Well Total Depth Previous Event (feet): Top of pump = 96.48

Dedicated Equipment: Yes ✓ No ____

Casing Diameter (inches): 2

One Casing Volume (gal): Not Applicable

One Casing Volume Previous Event (gal): N/A

Total Volume Purged (mL): 3000

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 42.65

Date/Time Completed: 10/8/13 0949

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 50 psi

Average Purge Rate: 250 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
0940	333	1000	16.9	7.16	621	4.78	37.84	Clear, No Odor
0943	200	1600	17.0	7.13	625	6.49	39.81	Clear, No Odor
0946	217	2250	16.9	7.10	627	5.25	41.26	Clear, No Odor
0949	250	3000	17.0	7.08	626	3.66	42.65	Clear, No Odor

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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): 42.65

Well Collection Sequence #: 46 of 76

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)	Other	Notes
0951 10/8/13	VOC: <100mL/min Other: 250mL/min	17.0	7.08	626	3.66	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/8/2013 0740

End of day: (Date/time) 10/8/2013 1630

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: #20120503

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #10461290

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
9.95	N/A	NTU std = 10.0	N/A	9.76	NTU std = 10.0
988.7	N/A	NTU std = 1,000	N/A	1019	NTU std = 1,000
1427	N/A	µS std = 1,413	N/A	1435	µS std = 1,413
Cell Const: 0.476	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.476	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @ 18.2°C	N/A	7.08	pH std = 7.00 @ 24.8°C
4.00	N/A	pH std = 4.00 @ 18.8°C	N/A	4.11	pH std = 4.01 @ 24.7°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 70°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___ 9 of 9

Sample Device Left in Well (YES) or NO ___ 7 of 7 Heritage

FB @ PZ-100-SD collected @ 0920 - OU-1 and Heritage FB

Date: 10/8/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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Global Presence
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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-100-SS

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 485.75

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 10/8/13 1019

Casing Diameter (inches): 2

Initial Water Level (feet): 33.94

One Casing Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 34.15

One Casing Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 451.81

Total Volume Purged (mL): 3300

Ground Water Elevation Previous Event (ft, msl): 451.60

Purged Dry?: Yes ____ No X

Well Total Depth (feet): Top of Pump = 89.25

Water Level after Purge (feet): 41.82

Well Total Depth Previous Event (feet): Top of pump = 89.25

Date/Time Completed: 10/8/13 1032

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 47.5 psi

Average Purge Rate: 275 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1023	250	1000	17.4	6.97	830	4.23	37.25	Clear, No Odor
1026	300	1900	17.3	6.96	833	5.06	39.04	Clear, No Odor
1029	233	2600	17.6	6.96	833	3.78	40.33	Clear, No Odor
1032	233	3300	17.6	6.95	828	4.81	41.82	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-100-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 41.82

Well Collection Sequence #: 49 of 76

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)	Other	Notes
1034 10/8/13	VOC: <100mL/min Other: 275mL/min	17.6	6.95	828	4.81	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/8/2013 0740

End of day: (Date/time) 10/8/2013 1630

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: # 20120503

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #10461280

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
9.95	N/A	NTU std = 10.0	N/A	9.76	NTU std = 10.0
988.7	N/A	NTU std = 1,000	N/A	1019	NTU std = 1,000
1427	N/A	µS std = 1,413	N/A	1435	µS std = 1,413
Cell Const: 0.476	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.476	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @18.2°C	N/A	7.08	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @18.8°C	N/A	4.11	pH std = 4.01 @24.3°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 70°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage

Date: 10/8/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-104-SD

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 483.51

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Date/Time Initiated: 10/7/13 1243

Initial Water Level (feet): 23.00

Initial Water Level Previous Event (feet): 22.02

Ground Water Elevation (ft, msl): 460.51

Ground Water Elevation Previous Event (ft, msl): 461.49

Well Total Depth (feet): Top of Pump = 120.50

Well Total Depth Previous Event (feet): Top of pump = 120.50

Dedicated Equipment: Yes ✓ No ____

Casing Diameter (inches): 2

One Casing Volume (gal): Not Applicable

One Casing Volume Previous Event (gal): N/A

Total Volume Purged (mL): 3600

Purged Dry?: Yes ____ No ✓

Water Level after Purge (feet): 26.11

Date/Time Completed: 10/7/13 1256

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 60 psi

Average Purge Rate: 277 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1247	375	1500	21.4	6.47	1421	5.17	25.09	Clear, Septic Odor
1250	183	2050	21.5	6.44	1387	4.55	25.55	Clear, Septic odor
1253	250	2800	21.6	6.46	1362	4.85	25.87	Clear, Septic odor
1256	267	3600	21.5	6.44	1345	5.21	26.11	Clear, Septic Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ-104-SD

Sampling Method: Bladder Pump Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 26.11 Well Collection Sequence #: 37 of 76

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)	Other	Notes
1258 10/7/13	VOC: <100 mL/min Other: 277 mL/min	21.5	6.44	1345	5.21	N/A	Septic Odor Clear, Odor (MOS)

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/7/13 0745

End of day: (Date/time) 10/7/13 1600

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: 20120508J

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: 10461280

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
9.99	N/A	NTU std = 10.0	N/A	9.99	NTU std = 10.0
1003	N/A	NTU std = 1,000	N/A	1009	NTU std = 1,000
1435	N/A	µS std = 1,413	N/A	1378	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: 0.483	Cell Const Range: 0.45 - 0.50
7.05	N/A	pH std = 7.05 @ 11.7°C	N/A	7.07	pH std = 7.01 @ 21.3°C
4.00	N/A	pH std = 4.00 @ 11.5°C	N/A	4.08	pH std = 4.00 @ 21.1°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Windy, Sunny, 65°F

Sample Characteristics: Clear, Septic Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage

Split Sample with MD DNR

Date: 10/7/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-104-SS

Sampler(s): Matt Stewart
Jon Wilkinson

Top of Casing (ft, msl): 483.45

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 10/9/13 1216

Casing Diameter (inches): 2

Initial Water Level (feet): 20.00 ~~10.03~~

One Casing Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 19.98

One Casing Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 463.45

Total Volume Purged (mL): 3000

Ground Water Elevation Previous Event (ft, msl): 463.47

Purged Dry?: Yes ____ No X

Well Total Depth (feet): Top of Pump = 140.22

Water Level after Purge (feet): 26.39

Well Total Depth Previous Event (feet): Top of pump = 140.22

Date/Time Completed: 10/9/13 1228

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 70 psi

Average Purge Rate: 250 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1219	333	1000	22.8	6.47	837	7.97	22.67	Clear, Septic Odor
1222	267	1800	23.5	6.69	878	6.09	24.11	Clear, Septic Odor
1225	200	2400	23.6	6.73	886	6.21	25.23	Clear, Septic Odor
1228	200	3000	23.6	6.69	869	7.30	26.39	Clear, Septic Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-104-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 26.39

Well Collection Sequence #: 66 of 76

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)	Other	Notes
1230 10/9/13	VOC: <100mL/min Other: 250mL/min	23.6	6.69	869	7.30	N/A	Clear, Septic Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/9/2013 0745

End of day: (Date/time) 10/9/2013 1550

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: #20120508J

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 10461290

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
10.04	N/A	NTU std = 10.0	N/A	9.90	NTU std = 10.0
995.3	N/A	NTU std = 1,000	N/A	998.6	NTU std = 1,000
1423	N/A	µS std = 1,413	N/A	1404	µS std = 1,413
Cell Const: 0.478	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.478	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @17.1°C	N/A	7.10	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @17.1°C	N/A	4.11	pH std = 4.01 @24.9°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: Clear, Septic Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage Detection Heritage Blind Duplicate Collected here

Date: 10/9/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-105-SS

Sampler(s): Matt Stewart
Don Wilkinson

Top of Casing (ft, msl): 483.51

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 10/9/13 1106

Casing Diameter (inches): 2

Initial Water Level (feet): 24.92

One Casing Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 24.31

One Casing Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 458.59

Total Volume Purged (mL): 3100

Ground Water Elevation Previous Event (ft, msl): 459.20

Purged Dry?: Yes ____ No X

Well Total Depth (feet): Top of Pump = 144.81

Water Level after Purge (feet): 31.61

Well Total Depth Previous Event (feet): Top of pump = 144.81

Date/Time Completed: 10/9/13 1120

PURGE DATA: Discharge: 8.0 sec Refill: 10.0 sec Pressure: 70 psi

Average Purge Rate: 221 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1111	200	1000	18.0	7.22	1054	8.46	27.72	Clear, No Odor
1114	267	1800	17.7	7.17	1045	17.47	29.19	Clear, No Odor
1117	217	2450	17.8	7.20	1044	11.25	30.40	Clear, No Odor
1120	217	3100	17.8	7.21	1036	8.85	31.61	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-105-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 31.61

Well Collection Sequence #: 65 of 76

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)	Other	Notes
1122 10/9/13	VOC: <100 mL/min Other: 221 mL/min	17.8	7.21	1036	8.85	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/9/2013 0745

End of day: (Date/time) 10/9/2013 1550

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: # 20120508 3

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 10461290

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
10.04	N/A	NTU std = 10.0	N/A	9.90	NTU std = 10.0
995.3	N/A	NTU std = 1,000	N/A	988.6	NTU std = 1,000
1423	N/A	µS std = 1,413	N/A	1404	µS std = 1,413
Cell Const: 0.478	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.478	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @ 17.1°C	N/A	7.10	pH std = 7.00 @ 24.8°C
4.00	N/A	pH std = 4.00 @ 17.1°C	N/A	4.11	pH std = 4.01 @ 24.9°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 78°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage

Replicate Collected here

Date: 10/9/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-106-SD

Sampler(s): Matt Stewart

Top of Casing (ft, msl) 463.36

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No

Date/Time Initiated: 10/8/13 1447

Casing Diameter (inches): 2

Initial Water Level (feet): 12.53

One Casing Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 13.37

One Casing Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 450.83

Total Volume Purged (mL): 2850

Ground Water Elevation Previous Event (ft, msl): 449.99

Purged Dry?: Yes ____ No X

Well Total Depth (feet): Top of Pump = 196.15

Water Level after Purge (feet): 15.51

Well Total Depth Previous Event (feet): Top of pump = 196.15

Date/Time Completed: 10/8/13 1500

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 105 psi

Average Purge Rate: 219 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1451	250	1000	22.9	6.98	836	15.61	14.36	Clear, No Odor
1454	167	1500	22.7	6.95	824	16.10	14.71	Clear, No Odor
1457	233	2200	22.6	6.97	823	28.01	15.14	Clear, No odor
1500	217	2850	22.6	6.95	827	29.32	15.51	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-106-SD

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 15.51

Well Collection Sequence #: 57 of 76

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)	Other	Notes
1502 10/8/13	VOC: <100mL/min Other: 250 mL/min	22.6	6.95	827	20.32	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/8/2013 0740

End of day: (Date/time) 10/8/2013 1630

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: 20120508J

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: 10461290

Purging Event Start of day	Purging Event End of day		Sampling Event Start of day	Sampling Event End of day	
0.92	N/A	NTU std = 0.02	N/A	0.00	NTU std = 0.02
9.95	N/A	NTU std = 10.0	N/A	9.76	NTU std = 10.0
988.7	N/A	NTU std = 1,000	N/A	1019	NTU std = 1,000
1427	N/A	µS std = 1,413	N/A	1435	µS std = 1,413
Cell Const: 0.476	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.476	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @18.2°C	N/A	7.08	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @18.8°C	N/A	4.11	pH std = 4.01 @24.3°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO

Full Suite Collected (YES) or NO

Sample Device Left in Well (YES) or NO

9 of 9, 7 of 7 Heritage

Date: 10/8/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-106-SS

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 462.71

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 10/7/13 1116

Casing Diameter (inches): 2

Initial Water Level (feet): 11.42

One Casing Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 12.36

One Casing Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 451.29

Total Volume Purged (mL): 7800

Ground Water Elevation.Previous Event (ft, msl): 450.35

Purged Dry?: Yes ____ No X

Well Total Depth (feet): Top of Pump = 161.20

Water Level after Purge (feet): 18.62

Well Total Depth Previous Event (feet): Top of pump = 161.20

Date/Time Completed: 10/7/13 1131

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 80 psi

Average Purge Rate: 253 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1122	~~+500~~ 258	~~1500~~ 1580	21.7	6.96	877	4.39	14.88	Clear, No Odor
1125	233	2200	21.6	6.94	884	1.71	16.10	Clear, No Odor
1128	251	2950	21.5	6.95	887	2.05	17.39	Clear, No Odor
1131	288	3800	21.5	6.94	879	0.87	18.62	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ-106-SS

Sampling Method: Bladder Pump Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 18.62 Well Collection Sequence #: 35 of 76

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)	Other	Notes
1431 10/7/13	VOC: <100 mL/min Other: 250 mL/min	21.5	6.94	879	0.87	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/7/13 0745

End of day: (Date/time) 10/8/13 1600

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: 20120508 3

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: 10461280

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
9.99	N/A	NTU std = 10.0	N/A	9.99	NTU std = 10.0
1003	N/A	NTU std = 1,000	N/A	1009	NTU std = 1,000
1435	N/A	µS std = 1,413	N/A	1378	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: 0.483	Cell Const Range: 0.45 - 0.50
7.05	N/A	pH std = 7.05 @ 11.7 °C	N/A	7.07	pH std = 7.01 @ 21.3 °C
4.00	N/A	pH std = 4.00 @ 15 °C	N/A	4.08	pH std = 4.00 @ 21.1 °C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny 60°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage

Industrial air freshener blowing upwind of well

Date: 10/7/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-109-SS

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 458.56

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Date/Time Initiated: 10/9/13 0911

Initial Water Level (feet): 29.48

Initial Water Level Previous Event (feet): 35.05

Ground Water Elevation (ft, msl): 429.08

Ground Water Elevation Previous Event (ft, msl): 423.51

Well Total Depth (feet): Top of Pump = 131.18

Well Total Depth Previous Event (feet): Top of pump = 131.18

Dedicated Equipment: Yes ✓ No ____

Casing Diameter (inches): 2

One Casing Volume (gal): Not Applicable

One Casing Volume Previous Event (gal): N/A

Total Volume Purged (mL): 3650

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 37.33

Date/Time Completed: 10/9/13 0924

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 65 psi

Average Purge Rate: 281 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
0915	325	1300	20.1	7.03	829	6.26	37.15	Clear, No Odor
0918	267	2100	20.3	7.06	825	7.18	34.34	Clear, No Odor
0921	300	3000	20.4	7.08	826	5.55	36.07	Clear, No Odor
0924	217	3650	20.3	7.08	824	6.56	37.33	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-109-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 37.33

Well Collection Sequence #: 60 of 76

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)	Other	Notes
0926 10/9/13	VOC: >100mL/min Other: 250mL/min	20.3	7.08	824	6.56	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/9/2013 0745

End of day: (Date/time) 10/9/2013 1550

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: #20120508B3

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #10461290

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
10.04	N/A	NTU std = 10.0	N/A	9.90	NTU std = 10.0
995.3	N/A	NTU std = 1,000	N/A	998.6	NTU std = 1,000
1423	N/A	µS std = 1,413	N/A	1404	µS std = 1,413
Cell Const: 0.478	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.478	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @7.1 °C	N/A	7.10	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @7.1 °C	N/A	4.11	pH std = 4.01 @24.9°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 65°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 4 of 9, 7 of 7 Heritage

Date: 10/9/13 By: Matt Steward Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-110-SS

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 461.15

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Date/Time Initiated: 10/8/13 1350

Initial Water Level (feet): 31.06

Initial Water Level Previous Event (feet): 28.65

Ground Water Elevation (ft, msl): 430.09

Ground Water Elevation Previous Event (ft, msl): 432.50

Well Total Depth (feet): Top of Pump = 107.11

Well Total Depth Previous Event (feet): Top of pump = 107.11

Dedicated Equipment: Yes ✓ No ____

Casing Diameter (inches): 2

One Casing Volume (gal): Not Applicable

One Casing Volume Previous Event (gal): N/A

Total Volume Purged (mL): 3450

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 34.18

Date/Time Completed: 10/8/13 1402

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 55 psi

Average Purge Rate: 288 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1353	333	1000	17.6	6.62	1946	7.53	33.36	Clear, No odor
1356	283	1850	17.4	6.61	1941	7.78	33.81	Clear, No Odor
1359	300	2750	17.5	6.60	1946	6.05	34.22	Clear, No Odor
1402	230	3450	17.5	6.60	1948	5.73	34.18	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-110-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 34.18

Well Collection Sequence #: 54 of 76

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)	Other	Notes
1404 10/8/13	VOC: <100mL/min Other: 288mL/min	17.5	6.60	1948	5.73	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/8/2013 0740

End of day: (Date/time) 10/8/2013 1630

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: # 2012050B3

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 10461290

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
9.95	N/A	NTU std = 10.0	N/A	9.76	NTU std = 10.0
988.7	N/A	NTU std = 1,000	N/A	1019	NTU std = 1,000
1427	N/A	µS std = 1,413	N/A	1435	µS std = 1,413
Cell Const: 0.476	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.476	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @18.2°C	N/A	7.08	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @18.8°C	N/A	4.11	pH std = 4.01 @24.3°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage

Date: 10/8/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-111-SD

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 466.46

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Date/Time Initiated: 10/7/13 0954

Initial Water Level (feet): 35.32

Initial Water Level Previous Event (feet): 33.13

Ground Water Elevation (ft, msl): 431.14

Ground Water Elevation Previous Event (ft, msl): 433.33

Well Total Depth (feet): Top of Pump = 196.81

Well Total Depth Previous Event (feet): Top of pump = 196.81

Dedicated Equipment: Yes ✓ No ____

Casing Diameter (inches): 2

One Casing Volume (gal): Not Applicable

One Casing Volume Previous Event (gal): N/A

Total Volume Purged (mL): 3400

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 43.07

Date/Time Completed: 10/7/13 1007

PURGE DATA: Discharge: ~~12.0~~ 6.0 sec Refill: 8.0 sec Pressure: 100 psi

Average Purge Rate: 262 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
0958	375	1500	17.0	7.04	838	10.02	39.80	Clear, No Odor
1001	267	2300	17.1	7.06	839	12.15	40.74	Clear, No Odor
1004	133	2700	17.2	7.05	836	8.96	41.66	Clear, No Odor
1007	233	3400	17.2	7.05	838	6.82	43.07	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ-111-SD

Sampling Method: Bladder Pump Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 43.07 Well Collection Sequence #: 33 of 76

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)	Other	Notes
1907 10/7/13	VOC: 150 mL/min Other: 262 mL/min	17.2	7.05	838	6.82	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/7/13 0745

End of day: (Date/time) 10/7/13 1600

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: 20120508 3

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: 10461280

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
9.99	N/A	NTU std = 10.0	N/A	9.99	NTU std = 10.0
1003	N/A	NTU std = 1,000	N/A	1009	NTU std = 1,000
1435	N/A	µS std = 1,413	N/A	1378	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: 0.483	Cell Const Range: 0.45 - 0.50
7.05	N/A	pH std = 7.05 @ 11.7 °C	N/A	7.07	pH std = 7.01 @ 21.3 °C
4.20	N/A	pH std = 4.00 @ 11.5 °C	N/A	4.08	pH std = 4.00 @ 21.1 °C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, 55°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO Full Suite Collected (YES) or NO

Sample Device Left in Well (YES) or NO 9 of 9, 7 of 7 Heritage

Date: 10/7/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-114-AS

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 451.26

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Date/Time Initiated: 10/8/13 1113

Initial Water Level (feet): 20.90

Initial Water Level Previous Event (feet): 17.60

Ground Water Elevation (ft, msl): 430.36

Ground Water Elevation Previous Event (ft, msl): 433.66

Well Total Depth (feet): Top of Pump = 26.35

Well Total Depth Previous Event (feet): Top of pump = 26.35

Dedicated Equipment: Yes ✓ No ____

Casing Diameter (inches): 2

One Casing Volume (gal): Not Applicable

One Casing Volume Previous Event (gal): N/A

Total Volume Purged (mL): 3000

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 20.97

Date/Time Completed: 10/8/13 1124

PURGE DATA: Discharge: 2.5 sec Refill: 4.0 sec Pressure: ~~10~~ 20 psi

Average Purge Rate: 278 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1115	250	500	17.0	6.59	1590	18.85	20.97	Clear, Septic odor
1118	300	1400	16.5	6.58	1554	12.91	20.97	Clear, Septic odor
1121	282	2250	16.6	6.59	1566	10.94	20.97	Clear, Septic odor
1124	250	3000	16.6	6.59	1556	7.49	20.97	Clear, Septic odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-114-AS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): ____

Well Collection Sequence #: 51 of 76

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)	Other	Notes
1126 10/8/12	VOC: <100 mL/min Other: 270 mL/min	16.6	6.59	1556	7.49	N/A	Clear, Septic Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/8/2013 0740

End of day: (Date/time) 10/8/2013 1630

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: # 2012050B3

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 10461290

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
9.95	N/A	NTU std = 10.0	N/A	9.76	NTU std = 10.0
988.7	N/A	NTU std = 1,000	N/A	1019	NTU std = 1,000
1427	N/A	µS std = 1,413	N/A	1435	µS std = 1,413
Cell Const: 0.476	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.476	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @18.2°C	N/A	7.08	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @18.8°C	N/A	4.11	pH std = 4.01 @24.3°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 70°F

Sample Characteristics: Clear, Septic Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO Full Suite Collected (YES) or NO

Sample Device Left in Well (YES) or NO 4 of 9, 7 of 7 Heritage

Date: 10/8/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-115-SS

Sampler(s): Matt Stewart

Top of Casing (ft, msl): 452.27

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Date/Time Initiated: 10/8/13 1156

Initial Water Level (feet): 17.63

Initial Water Level Previous Event (feet): 14.80

Ground Water Elevation (ft, msl): 434.64

Ground Water Elevation Previous Event (ft, msl): 437.47

Well Total Depth (feet): Top of Pump = 80.92

Well Total Depth Previous Event (feet): Top of pump = 80.92

Dedicated Equipment: Yes ✓ No ____

Casing Diameter (inches): 2"

One Casing Volume (gal): Not Applicable

One Casing Volume Previous Event (gal): N/A

Total Volume Purged (mL): 3300

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 20.83

Date/Time Completed: 10/8/13 1209

PURGE DATA: Discharge: 4.0 sec Refill: 4.5 sec Pressure: 45 psi

Average Purge Rate: 254 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
~~1200~~ 1156	250	1000	16.9	6.64	1983	11.55	19.37	Clear, Septic Odor
1203	233	1700	16.9	6.65	2000	6.24	19.92	Clear, Septic Odor
1206	267	2500	16.9	6.64	2010	7.83	20.46	Clear, Septic Odor
1209	267	3300	16.8	6.67	2015	5.12	20.83	Clear, Septic Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-115-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 20.83

Well Collection Sequence #: 53 of 76

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)	Other	Notes
1211 10/8/13	VOC: <100 mL/min Other: 254 mL/min	16.8	6.67	2015	5.12	N/A	Clear, Septic Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/8/2013 0740

End of day: (Date/time) 10/8/2013 1630

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: #201205083

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: # 10461290

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
9.95	N/A	NTU std = 10.0	N/A	9.76	NTU std = 10.0
988.7	N/A	NTU std = 1,000	N/A	1019	NTU std = 1,000
1427	N/A	µS std = 1,413	N/A	1435	µS std = 1,413
Cell Const: 0.476	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.476	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @18.2°C	N/A	7.08	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @18.8°C	N/A	4.11	pH std = 4.01 @24.3°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 70°F

Sample Characteristics: Clear, Septic Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage

Date: 10/8/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-201A-SS

Sampler(s): Matt Stewart
Jon Wilkinson

Top of Casing (ft, msl): 480.20

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 10/9/13 1329

Casing Diameter (inches): 2

Initial Water Level (feet): 12.25

One Casing Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 10.57

One Casing Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 467.95

Total Volume Purged (mL): 2850

Ground Water Elevation Previous Event (ft, msl): 469.63

Purged Dry?: Yes ____ No X

Well Total Depth (feet): Top of Pump = 86.11

Water Level after Purge (feet): 18.45

Well Total Depth Previous Event (feet): Top of pump = 86.11

Date/Time Completed: 10/9/13 1342

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 45 psi

Average Purge Rate: 219 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1333	250	1000	18.1	7.00	821	10.64	15.15	Clear, No Odor
1336	300	1900	18.3	7.01	828	8.82	16.65	Clear, No Odor
1339	200	2500	18.2	7.00	818	6.76	17.75	Clear, No Odor
1342	117	2850	18.3	6.99	809	7.35	18.45	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-201A-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 18.45

Well Collection Sequence #: 67 of 76

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)	Other	Notes
1344 10/9/13	VOC: <100mL/min Other: 219mL/min	18.3	6.99	809	7.35	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/9/2013 0745

End of day: (Date/time) 10/9/2013 1550

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: # 201205083

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #10461290

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
10.04	N/A	NTU std = 10.0	N/A	9.90	NTU std = 10.0
995.3	N/A	NTU std = 1,000	N/A	998.6	NTU std = 1,000
1423	N/A	µS std = 1,413	N/A	1404	µS std = 1,413
Cell Const: 0.478	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.478	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @17.1°C	N/A	7.10	pH std = 7.00 @24.8°C
4.00	N/A	pH std = 4.00 @17.1°C	N/A	4.11	pH std = 4.01 @24.9°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO

Full Suite Collected (YES) or NO

Sample Device Left in Well (YES) or NO

9 of 9, 7 of 7 Heritage

Date: 10/9/13 By: Matt Stewart Matt Stewart Title: Project Geologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake Landfill

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-205-SS

Sampler(s): Matt Steward

Top of Casing (ft, msl): 461.73

PURGE INFORMATION:

Method of Well Purge: Bladder Pump

Dedicated Equipment: Yes ✓ No ____

Date/Time Initiated: 10/9/13 1008

Casing Diameter (inches): 2

Initial Water Level (feet): 27.13

One Casing Volume (gal): Not Applicable

Initial Water Level Previous Event (feet): 25.76

One Casing Volume Previous Event (gal): N/A

Ground Water Elevation (ft, msl): 434.60

Total Volume Purged (mL): 3250

Ground Water Elevation Previous Event (ft, msl): 435.97

Purged Dry?: Yes ____ No X

Well Total Depth (feet): Top of Pump = 92.95

Water Level after Purge (feet): 33.90

Well Total Depth Previous Event (feet): Top of pump = 92.95

Date/Time Completed: 10/9/13 1020

PURGE DATA: Discharge: 6.0 sec Refill: 6.0 sec Pressure: 42.5 psi

Average Purge Rate: 271 mL / min

Time	Purge Rate (mL / min)	Cumulative Volume (mL)	Temp (°C)	pH (std units)	Conductivity (µS = µmhos/cm)	Turbidity (NTU)	Water Level (feet)	Notes
1011	333	1000	18.5	6.96	934	7.51	29.92	Clear, No Odor
1014	233	1700	18.5	6.94	936	9.03	30.96	Clear, No Odor
1017	267	2500	18.6	6.94	936	5.77	32.59	Clear, No Odor
1020	250	3250	18.6	6.96	936	4.10	33.90	Clear, No Odor

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-205-SS

Sampling Method: Bladder Pump

Dedicated: Yes ✓ No ____

Water Level @ Sampling (ft): 33.90

Well Collection Sequence #: 63 of 76

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)	Other	Notes
1022 10/9/13	VOC: <100 mL/min Other: 271 mL/min	18.6	6.96	936	4.10	N/A	Clear, No Odor

INSTRUMENT CALIBRATION DATA:

Start of day: (Date/Time) 10/9/2013 0745

End of day: (Date/time) 10/9/2013 1550

Turbidity Meter: HF MicroTPW

Turbidity Meter S/N: # 20120508J

pH / Sp. Cond. Meter: WTW pH/Cond 3400i

pH / Sp. Cond. Meter S/N: #10461290

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
10.04	N/A	NTU std = 10.0	N/A	9.90	NTU std = 10.0
995.3	N/A	NTU std = 1,000	N/A	998.6	NTU std = 1,000
1423	N/A	µS std = 1,413	N/A	1404	µS std = 1,413
Cell Const: 0.478	Cell Const: N/A	Cell Const Range: 0.45 - 0.50	Cell Const: N/A	Cell Const: 0.478	Cell Const Range: 0.45 - 0.50
7.03	N/A	pH std = 7.03 @17.1 °C	N/A	7.10	pH std = 7.00@24.8°C
4.00	N/A	pH std = 4.00 @17.1 °C	N/A	4.11	pH std = 4.01 @24.9°C

Other Calibration: Not Applicable

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 65 °F

Sample Characteristics: Clear, No Odor

COMMENTS AND OBSERVATIONS:

Well Closed and Locked (YES) or NO ___ Full Suite Collected (YES) or NO ___

Sample Device Left in Well (YES) or NO ___ 9 of 9, 7 of 7 Heritage

Date: 10/9/13 By: Matt Stewart MATT STEWART Title: Project Geologist

Company: Herst & Associates, Inc.

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CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 01 W. MORRIS ST. ..NDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997746
	Completed	**PO Number**
	31-OCT-13	4005889***
	Printed	**Sampled**
	31-OCT-13	07-OCT-13 10:07

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-111-SD
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 07-OCT-13 10:07 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	196.81		ft
INITIAL WATER LEVEL	35.32		ft
ELEVATION OF GROUNDWATER SURFACE	431.14		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 07-OCT-13 10:07 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	17.2		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 07-OCT-13 10:07 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.05	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 07-OCT-13 10:07 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	838	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 07-OCT-13 10:07 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	6.82		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	450	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	110	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:07 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	92000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	23	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	53000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	20000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:07 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:14 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:26 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	470	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 23:21 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	9.6	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 23:21 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	2.2	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 12:44 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL QC-	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:29 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	0.11	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 12:36 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST Analysis Date: 14-OCT-13 18:36 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	47	2.0	mg/L

1:5 Dilution.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 24-OCT-13 11:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.6	1.0	mg/L

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Sample ID: A997746 PZ-111-SD

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS | Analysis Date: 15-OCT-13 08:06 | Instrument: GC/MS VOA | Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
RANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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Sample ID: A997746 PZ-111-SD

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	114		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	88		% Rec
DIBROMOFLUOROMETHANE	112		% Rec

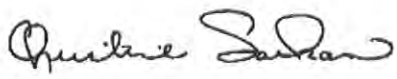
Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit
QC- Estimated due to Low QC Recovery

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01



Approved by: CHRISTINE SARKAN 31-OCT-13

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CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 01 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997747
	Completed	**PO Number**
	31-OCT-13	4005889***
	Printed	**Sampled**
	31-OCT-13	07-OCT-13 11:31

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-106-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 07-OCT-13 11:31 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	161.20		ft
INITIAL WATER LEVEL	11.42		ft
ELEVATION OF GROUNDWATER SURFACE	451.29		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 07-OCT-13 11:31 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	21.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 07-OCT-13 11:31 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.94	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 07-OCT-13 11:31 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	879	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 07-OCT-13 11:31 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	0.87		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	460	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	140	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	100000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	600	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	49000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	16	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	18000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:10 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:15 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:28 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

TOTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	470	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 00:23 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	24	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 00:23 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	2.1	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:27 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:30 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 12:37 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST Analysis Date: 14-OCT-13 19:07 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	49	2.0	mg/L

1:5 Dilution.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	2.2	1.0	mg/L

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Sample ID: A997747 PZ-106-SS

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS | Analysis Date: 15-OCT-13 08:32 | Instrument: GC/MS VOA | Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
RANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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Sample ID: A997747 PZ-106-SS

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	93		% Rec
4-BROMOFLUOROBENZENE	87		% Rec
DIBROMOFLUOROMETHANE	106		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

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KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 701 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997748
	Completed	**PO Number**
	31-OCT-13	4005889***
	Printed	**Sampled**
	31-OCT-13	07-OCT-13 12:58

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-104-SD
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 07-OCT-13 12:58 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	120.50		ft
INITIAL WATER LEVEL	23.00		ft
ELEVATION OF GROUNDWATER SURFACE	460.51		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 07-OCT-13 12:58 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	21.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 07-OCT-13 12:58 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.44	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 07-OCT-13 12:58 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1345	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 07-OCT-13 12:58 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	5.21		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	570	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	610	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	690	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	120000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	12	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	8200	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	64000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	170	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:14 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	32	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	130000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	11	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:13 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	9.9	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:40 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:30 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	970	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 01:08 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	170	6.3	mg/L

1:25 Dilution.

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 00:53 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	BDL	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 13:05 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	27	5.0	mg/L

1:50 Dilution.

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:43 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

1:5 Dilution.

Dilution due to suspected matrix interference.

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 12:37 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	0.097	0.050	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST Analysis Date: 14-OCT-13 19:22 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	28	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 11:25 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	290	10	mg/L

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Sample ID: A997748 PZ-104-SD

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

`nalyst: H. WILLIAMS Analysis Date: 15-OCT-13 08:58 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	EX	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	EX	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	5.4	5.0	ug/L
RANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	18	5.0	ug/L
2-HEXANONE	19	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	EX	10	ug/L
4-METHYL-2-PENTANONE	47	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	EX	5.0	ug/L
,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

Sample ID: A997748 PZ-104-SD

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	42	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	108		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	96		% Rec
DIBROMOFLUOROMETHANE	101		% Rec

Dilution necessary due to high concentration of target analytes.

Prep Method SW846-5030B Purge and Trap

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	81	5.0	mg/L

1:5 Dilution.

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 16-OCT-13 08:02 Instrument: GC/MS VOA Test: O510.6.1

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	3000	100	ug/L
BENZENE	920	10	ug/L
METHYL ETHYL KETONE	1900	100	ug/L
TOLUENE	250	10	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	97		% Rec
TOLUENE-D8	96		% Rec
4-BROMOFLUOROBENZENE	107		% Rec
DIBROMOFLUOROMETHANE	101		% Rec

1:10 Dilution.

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit
EX Exceeds calibration range. See Replicate

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

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Sample ID: A997748 PZ-104-SD

Sample Comments

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997749
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 08-OCT-13 09:51

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-100-SD
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 08-OCT-13 09:51 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	96.48		ft
INITIAL WATER LEVEL	35.61		ft
ELEVATION OF GROUNDWATER SURFACE	450.11		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 08-OCT-13 09:51 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	17.0		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 08-OCT-13 09:51 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.08	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 08-OCT-13 09:51 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	626	1.0	umHOS/cm

FIELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 08-OCT-13 09:51 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	3.66		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	360	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

nalyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	330	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M109.3.0

rep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	81000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

1:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	730	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	37000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	64	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	6900	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:17 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:44 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:32 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

TOTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	340	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 01:24 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	BDL	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 01:24 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	2.1	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:40 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.29	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:45 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 12:38 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST Analysis Date: 14-OCT-13 19:53 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	9.8	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.9	1.0	mg/L

Sample ID: A997749 PZ-100-SD

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS | Analysis Date: 15-OCT-13 09:24 | Instrument: GC/MS VOA | Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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Sample ID: A997749 PZ-100-SD

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	90		% Rec
DIBROMOFLUOROMETHANE	109		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or ıstified as to the the exact nature of the deviations.
.KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

Pace Analytical®
Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997750
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 08-OCT-13 09:20

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: FB @ PZ-100-SD
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	BDL	1.0	mg CaCO3/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	BDL	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	BDL	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

1:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
IRON	BDL	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	BDL	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	BDL	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:20 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:48 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

arameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:34 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

TOTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 01:39 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	BDL	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 01:39 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	BDL	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:41 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:46 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 12:39 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST | Analysis Date: 14-OCT-13 20:08 | Instrument: IC | Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON | Analysis Date: 22-OCT-13 09:45 | Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS | Analysis Date: 16-OCT-13 09:55 | Instrument: TOC | Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	BDL	1.0	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS | Analysis Date: 15-OCT-13 09:49 | Instrument: GC/MS VOA | Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L

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Sample ID: A997750 FB @ PZ-100-SD

Parameter	Result	Det. Limit	Units
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	89		% Rec
DIBROMOFLUOROMETHANE	110		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

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KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC.)1 W. MORRIS ST. ..NDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997751
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 08-OCT-13 10:34

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-100-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 08-OCT-13 10:34 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	89.25		ft
INITIAL WATER LEVEL	33.94		ft
ELEVATION OF GROUNDWATER SURFACE	451.81		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 08-OCT-13 10:34 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	17.6		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 08-OCT-13 10:34 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.95	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 08-OCT-13 10:34 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	828	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 08-OCT-13 10:34 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.81		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	470	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	67	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:17 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	130	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	98000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	BDL	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	54000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	5.0	ug/L

ICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:17 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	16	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	12000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:24 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:53 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:36 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

TOTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	460	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 02:40 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	3.5	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 02:40 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.79	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:43 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:48 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 12:41 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 02:40 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	39	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.5	1.0	mg/L

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Sample ID: A997751 PZ-100-SS

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 10:15 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
RANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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Sample ID: A997751 PZ-100-SS

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	87		% Rec
DIBROMOFLUOROMETHANE	110		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

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KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC.)1 W. MORRIS ST. ..DIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997752
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 08-OCT-13 11:26

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-114-AS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 08-OCT-13 11:26 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	26.35		ft
INITIAL WATER LEVEL	20.90		ft
ELEVATION OF GROUNDWATER SURFACE	430.36		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 08-OCT-13 11:26 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	16.6		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 08-OCT-13 11:26 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.59	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 08-OCT-13 11:26 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1556	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 08-OCT-13 11:26 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	7.49		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	490	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	440	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:11 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	160	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	140000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	70000	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	36000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	1700	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	110000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 11:27 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	200	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 22:57 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:38 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

TOTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	820	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 03:26 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	160	6.3	mg/L

1:25 Dilution.

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 03:11 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.34	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:44 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	1.4	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:50 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 13:06 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	2.2	0.25	mg/L

1:5 Dilution.

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 03:11 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	5.4	3.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: C. ANYANWUTAKU Analysis Date: 17-OCT-13 10:40 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units

Sample ID: A997752 PZ-114-AS

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	9.9	5.0	mg/L

.5 Dilution.

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 11:33 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	69	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
',2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
',2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	6.3	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L

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Sample ID: A997752 PZ-114-AS

Parameter	Result	Det. Limit	Units
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	93		% Rec
DIBROMOFLUOROMETHANE	106		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC.)1 W. MORRIS ST. ..DIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997753
	Completed	**PO Number**
	31-OCT-13	4005889***
	Printed	**Sampled**
	31-OCT-13	08-OCT-13 12:11

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-115-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 08-OCT-13 12:11 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	80.92		ft
INITIAL WATER LEVEL	17.63		ft
ELEVATION OF GROUNDWATER SURFACE	434.64		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 08-OCT-13 12:11 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	16.8		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 08-OCT-13 12:11 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.67	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 08-OCT-13 12:11 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	2015	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 08-OCT-13 12:11 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	5.12		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	780	1.0	mg CaCO3/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	310	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	230	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Sample ID: A997753 PZ-115-SS

Parameter	Result	Det. Limit	Units
CALCIUM	180000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	13	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:28 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	1300	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	81000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	46	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	43	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	65000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:10 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:01 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 17-OCT-13 11:40 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	920	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST Analysis Date: 15-OCT-13 18:37 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	250	6.3	mg/L

1:25 Dilution.

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 03:41 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.66	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:45 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:51 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 18-OCT-13 12:42 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	0.15	0.050	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 03:41 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	12	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: C. ANYANWUTAKU Analysis Date: 17-OCT-13 10:40 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	11	5.0	mg/L

1:5 Dilution.

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 11:59 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
IBROMOMETHANE	BDL	10	ug/L
,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
ETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L

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Sample ID: A997753 PZ-115-SS

Parameter	Result	Det. Limit	Units
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	90		% Rec
4-BROMOFLUOROBENZENE	90		% Rec
DIBROMOFLUOROMETHANE	109		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC.)1 W. MORRIS ST. ..NDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997754
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 08-OCT-13 14:04

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-110-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 08-OCT-13 14:04 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	107.11		ft
INITIAL WATER LEVEL	31.06		ft
ELEVATION OF GROUNDWATER SURFACE	430.09		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 08-OCT-13 14:04 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	17.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 08-OCT-13 14:04 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.60	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 08-OCT-13 14:04 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1948	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 08-OCT-13 14:04 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	5.73		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	950	1.0	mg CaCO3/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	290	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	270	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	240000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	6500	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	87000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	180	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	14	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	94000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:14 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:05 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:25 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	1100	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 04:58 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	190	6.3	mg/L

1:25 Dilution.

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 04:42 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.43	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:46 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.15	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:53 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:36 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	0.15	0.050	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 12-OCT-13 04:58 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	55	6.3	mg/L

1:25 Dilution.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	43	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: C. ANYANWUTAKU Analysis Date: 17-OCT-13 10:40 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units

Sample ID: A997754 PZ-110-SS

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	15	5.0	mg/L

..5 Dilution.

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 12:25 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
',2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
,,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L

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Sample ID: A997754 PZ-110-SS

Parameter	Result	Det. Limit	Units
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	85		% Rec
DIBROMOFLUOROMETHANE	109		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

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KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 01 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997755
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 08-OCT-13 15:02

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-106-SD
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 08-OCT-13 15:02 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	196.15		ft
INITIAL WATER LEVEL	12.53		ft
ELEVATION OF GROUNDWATER SURFACE	450.83		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 08-OCT-13 15:02 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	22.6		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 08-OCT-13 15:02 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.95	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 08-OCT-13 15:02 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	827	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 08-OCT-13 15:02 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	20.32		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	460	1.0	mg CaCO3/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	120	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	100000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	2100	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	50000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	66	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	11000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 12:53 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:09 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:37 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 11-OCT-13 15:15 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	440	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 17:35 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	12	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 17:35 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	1.4	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 11:48 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.11	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 09:59 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:37 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	0.055	0.050	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 17:50 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	58	2.0	mg/L

1:5 Dilution.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.5	1.0	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 12:51 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
RANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

Sample ID: A997755 PZ-106-SD

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	87		% Rec
DIBROMOFLUOROMETHANE	108		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

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KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC.)1 W. MORRIS ST. ..NDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997756
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 09-OCT-13 09:26

Report To

JON WILKINSON
HERST AND ASSOCIATES
4630 SOUTH HIGHWAY 94
NORTH OUTER ROAD
ST. CHARLES, MO 63304

Bill To

DAVE VASBINDER
ALLIED WASTE SYSTEMS
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-109-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 09-OCT-13 09:26 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	131.18		ft
INITIAL WATER LEVEL	29.48		ft
ELEVATION OF GROUNDWATER SURFACE	429.08		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000

NELAC:N

Analysis Date: 09-OCT-13 09:26 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	20.3		Degrees C

FIELD PH (AQUEOUS) SW846-9040C

NELAC:Y

Analysis Date: 09-OCT-13 09:26 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.08	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A

NELAC:Y

Analysis Date: 09-OCT-13 09:26 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	824	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1

NELAC:Y

Analysis Date: 09-OCT-13 09:26 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	6.56		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	450	1.0	mg CaCO3/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 17-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	62	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	250	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Sample ID: A997756 PZ-109-SS

Parameter	Result	Det. Limit	Units
CALCIUM	91000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	BDL	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	53000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	18000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:17 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:14 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:39 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 15-OCT-13 15:10 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	430	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 18:06 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	3.7	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 18:06 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	2.3	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 12:34 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 10:01 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:37 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 18:06 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	33	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.5	1.0	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 13:17 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
RANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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Pace Analytical Services, Inc.

Sample ID: A997756 PZ-109-SS

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	94		% Rec
4-BROMOFLUOROBENZENE	87		% Rec
DIBROMOFLUOROMETHANE	110		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 01 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997757
	Completed	**PO Number**
	31-OCT-13	4005889***
	Printed	**Sampled**
	31-OCT-13	09-OCT-13 10:22

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-205-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 09-OCT-13 10:22 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	92.95		ft
INITIAL WATER LEVEL	27.13		ft
ELEVATION OF GROUNDWATER SURFACE	434.60		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 09-OCT-13 10:22 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	18.6		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 09-OCT-13 10:22 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.96	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 09-OCT-13 10:22 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	936	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 09-OCT-13 10:22 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.10		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	500	1.0	mg CaCO3/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 18-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	140	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	100000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:31 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	99	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	57000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	5.0	ug/L

ICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	15000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:20 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 19-OCT-13 23:39 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:42 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 15-OCT-13 15:10 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	500	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 19:07 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	33	3.0	mg/L

1:5 Dilution.

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 18:52 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.36	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 12:35 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 10:02 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:38 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 19:07 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	54	2.0	mg/L

1:5 Dilution.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units

Sample ID: A997757 PZ-205-SS

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.9	1.0	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 13:43 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
IBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
',1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
,ETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L

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Sample ID: A997757 PZ-205-SS

Parameter	Result	Det. Limit	Units
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	117		% Rec
TOLUENE-D8	94		% Rec
4-BROMOFLUOROBENZENE	82		% Rec
DIBROMOFLUOROMETHANE	109		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

Pace Analytical®

Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 01 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997758
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 09-OCT-13 11:22

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-105-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 09-OCT-13 11:22 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	144.81		ft
INITIAL WATER LEVEL	24.42		ft
ELEVATION OF GROUNDWATER SURFACE	458.59		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 09-OCT-13 11:22 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	17.8		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 09-OCT-13 11:22 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.21	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 09-OCT-13 11:22 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1036	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 09-OCT-13 11:22 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	8.85		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	430	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 18-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	150	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	92000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:34 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	310	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	48000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	6.5	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	60000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:24 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:04 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:44 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 15-OCT-13 15:10 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	590	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 19:37 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	81	2.5	mg/L

1:10 Dilution.

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 19:22 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.59	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 12:47 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 10:04 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:39 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 19:37 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	85	2.5	mg/L

1:10 Dilution.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units

Sample ID: A997758 PZ-105-SS

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.6	1.0	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 14:08 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
IBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
',1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
'ETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L

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Sample ID: A997758 PZ-105-SS

Parameter	Result	Det. Limit	Units
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	117		% Rec
TOLUENE-D8	94		% Rec
4-BROMOFLUOROBENZENE	87		% Rec
DIBROMOFLUOROMETHANE	113		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

Pace Analytical®

Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC.)1 W. MORRIS ST. ,,vDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997759
	Completed	**PO Number**
	31-OCT-13	4005889***
	Printed	**Sampled**
	31-OCT-13	09-OCT-13 12:30

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-104-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 09-OCT-13 12:30 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	140.22		ft
INITIAL WATER LEVEL	20.00		ft
ELEVATION OF GROUNDWATER SURFACE	463.45		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 09-OCT-13 12:30 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	23.6		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 09-OCT-13 12:30 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.69	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 09-OCT-13 12:30 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	869	1.0	umHOS/cm

IELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 09-OCT-13 12:30 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	7.30		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	450	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 18-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	100	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	140	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Sample ID: A997759 PZ-104-SS

Parameter	Result	Det. Limit	Units
CALCIUM	92000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	1500	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	53000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	38	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	13000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:27 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:09 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:46 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

OTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 15-OCT-13 15:10 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	420	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 19:53 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	4.6	3.0	mg/L

1:5 Dilution.

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 19:53 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.63	0.50	mg/L

1:5 Dilution.

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 12:49 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 10:06 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:40 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST Analysis Date: 14-OCT-13 16:49 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	6.1	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	55	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	9.2	1.0	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 14:34 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	EX	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
IBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	7.5	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	43	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	35	5.0	ug/L
2-HEXANONE	52	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	210	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
',1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
ETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	EX	5.0	ug/L

Sample ID: A997759 PZ-104-SS

Parameter	Result	Det. Limit	Units
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	78	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	98		% Rec
4-BROMOFLUOROBENZENE	98		% Rec
DIBROMOFLUOROMETHANE	101		% Rec

Dilution necessary due to high concentration of target analytes.

Prep Method SW846-5030B Purge and Trap

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: R. SHAMP Analysis Date: 21-OCT-13 16:12 Instrument: GC/MS VOA Test: O510.6.1

Parameter	Result	Det. Limit	Units
BENZENE	2200	50	ug/L
TOLUENE	150	50	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	102		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	100		% Rec
DIBROMOFLUOROMETHANE	100		% Rec

1:50 Dilution

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit
EX Exceeds calibration range. See Replicate

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997760
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 09-OCT-13 13:44

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: PZ-201A-SS
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

GROUNDWATER MONITORING WELL DATA SAS

Analysis Date: 09-OCT-13 13:44 Instrument: FIELD Test: G600.0.0

Parameter	Result	Det. Limit	Units
TOTAL WELL DEPTH	86.11		ft
INITIAL WATER LEVEL	12.25		ft
ELEVATION OF GROUNDWATER SURFACE	467.95		Feet/MSL

FIELD TEMPERATURE SM2550 B 2000 NELAC:N

Analysis Date: 09-OCT-13 13:44 Instrument: FIELD Test: G603.1.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	18.3		Degrees C

FIELD PH (AQUEOUS) SW846-9040C NELAC:Y

Analysis Date: 09-OCT-13 13:44 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.99	0.1	Std. Units

FIELD SPECIFIC CONDUCTANCE SW846-9050A NELAC:Y

Analysis Date: 09-OCT-13 13:44 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	809	1.0	umHOS/cm

FIELD TURBIDITY EPA 180.1 NELAC:Y

Analysis Date: 09-OCT-13 13:44 Instrument: FIELD Test: G602.0.0

Sample ID: A997760 PZ-201A-SS

Parameter	Result	Det. Limit	Units
TURBIDITY	7.35		ntu

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	450	1.0	mg CaCO3/L

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 18-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	130	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	BDL	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Parameter	Result	Det. Limit	Units
CALCIUM	100000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

1:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 24-OCT-13 05:38 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	67	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	48000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	11	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	13000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:31 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

1:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:13 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:48 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

TOTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 15-OCT-13 15:10 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	520	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 21:09 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	3.9	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 21:09 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.37	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 12:50 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 10:07 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	0.34	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:40 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST Analysis Date: 14-OCT-13 14:47 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	63	2.0	mg/L

1:5 Dilution.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON Analysis Date: 22-OCT-13 09:45 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS Analysis Date: 16-OCT-13 09:55 Instrument: TOC Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	1.6	1.0	mg/L

Sample ID: A997760 PZ-201A-SS

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 15:00 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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Sample ID: A997760 PZ-201A-SS

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	89		% Rec
DIBROMOFLUOROMETHANE	104		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or ıstified as to the the exact nature of the deviations.
.KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

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Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997761
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 09-OCT-13

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: DUPLICATE
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

HARDNESS SM2340 B 1997 NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: G608.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
HARDNESS	450	1.0	mg CaCO3/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 21-OCT-13 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

Analyst: K. KAMARA Analysis Date: 18-OCT-13 09:00 Instrument: PREP Test: P129.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	100	10	ug/L

BERYLLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V105.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	2.0	ug/L

1:5 Dilution.

BORON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M107.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	140	100	ug/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	93000	100	ug/L

CHROMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V110.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	5.0	ug/L

1:5 Dilution.

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	5.0	ug/L

COPPER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V112.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	5.0	ug/L

1:5 Dilution.

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units

Sample ID: A997761 DUPLICATE

Parameter	Result	Det. Limit	Units
IRON	1500	20	ug/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	53000	100	ug/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	38	5.0	ug/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	10	ug/L

SILVER ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V130.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	5.0	ug/L

1:5 Dilution.

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	13000	1000	ug/L

THALLIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V134.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	2.0	ug/L

1:5 Dilution.

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Sample ID: A997761 DUPLICATE

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	10	ug/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 23-OCT-13 13:34 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	20	ug/L

ARSENIC ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V103.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	5.0	ug/L

1:5 Dilution.

CADMIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V108.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.20	ug/L

:5 Dilution.

LEAD ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V116.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	5.0	ug/L

1:5 Dilution.

SELENIUM ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V128.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	5.0	ug/L

1:5 Dilution.

ANTIMONY ICP/MS SW846-6020 NELAC:Y

Analyst: J. KRAMER Analysis Date: 20-OCT-13 00:17 Instrument: ICP/MS Test: V102.3.0

Prep: ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8 P129.4.0

arameter	Result	Det. Limit	Units
ANTIMONY	BDL	5.0	ug/L

1:5 Dilution.

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 08:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 16-OCT-13 15:50 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.20	ug/L

TOTAL DISSOLVED SOLIDS SM2540 C 1997 NELAC:Y

Analyst: A. CORNWELL Analysis Date: 15-OCT-13 15:10 Test: G402.9.0

Parameter	Result	Det. Limit	Units
DISSOLVED SOLIDS	420	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 21:40 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	4.4	3.0	mg/L

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: R. DALAL Analysis Date: 11-OCT-13 21:40 Instrument: IC Test: G310.1.0

Parameter	Result	Det. Limit	Units
FLUORIDE	0.75	0.10	mg/L

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 NELAC:Y

Analyst: E. SKALA Analysis Date: 16-OCT-13 12:51 Instrument: AUTO-ANALYZER Test: G204.6.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.10	mg/L

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) NELAC:Y

Analyst: E. SKALA Analysis Date: 17-OCT-13 10:09 Instrument: AUTO-ANALYZER Test: G113.3.0

Parameter	Result	Det. Limit	Units
NITROGEN, NITRATE-NITRITE	BDL	0.10	mg/L

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) NELAC:Y

Analyst: S. BOXUM Analysis Date: 22-OCT-13 12:43 Instrument: AUTO-ANALYZER Test: G207.2.0

Parameter	Result	Det. Limit	Units
PHOSPHORUS	BDL	0.05	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056 NELAC:Y

Analyst: K. VEST | Analysis Date: 14-OCT-13 15:02 | Instrument: IC | Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	6.2	2.0	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) NELAC:Y

Analyst: D. DICKERSON | Analysis Date: 22-OCT-13 09:45 | Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	49	10	mg/L

TOTAL ORGANIC CARBON SW846-9060A NELAC:Y

Analyst: T. DRIGGERS | Analysis Date: 16-OCT-13 09:55 | Instrument: TOC | Test: O401.0.0

Parameter	Result	Det. Limit	Units
TOTAL ORGANIC CARBON (TOC)	9.2	1.0	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS | Analysis Date: 15-OCT-13 15:25 | Instrument: GC/MS VOA | Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	EX	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	7.1	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	42	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L

Sample ID: A997761 DUPLICATE

Parameter	Result	Det. Limit	Units
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	34	5.0	ug/L
2-HEXANONE	54	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	210	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	EX	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	76	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	106		% Rec
TOLUENE-D8	98		% Rec
4-BROMOFLUOROBENZENE	97		% Rec
DIBROMOFLUOROMETHANE	100		% Rec

Dilution necessary due to high concentration of target analytes.

Prep Method SW846-5030B Purge and Trap

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 17-OCT-13 08:14 Instrument: GC/MS VOA Test: O510.6.1

Parameter	Result	Det. Limit	Units
BENZENE	2100	50	ug/L
TOLUENE	160	50	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	98		% Rec
TOLUENE-D8	96		% Rec
4-BROMOFLUOROBENZENE	111		% Rec
DIBROMOFLUOROMETHANE	103		% Rec

1:50 Dilution.

·ep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit
EX Exceeds calibration range. See Replicate

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Pace Analytical Services, INC. certifies that the test results indicated as NELAP (National Environmental Laboratory Accreditation Program) accredited (Yes for NELAP) meet all requirements of NELAP and Kansas (KDHE) unless otherwise explained or justified as to the the exact nature of the deviations.
KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Approved by: CHRISTINE SARKAN 31-OCT-13

Pace Analytical®
Pace Analytical Services, Inc.

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
PACE ANALYTICAL SERVICES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	10-OCT-13	A997762
	Completed 31-OCT-13	PO Number 4005889***
	Printed 31-OCT-13	Sampled 09-OCT-13

Report To	Bill To
JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 NORTH OUTER ROAD ST. CHARLES, MO 63304	DAVE VASBINDER ALLIED WASTE SYSTEMS 13570 ST. CHARLES ROCK ROAD BRIDGETON, MO 63044

Sample Description

CLIENT ID: TRIP BLANK
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 8945 - MO-ALLIED-BRIDGETON LANDFILL
PROJECT NAME: GROUNDWATER - BRIDGETON LANDFILL
DATA PACKAGE #: 65365
LOCATION: BRIDGETON LANDFILL
DESCRIPTION: SEMI-ANNUAL GROUNDWATER TESTING

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 15-OCT-13 15:51 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
ACETONE (2-PROPANONE)	BDL	10	ug/L
ACRYLONITRILE	BDL	100	ug/L
BENZENE	BDL	5.0	ug/L
BROMOCHLOROMETHANE	BDL	5.0	ug/L
BROMODICHLOROMETHANE	BDL	5.0	ug/L
BROMOFORM	BDL	5.0	ug/L
BROMOMETHANE	BDL	10	ug/L
CARBON DISULFIDE	BDL	10	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
DIBROMOCHLOROMETHANE	BDL	5.0	ug/L
CHLOROETHANE	BDL	10	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	10	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	5.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	5.0	ug/L
DIBROMOMETHANE	BDL	10	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
TRANS-1,4-DICHLORO-2-BUTENE	BDL	10	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L

Pace Analytical®

Pace Analytical Services, Inc.

Sample ID: A997762 TRIP BLANK

Parameter	Result	Det. Limit	Units
' 2-DICHLOROETHANE	BDL	5.0	ug/L
,1-DICHLOROETHENE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
2-HEXANONE	BDL	10	ug/L
IODOMETHANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
METHYL ETHYL KETONE	BDL	10	ug/L
4-METHYL-2-PENTANONE	BDL	10	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
RICHLOROFLUOROMETHANE	BDL	10	ug/L
1,2,3-TRICHLOROPROPANE	BDL	5.0	ug/L
VINYL ACETATE	BDL	10	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	108		% Rec
TOLUENE-D8	93		% Rec
4-BROMOFLUOROBENZENE	90		% Rec
DIBROMOFLUOROMETHANE	105		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature .9 C.
Sample chain of custody number 15635.

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KS ELAP / NELAP Accreditation # E-10177 Indiana SDWA C-49-01

Sample ID: A997762 TRIP BLANK

Approved by: CHRISTINE SARKAN 31-OCT-13

01097669

HERITAGE ENVIRONMENTAL SERVICES, LLC.
COMMERCIAL LABORATORY OPERATIONS
7901 W Morris St Indianapolis, IN 46231
www.heritage-enviro.com (800)827-4374 Fax:(317)486-5095

15635

Submitter Name: **MO-ALLIED-BRIDGETON LANDFILL (8945)**
Project Name: **GROUNDWATER - BRIDGETON LANDFILL (49**
Z Quote No: **Z139500**
PO No: **4337-12001-9 (2012)**
Heritage Contact CHRISTOPHER BOYLE (317)390-3128

Sample Turn Around Time
Standard: X Rush Date ____/____/____ (Mo Day Yr)
Accelerated TAT subject to Additional Charge.
Date must be Accepted and Approved by Lab.

Sampled By:

Date Sampled	Time Sampled	Comp	Grab	Sample ID and/or Location where your sample was taken	Sample Type (Matrix): Water, Soil, Oil, Sludge, Swipe, Other	Number of Containers	VOL	Ag, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hardness, Hg, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	COD, NH3, NO3+NO2, P, TOC	IC-Cl, IC-F, IC-SO4, TDS	Remarks:	Lab use only Sample No.
10/7/13	1007 AM/PM		X	P2-111-SD	GW	7	X	X	X	X		A997746
	1131 AM/PM		X	P2-106-SS	GW	7	X	X	X	X		747
10/7/13	1258 AM/PM		X	P2-104-SD	GW	7	X	X	X	X		748
10/8/13	0951 AM/PM		X	P2-100-SD	GW	7	X	X	X	X		749
	0920 AM/PM		X	FBQ P2-100-SD	DI	7	X	X	X	X	DI=Deionized water	750
	1034 AM/PM		X	P2-100-SS	GW	7	X	X	X	X		751
	1126 AM/PM		X	P2-114-AS	GW	7	X	X	X	X		752
	1211 AM/PM		X	P2-115-SS	GW	7	X	X	X	X		753
	1404 AM/PM		X	P2-110-SS	GW	7	X	X	X	X		754
10/8/13	1502 AM/PM		X	P2-106-SD	GW	7	X	X	X	X		755

Comments: 3 Coolers

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Matt D. Stewart	10/9/13 1525	FedEx #: 5427 9764 1919
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Received for Lab by: (Signature)	Date: 10/10/13 Time: 0810	Temperature: 0.3 (1.0) °C Received On Ice: Yes / No

Laboratory use only	Yes	No	NA
Custody seals intact on cooler?	—		
C. seals intact on containers?			-
Broken containers?		—	
COC agree with sample labels?	—		
Correct containers for testing?	—		
Headspace issues acceptable?	—		
Holding time(s) acceptable?	—		
Preservative pH's acceptable?			
Was pH left unadjusted?			

Send Report To:
Co: HERST AND ASSOCIATES
Addr: 4630 SOUTH HIGHWAY 94
ST. CHARLES, MO 63304
Attn: JON WILKINSON
Phone: (636)939-9111
Fax: (636)939-9757
email: jwilkinson@herstassociates.com

Sample Receiving Check Sheet

COC ID/Date Received: 01097669

	Sulfuric plastic <2	Sulfuric Diss Plastic<2	Sulfuric glass <2	Nitric plastic <2	Nitric Diss Plastic <2	NaOH/ZnAOC <12	NaOH plastic >12	preservative added?	pH after addition	Residual C12 present Y/N	Headspace >1/4"	Sample is UNP or other than aqueous Y/N	HCL Presered Containers*	Comments
Line 1 on COC	2			2									X	
Line 2 on COC	2			2									X	
Line 3 on COC	2			2									X	
Line 4 on COC	2			2									X	
Line 5 on COC	2			2									X	
Line 6 on COC	2			2									X	
Line 7 on COC	2			2									X	
Line 8 on COC	2			2									X	
Line 9 on COC	2			2									X	
Line 10 on COC	2			2									X	
Line 11 on COC														
Line 12 on COC														
Line 13 on COC														
Line 14 on COC														
Line 15 on COC														
Line 16 on COC														
Line 17 on COC														
Line 18 on COC														
Line 19 on COC														
Line 20 on COC														
Line 21 on COC														
Line 22 on COC														
Line 23 on COC														
Line 24 on COC														
Line 25 on COC														

Aqueous samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container then record the pH in the box. If approved by the project chemist then add acid or base to the sample to achieve the correct pH. Add up to two times the volume initially added to the sample container. Record pH after the addition of this preservative.

Preservative sizes for addition:

120ml NaOH	1 mL
500ml H2SO4	2 mL
1000ml H2SO4	4 mL
500ml HNO3	2 mL
1000ml HNO3	4 mL

Drop Off ~~FedEx~~ UPS Courier

Tracking # 8037 9684 9889

Checked by: MSW

***pH of HCL preserved containers checked by analysts**

Comments:

01097670

HERITAGE ENVIRONMENTAL SERVICES, LLC.

COMMERCIAL LABORATORY OPERATIONS

7901 W Morris St Indianapolis, IN 46231

www.heritage-enviro.com (800)827-4374 Fax:(317)486-5095

15635

Submitter Name: **MO-ALLIED-BRIDGETON LANDFILL (8945)**

Project Name: **GROUNDWATER - BRIDGETON LANDFILL (49**

Z Quote No: **Z139500**

PO No: **4337-12001-9 (2012)**

Heritage Contact CHRISTOPHER BOYLE (317)390-3128

Sample Turn Around Time

Accelerated TAT subject to Additional Charge.

Standard: X Rush Date___/___/___ (Mo Day Yr) Date must be Accepted and Approved by Lab.

Sampled By: Matt Stewart, Herst & Associates, Inc.

Analyses Requested (Note special detection limits or methods)

Comments: 3 coolers

Date Sampled	Time Sampled	Comp	Grab	Sample ID and/or Location where your sample was taken	Sample Type (Matrix): Water, Soil, Oil, Sludge, Swipe, Other	Number of Containers	VOL	Ag, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hardness, Hg, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	COD, NH3, NO3+NO2, P, TOC	IC-Cl, IC-F, IC-SO4, TDS	Remarks:	Lab use only Sample No.
10/9/13	0926 AM PM		X	PZ-109-SS	GW	7	X	X	X	X		A997756
	1022 AM PM		X	PZ-205-SS	GW	7	X	X	X	X		757
	1122 AM PM		X	PZ-105-SS	GW	7	X	X	X	X		758
	1230 AM PM		X	PZ-104-SS	GW	7	X	X	X	X		759
	1344 AM PM		X	PZ-201A-SS	GW	7	X	X	X	X		760
	— AM PM		X	Duplicate	GW	7	X	X	X	X		761
10/9/13	— AM PM		X	Trip Blank	DI	2	X				DI = Deionized Water	762
	AM PM											
	AM PM											
	AM PM											

Relinquished by: (Signature) Matt Stewart Date/Time 10/9/13 1525

Received by: (Signature) FedEx #: 542747691919

Relinquished by: (Signature) Date/Time

Received by: (Signature)

Relinquished by: (Signature) Date/Time

Received by: (Signature)

Received for Lab by: (Signature)

Date 10/10/13 Time 0810

Temperature 0.9 (1-8) °C

Received On Ice ~~Yes~~ / No

Laboratory use only	Yes	No	NA
Custody seals intact on cooler?	—		
C. seals intact on containers?			—
Broken containers?		—	
COC agree with sample labels?	—		
Correct containers for testing?	—		
Headspace issues acceptable?	—		
Holding time(s) acceptable?	—		
Preservative pH's acceptable?			
Was pH left unadjusted?			

Send Report To:

Co: HERST AND ASSOCIATES

Addr: 4630 SOUTH HIGHWAY 94
ST. CHARLES, MO 63304

Attn: JON WILKINSON

Phone: (636)939-9111

Fax: (636)939-9757

email: jwilkinson@herstassociates.com

Sample Receiving Check Sheet

COC ID/Date Received: 0257670

	Sulfuric plastic <2	Sulfuric Diss Plastic<2	Sulfuric glass <2	Nitric plastic <2	Nitric Diss Plastic <2	NaOH/ZnAOC <12	NaOH plastic >12	preservative added?	pH after addition	Residual C12 present Y/N	Headspace >1/4"	Sample is UNP or other than aqueous Y/N	HCL Preserved Containers*	Comments
Line 1 on COC	2			2									X	
Line 2 on COC	2			2									X	
Line 3 on COC	2			2									X	
Line 4 on COC	2			2									X	
Line 5 on COC	2			2									X	
Line 6 on COC	2			2									X	
Line 7 on COC													X	
Line 8 on COC														
Line 9 on COC														
Line 10 on COC														
Line 11 on COC														
Line 12 on COC														
Line 13 on COC														
Line 14 on COC														
Line 15 on COC														
Line 16 on COC														
Line 17 on COC														
Line 18 on COC														
Line 19 on COC														
Line 20 on COC														
Line 21 on COC														
Line 22 on COC														
Line 23 on COC														
Line 24 on COC														
Line 25 on COC														

Aqueous samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container then record the pH in the box. If approved by the project chemist then add acid or base to the sample to achieve the correct pH. Add up to two times the volume initially added to the sample container. Record pH after the addition of this preservative.

Preservative sizes for addition:

120ml NaOH	1 mL
500ml H2SO4	2 mL
1000ml H2SO4	4 mL
500ml HNO3	2 mL
1000ml HNO3	4 mL

Drop Off (FedEx) UPS Courier

Tracking # 8037 9684 9889

Checked by:

***pH of HCL preserved containers checked by analysts**

Comments:

Pace Analytical®

Pace Analytical Services, Inc.

Quality Assurance Report

65365

31-OCT-13

Service Location	Submitter
Pace Analytical Services, INC. 7901 West Morris Street Indianapolis, IN 46231 (317) 243-8304	JON WILKINSON HERST AND ASSOCIATES 4630 SOUTH HIGHWAY 94 ST. CHARLES, MO 63304

Sample ID	Client ID	Date/Time Sampled	Date Received	Date Released
A997746	PZ-111-SD	07-Oct-13 10:07	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997747	PZ-106-SS	07-Oct-13 11:31	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997748	PZ-104-SD	07-Oct-13 12:58	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997749	PZ-100-SD	08-Oct-13 09:51	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997750	FB @ PZ-100-SD	08-Oct-13 09:20	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997751	PZ-100-SS	08-Oct-13 10:34	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997752	PZ-114-AS	08-Oct-13 11:26	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997753	PZ-115-SS	08-Oct-13 12:11	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997754	PZ-110-SS	08-Oct-13 14:04	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997755	PZ-106-SD	08-Oct-13 15:02	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997756	PZ-109-SS	09-Oct-13 09:26	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997757	PZ-205-SS	09-Oct-13 10:22	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		

Quality Assurance Report

65365

31-OCT-13

Sample ID	Client ID	Date/Time Sampled	Date Received	Date Released
A997758	PZ-105-SS	09-Oct-13 11:22	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997759	PZ-104-SS	09-Oct-13 12:30	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997760	PZ-201A-SS	09-Oct-13 13:44	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997761	DUPLICATE	09-Oct-13	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		
A997762	TRIP BLANK	09-Oct-13	10-Oct-13	31-Oct-2013
	LOCATION :	BRIDGETON LANDFILL		
	DESCRIPTION :	SEMI-ANNUAL GROUNDWATER TESTING		

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 G204.6

R617480 Analyst: E SKALA Run Date: 16-Oct-13 Instrument: AUTO-ANALYZER
Analytical Reviewer: P SPENCE Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2746535		NITROGEN, AMMONIA	0.100			0.131	mg/L	131.0	
ICV01	Q2746536		NITROGEN, AMMONIA	1.50			1.54	mg/L	102.7	
CCVL	Q2746544		NITROGEN, AMMONIA	0.400			0.419	mg/L	104.8	
CCVH	Q2746545		NITROGEN, AMMONIA	1.00			0.995	mg/L	99.5	
BLA01	Q2746546		NITROGEN, AMMONIA			BDL	0.10	mg/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
CCVL	Q2746547		NITROGEN, AMMONIA	0.400			0.426	mg/L	106.5	
CCVH	Q2746548		NITROGEN, AMMONIA	1.00			0.998	mg/L	99.8	
BLA01	Q2746549		NITROGEN, AMMONIA			BDL	0.10	mg/L		
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
CCVL	Q2746550		NITROGEN, AMMONIA	0.400			0.421	mg/L	105.3	
CCVH	Q2746551		NITROGEN, AMMONIA	1.00			0.989	mg/L	98.9	
BLA01	Q2746552		NITROGEN, AMMONIA			BDL	0.10	mg/L		
CCVL	Q2746553		NITROGEN, AMMONIA	0.400			0.420	mg/L	105.0	
CCVH	Q2746554		NITROGEN, AMMONIA	1.00			1.01	mg/L	101.0	
BLA01	Q2746555		NITROGEN, AMMONIA			BDL	0.10	mg/L		
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
CCVL	Q2746556		NITROGEN, AMMONIA	0.400			0.420	mg/L	105.0	
CCVH	Q2746557		NITROGEN, AMMONIA	1.00			0.994	mg/L	99.4	
BLA01	Q2746558		NITROGEN, AMMONIA			BDL	0.10	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SPI01	Q2746559	A997746	NITROGEN, AMMONIA	0	0.4		0.302	mg/L	75.5	
DPS01	Q2746560	A997746	NITROGEN, AMMONIA	0	0.4		0.297	mg/L	74.3	1.6
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCVL	Q2746563		NITROGEN, AMMONIA	0.400			0.413	mg/L	103.3	
CCVH	Q2746564		NITROGEN, AMMONIA	1.00			0.994	mg/L	99.4	
BLA01	Q2746565		NITROGEN, AMMONIA			BDL	0.10	mg/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
CCVL	Q2746566		NITROGEN, AMMONIA	0.400			0.425	mg/L	106.3	
CCVH	Q2746567		NITROGEN, AMMONIA	1.00			1.01	mg/L	101.0	
BLA01	Q2746568		NITROGEN, AMMONIA			BDL	0.10	mg/L		
SPI02	Q2746589	A997596	NITROGEN, AMMONIA	0.641	4		5.00	mg/L	109.0	
DPS02	Q2746590	A997596	NITROGEN, AMMONIA	0.641	4		4.90	mg/L	106.5	2.3
DUP02	Q2746594	A997560	NITROGEN, AMMONIA	0.109			0.0950	mg/L		13.7

Q2746535 1:20 Dilution
Q2746536 1:2 Dilution
Q2746544 1:5 Dilution

AMMONIA BY AUTOMATED PHENATE SM4500-NH3 G 1997 **G204.6**

R617480 Analyst: E SKALA Run Date: 16-Oct-13
Analytical Reviewer: P SPENCE Review Date: 17-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
Q2746545	1:2 Dilution									
Q2746547	1:5 Dilution									
Q2746548	1:2 Dilution									
Q2746550	1:5 Dilution									
Q2746551	1:2 Dilution									
Q2746553	1:5 Dilution									
Q2746554	1:2 Dilution									
Q2746556	1:5 Dilution									
Q2746557	1:2 Dilution									
Q2746559	MS and/or MSD do not meet control limits. Results for this sample are									
Q2746559	estimated.									
Q2746560	MS and/or MSD do not meet control limits. Results for this sample are									
Q2746560	estimated.									
Q2746563	1:5 Dilution									
Q2746564	1:2 Dilution									
Q2746566	1:5 Dilution									
Q2746567	1:2 Dilution									
Q2746589	1:10 Dilution									
Q2746590	1:10 Dilution									

ANTIMONY ICP/MS SW846-6020 **V102.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							

ITIMONY ICP/MS SW846-6020 **V102.3**

Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617487 Analyst: K KAMARA Run Date: 17-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		ANTIMONY	0.1			0.119	ug/L	119.0	
ICV01	Q2747879		ANTIMONY	50			50.7	ug/L	101.4	
LCCV	Q2747908		ANTIMONY	0.1			0.0920	ug/L	92.0	
CDL01	Q2747897		ANTIMONY	0.2			0.226	ug/L	113.0	
ICS-A	Q2747901		ANTIMONY	40			40.1	ug/L	100.2	
CCV	Q2747889		ANTIMONY	20			18.8	ug/L	94.0	
BLA01	Q2747883		ANTIMONY			<	0.400	ug/L		
BLA02	Q2746617		ANTIMONY			<	0.400	ug/L		
LCS	Q2746618		ANTIMONY	40			36.4	ug/L	91.0	
SER01	Q2747903	A997747	ANTIMONY	0		BDL		ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	ANTIMONY	0		BDL		ug/L		
SPI02	Q2746620	A997747	ANTIMONY	0	40		38.2	ug/L	95.5	
CCV	Q2747890		ANTIMONY	20			18.8	ug/L	94.0	
BLA01	Q2747884		ANTIMONY			<	0.400	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		ANTIMONY	20			19.1	ug/L	95.5	
BLA01	Q2747885		ANTIMONY			<	0.400	ug/L		
BLA02	Q2747193		ANTIMONY			<	0.400	ug/L		

ANTIMONY ICP/MS SW846-6020 **V102.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analytical — Analyst: J KRAMER — Reviewer: S ENDERSEN — Run Date: 19-Oct-13 — Review Date: 21-Oct-13 — Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS	Q2747194		ANTIMONY	40			35.3	ug/L	88.2	
SER01	Q2747904	A997757	ANTIMONY	0		BDL		ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	ANTIMONY	0		BDL		ug/L		
SPI02	Q2747196	A997757	ANTIMONY	0	40		36.5	ug/L	91.2	
CCV	Q2747892		ANTIMONY	20			18.7	ug/L	93.5	
BLA01	Q2747909		ANTIMONY			<	0.400	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		ANTIMONY	20			18.8	ug/L	94.0	
BLA01	Q2747910		ANTIMONY			<	0.400	ug/L		
SER01	Q2747935	A997633	ANTIMONY	0		BDL		ug/L		
CDL01	Q2747938		ANTIMONY	0.1			0.0720	ug/L	72.0	
ICS-A	Q2747933		ANTIMONY	40			34.7	ug/L	86.8	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analytical — Analyst: J KRAMER — Reviewer: S ENDERSEN — Run Date: 22-Oct-13 — Review Date: 23-Oct-13 — Instrument: ICP/MS

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748892		ANTIMONY	50			52.1	ug/L	104.2	
CDL01	Q2748927		ANTIMONY	0.2			0.246	ug/L	123.0	
ICS-A	Q2748931		ANTIMONY	40			48.6	ug/L	121.5	
LCCV	Q2748939		ANTIMONY	0.1			0.106	ug/L	106.0	
CCV	Q2748919		ANTIMONY	20			20.9	ug/L	104.5	
BLA01	Q2748902		ANTIMONY			<	0.400	ug/L		
BLA02	Q2746613		ANTIMONY			<	0.400	ug/L		
LCS	Q2746614		ANTIMONY	40			41.9	ug/L	104.8	
SER01	Q2748933	A997659	ANTIMONY	0		BDL		ug/L		
DUP02	Q2746615	A997659	ANTIMONY	0		BDL		ug/L		
SPI02	Q2746616	A997659	ANTIMONY	0	40		42.4	ug/L	106.0	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		ANTIMONY	20			20.8	ug/L	104.0	
BLA01	Q2748903		ANTIMONY			<	0.400	ug/L		
CDL01	Q2748937		ANTIMONY	0.1			0.111	ug/L	111.0	
ICS-A	Q2748932		ANTIMONY	40			44.2	ug/L	110.5	

Q2748931 1:5 Dilution.

ARSENIC ICP/MS SW846-6020 V103.3

Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		ARSENIC	1			0.880	ug/L	88.0	
ICV01	Q2747879		ARSENIC	50			48.8	ug/L	97.6	
LCCV	Q2747908		ARSENIC	1			0.819	ug/L	81.9	
CDL01	Q2747897		ARSENIC	2			2.13	ug/L	106.5	
ICS-A	Q2747901		ARSENIC	40			38.4	ug/L	96.0	
CCV	Q2747889		ARSENIC	20			19.6	ug/L	98.0	

ARSENIC ICP/MS SW846-6020 V103.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analytical — Analyst: J KRAMER, Reviewer: S ENDERSEN — Run Date: 19-Oct-13, Review Date: 21-Oct-13 — Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2747883		ARSENIC			<	0.400	ug/L		
BLA02	Q2746617		ARSENIC			<	0.400	ug/L		
LCS	Q2746618		ARSENIC	40			33.2	ug/L	83.0	
SER01	Q2747903	A997747	ARSENIC	2.31		CNA	1.62	ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	ARSENIC	0		BDL		ug/L		
SPI02	Q2746620	A997747	ARSENIC	0	40		38.1	ug/L	95.2	
CCV	Q2747890		ARSENIC	20			19.1	ug/L	95.5	
BLA01	Q2747884		ARSENIC			<	0.400	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		ARSENIC	20			19.3	ug/L	96.5	
BLA01	Q2747885		ARSENIC			<	0.400	ug/L		
BLA02	Q2747193		ARSENIC			<	0.400	ug/L		
LCS	Q2747194		ARSENIC	40			33.6	ug/L	84.0	
SER01	Q2747904	A997757	ARSENIC	0		BDL		ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	ARSENIC	0		BDL		ug/L		
SPI02	Q2747196	A997757	ARSENIC	0	40		35.9	ug/L	89.8	
CCV	Q2747892		ARSENIC	20			18.8	ug/L	94.0	
BLA01	Q2747909		ARSENIC			<	0.400	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		ARSENIC	20			18.6	ug/L	93.0	
BLA01	Q2747910		ARSENIC			<	0.400	ug/L		
SER01	Q2747935	A997633	ARSENIC	1.04		CNA	1.75	ug/L		
CDL01	Q2747938		ARSENIC	1			0.696	ug/L	69.6	
ICS-A	Q2747933		ARSENIC	40			30.9	ug/L	77.2	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analytical — Analyst: J KRAMER, Reviewer: S ENDERSEN — Run Date: 22-Oct-13, Review Date: 23-Oct-13 — Instrument: ICP/MS

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748938		ARSENIC	1			0.973	ug/L	97.3	
ICV01	Q2748892		ARSENIC	50			53.0	ug/L	106.0	
CDL01	Q2748927		ARSENIC	2			2.18	ug/L	109.0	

ARSENIC ICP/MS SW846-6020 V103.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617744 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICS-A	Q2748931		ARSENIC	40			48.3	ug/L	120.8	
LCCV	Q2748939		ARSENIC	1			0.994	ug/L	99.4	
CCV	Q2748919		ARSENIC	20			21.0	ug/L	105.0	
BLA01	Q2748902		ARSENIC			<	0.400	ug/L		
BLA02	Q2746613		ARSENIC			<	0.400	ug/L		
LCS	Q2746614		ARSENIC	40			38.1	ug/L	95.2	
SER01	Q2748933	A997659	ARSENIC	1.08		CNA	1.20	ug/L		
DUP02	Q2746615	A997659	ARSENIC	0		BDL		ug/L		
SPI02	Q2746616	A997659	ARSENIC	0	40		38.8	ug/L	97.0	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		ARSENIC	20			21.9	ug/L	109.5	
BLA01	Q2748903		ARSENIC			<	0.400	ug/L		
CDL01	Q2748937		ARSENIC	1			1.02	ug/L	102.0	
ICS-A	Q2748932		ARSENIC	40			42.7	ug/L	106.8	

Q2748931 1:5 Dilution.

BARIUM ICP SW846-6010B M104.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							

BARIUM ICP SW846-6010B **M104.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		BARIUM			<	0.000104	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		BARIUM	0.0100			0.0103	mg/L	103.0	
ICV01	Q2748710		BARIUM	1			1.01	mg/L	101.0	
LCCV	Q2748713		BARIUM	0.0100			0.0106	mg/L	106.0	
CDL01	Q2748699		BARIUM	0.0100			0.0101	mg/L	101.0	
ICS-AB	Q2748681		BARIUM	0.500			0.516	mg/L	103.2	
LCS	Q2747657		BARIUM	2			1.90	mg/L	95.0	
SER01	Q2748799	A997577	BARIUM	0.0925			0.0940	mg/L		1
DUP02	Q2747658	A997577	BARIUM	0.0925			0.0930	mg/L		0.5
SPI02	Q2747659	A997577	BARIUM	0.0925	2.00		1.91	mg/L	90.9	
CCV	Q2748797		BARIUM	5.00			4.89	mg/L	97.8	
BLA01	Q2748794		BARIUM			<	0.000800	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		BARIUM	5.00			4.88	mg/L	97.6	
BLA01	Q2748795		BARIUM			<	0.000800	mg/L		
SER01	Q2749088	A998242	BARIUM	0.0952			0.0955	mg/L		0.3
CCV	Q2749080		BARIUM	5.00			4.91	mg/L	98.2	
BLA01	Q2749072		BARIUM			<	0.000800	mg/L		
BLA02	Q2747672		BARIUM			<	0.000800	mg/L		
LCS	Q2747673		BARIUM	2			1.95	mg/L	97.5	
SER01	Q2749087	A997755	BARIUM	0.121			0.120	mg/L		0.8
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	BARIUM	0.121			0.117	mg/L		3.4
SPI02	Q2747675	A997755	BARIUM	0.121	2.00		2.04	mg/L	96.0	
CCV	Q2749081		BARIUM	5.00			4.87	mg/L	97.4	
BLA01	Q2749073		BARIUM				0.00248	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							

ARIUM ICP SW846-6010B M104.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		BARIUM	5.00			4.94	mg/L	98.8	
BLA01	Q2749074		BARIUM			<	0.000800	mg/L		
CDL01	Q2749167		BARIUM	0.0100			0.0105	mg/L	105.0	
ICS-AB	Q2749162		BARIUM	0.500			0.523	mg/L	104.6	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

ERYLLIUM ICP/MS SW846-6020 V105.3
ep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							

BERYLLIUM ICP/MS SW846-6020 **V105.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617487 Analyst: K KAMARA Run Date: 17-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		BERYLLIUM	0.05			0.0640	ug/L	128.0	
ICV01	Q2747879		BERYLLIUM	50			50.7	ug/L	101.4	
LCCV	Q2747908		BERYLLIUM	0.05			0.0420	ug/L	84.0	
CDL01	Q2747897		BERYLLIUM	0.4			0.412	ug/L	103.0	
ICS-A	Q2747901		BERYLLIUM	40			37.4	ug/L	93.5	
CCV	Q2747889		BERYLLIUM	20			18.5	ug/L	92.5	
BLA01	Q2747883		BERYLLIUM			<	0.160	ug/L		
BLA02	Q2746617		BERYLLIUM			<	0.160	ug/L		
LCS	Q2746618		BERYLLIUM	40			37.4	ug/L	93.5	
SER01	Q2747903	A997747	BERYLLIUM	0		BDL		ug/L		
SAMPLE	A997747		See Certificate of Analysis. Rep: 0							
DUP02	Q2746619	A997747	BERYLLIUM	0		BDL		ug/L		
SPI02	Q2746620	A997747	BERYLLIUM	0	40		39.5	ug/L	98.8	
CCV	Q2747890		BERYLLIUM	20			20.3	ug/L	101.5	
BLA01	Q2747884		BERYLLIUM			<	0.160	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		BERYLLIUM	20			20.5	ug/L	102.5	
BLA01	Q2747885		BERYLLIUM			<	0.160	ug/L		
BLA02	Q2747193		BERYLLIUM			<	0.160	ug/L		
LCS	Q2747194		BERYLLIUM	40			40.5	ug/L	101.2	

:RYLLIUM ICP/MS SW846-6020 **V105.3**

Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analyst: J KRAMER Run Date: 19-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SER01	Q2747904	A997757	BERYLLIUM	0		CNA	0.450	ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	BERYLLIUM	0		BDL		ug/L		
SPI02	Q2747196	A997757	BERYLLIUM	0	40		39.3	ug/L	98.2	
CCV	Q2747892		BERYLLIUM	20			20.2	ug/L	101.0	
BLA01	Q2747909		BERYLLIUM			<	0.160	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		BERYLLIUM	20			20.3	ug/L	101.5	
BLA01	Q2747910		BERYLLIUM			<	0.160	ug/L		
SER01	Q2747935	A997633	BERYLLIUM	0		BDL		ug/L		
CDL01	Q2747938		BERYLLIUM	0.05			0.0400	ug/L	80.0	
ICS-A	Q2747933		BERYLLIUM	40			34.5	ug/L	86.2	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748892		BERYLLIUM	50			50.8	ug/L	101.6	
CDL01	Q2748927		BERYLLIUM	0.4			0.487	ug/L	121.8	
ICS-A	Q2748931		BERYLLIUM	40			48.3	ug/L	120.8	
LCCV	Q2748939		BERYLLIUM	0.05			0.0520	ug/L	104.0	
CCV	Q2748919		BERYLLIUM	20			21.8	ug/L	109.0	
BLA01	Q2748902		BERYLLIUM			<	0.160	ug/L		
BLA02	Q2746613		BERYLLIUM			<	0.160	ug/L		
LCS	Q2746614		BERYLLIUM	40			41.9	ug/L	104.8	
SER01	Q2748933	A997659	BERYLLIUM	0		BDL		ug/L		
DUP02	Q2746615	A997659	BERYLLIUM	0		BDL		ug/L		
SPI02	Q2746616	A997659	BERYLLIUM	0	40		44.2	ug/L	110.5	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		BERYLLIUM	20			21.3	ug/L	106.5	
BLA01	Q2748903		BERYLLIUM			<	0.160	ug/L		
CDL01	Q2748937		BERYLLIUM	0.05			0.0520	ug/L	104.0	
ICS-A	Q2748932		BERYLLIUM	40			43.5	ug/L	108.8	

Q2748931 1:5 Dilution.

BORON ICP SW846-6010B **M107.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617801							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617801							
SAMPLE	A997752	Rep: 0	Analytical Run: R617801							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		BORON				0.0126	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		BORON	0.05			0.0520	mg/L	104.0	
ICV01	Q2748710		BORON	1			1.00	mg/L	100.0	
LCCV	Q2748712		BORON	0.05			0.0509	mg/L	101.8	
CDL01	Q2748699		BORON	0.05			0.0563	mg/L	112.6	
LCS	Q2747657		BORON	1.00			1.00	mg/L	100.0	
SER01	Q2748799	A997577	BORON	3.72			3.59	mg/L		3.6
DUP02	Q2747658	A997577	BORON	3.72			3.77	mg/L		1
SPI02	Q2747659	A997577	BORON	3.72	1		4.66	mg/L	94.0	
CCV	Q2748797		BORON	2			2.13	mg/L	106.5	

)RON ICP SW846-6010B **M107.3**

Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2748794		BORON				0.0596	mg/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		BORON	2			2.09	mg/L	104.5	
BLA01	Q2748795		BORON				0.0222	mg/L		
SER01	Q2749088	A998242	BORON	0.172		CNA	0.241	mg/L		
CCV	Q2749080		BORON	2			2.13	mg/L	106.5	
BLA01	Q2749072		BORON				0.0487	mg/L		
BLA02	Q2747672		BORON				0.0352	mg/L		
LCS	Q2747673		BORON	1.00			1.07	mg/L	107.0	
SER01	Q2749087	A997755	BORON	0.0875		CNA	0.191	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	BORON	0.0875		CNA	0.0791	mg/L		
SPI02	Q2747675	A997755	BORON	0.0875	1		1.10	mg/L	101.2	
CCV	Q2749081		BORON	2			2.09	mg/L	104.5	
BLA01	Q2749073		BORON				0.0282	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		BORON	2			2.12	mg/L	106.0	
BLA01	Q2749074		BORON				0.0255	mg/L		
CDL01	Q2749167		BORON	0.05			0.0931	mg/L	186.2	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

R617801 Analyst: J KRAMER Run Date: 23-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 24-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2749511		BORON	1			1.00	mg/L	100.0	
CDL01	Q2749494		BORON	0.05			0.0673	mg/L	134.6	
SER01	Q2749502	A998332	BORON	0.141		CNA	0.202	mg/L		
CCV	Q2749467		BORON	2			2.04	mg/L	102.0	

BORON ICP SW846-6010B **M107.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617801 Analyst: J KRAMER Run Date: 23-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 24-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2749436		BORON			<	0.0200	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
CCV	Q2749468		BORON	2			2.04	mg/L	102.0	
BLA01	Q2749437		BORON			<	0.0200	mg/L		
SER01	Q2749509	A998640	BORON	0.139		CNA	0.197	mg/L		
Q2749509	1:5 Dilution.									

CADMIUM ICP/MS SW846-6020 **V108.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							

ADMIUM ICP/MS SW846-6020 **V108.3**

Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617540 Analyst: K KAMARA Run Date: 18-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		CADMIUM	0.05			0.0540	ug/L	108.0	
ICV01	Q2747879		CADMIUM	50			50.3	ug/L	100.6	
LCCV	Q2747908		CADMIUM	0.05			0.0510	ug/L	102.0	
CDL01	Q2747897		CADMIUM	0.2			0.263	ug/L	131.5	
ICS-A	Q2747901		CADMIUM	40			39.3	ug/L	98.2	
CCV	Q2747889		CADMIUM	20			19.0	ug/L	95.0	
BLA01	Q2747883		CADMIUM			<	0.0160	ug/L		
BLA02	Q2746617		CADMIUM			<	0.0160	ug/L		
LCS	Q2746618		CADMIUM	40			35.4	ug/L	88.5	
SER01	Q2747903	A997747	CADMIUM	0		CNA	0.150	ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	CADMIUM	0		BDL		ug/L		
SPI02	Q2746620	A997747	CADMIUM	0	40		36.3	ug/L	90.8	
CCV	Q2747890		CADMIUM	20			18.8	ug/L	94.0	
BLA01	Q2747884		CADMIUM			<	0.0160	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		CADMIUM	20			19.0	ug/L	95.0	
BLA01	Q2747885		CADMIUM			<	0.0160	ug/L		
BLA02	Q2747193		CADMIUM			<	0.0160	ug/L		
LCS	Q2747194		CADMIUM	40			36.0	ug/L	90.0	
SER01	Q2747904	A997757	CADMIUM	0		CNA	0.250	ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	CADMIUM	0		BDL		ug/L		
SPI02	Q2747196	A997757	CADMIUM	0	40		35.9	ug/L	89.8	
CCV	Q2747892		CADMIUM	20			18.8	ug/L	94.0	
BLA01	Q2747909		CADMIUM			<	0.0160	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							

CADMIUM ICP/MS SW846-6020 **V108.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analytical — Analyst: J KRAMER, Reviewer: S ENDERSEN — Run Date: 19-Oct-13, Review Date: 21-Oct-13 — Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCV	Q2747919		CADMIUM	20			18.8	ug/L	94.0	
BLA01	Q2747910		CADMIUM			<	0.0160	ug/L		
SER01	Q2747935	A997633	CADMIUM	0		CNA	0.275	ug/L		
CDL01	Q2747938		CADMIUM	0.05			0.0390	ug/L	78.0	
ICS-A	Q2747933		CADMIUM	40			34.0	ug/L	85.0	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analytical — Analyst: J KRAMER, Reviewer: S ENDERSEN — Run Date: 22-Oct-13, Review Date: 23-Oct-13 — Instrument: ICP/MS

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748892		CADMIUM	50			52.0	ug/L	104.0	
CDL01	Q2748927		CADMIUM	0.2			0.296	ug/L	148.0	
ICS-A	Q2748931		CADMIUM	40			47.3	ug/L	118.2	
LCCV	Q2748939		CADMIUM	0.05			0.0570	ug/L	114.0	
CCV	Q2748919		CADMIUM	20			20.9	ug/L	104.5	
BLA01	Q2748902		CADMIUM			<	0.0160	ug/L		
BLA02	Q2746613		CADMIUM			<	0.0160	ug/L		
LCS	Q2746614		CADMIUM	40			39.6	ug/L	99.0	
SER01	Q2748933	A997659	CADMIUM	0		BDL		ug/L		
DUP02	Q2746615	A997659	CADMIUM	0		BDL		ug/L		
SPI02	Q2746616	A997659	CADMIUM	0	40		40.6	ug/L	101.5	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		CADMIUM	20			20.9	ug/L	104.5	
BLA01	Q2748903		CADMIUM			<	0.0160	ug/L		
CDL01	Q2748937		CADMIUM	0.05			0.0510	ug/L	102.0	
ICS-A	Q2748932		CADMIUM	40			43.4	ug/L	108.5	

Q2748931 1:5 Dilution.

CALCIUM ICP SW846-6010B **M109.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Prep — Analyst: K KAMARA, Reviewer: S ENDERSEN — Run Date: 21-Oct-13, Review Date: 21-Oct-13 — Instrument: PREP

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

ALCIUM ICP SW846-6010B **M109.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		CALCIUM			<	0.00520	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		CALCIUM	0.1			0.0989	mg/L	98.9	
ICV01	Q2748710		CALCIUM	20			21.6	mg/L	108.0	
LCCV	Q2748713		CALCIUM	0.1			0.107	mg/L	107.0	
CDL01	Q2748699		CALCIUM	0.1			0.0996	mg/L	99.6	
ICS-A	Q2748702		CALCIUM	500			501	mg/L	100.2	
ICS-AB	Q2748681		CALCIUM	500			502	mg/L	100.4	
LCS	Q2747657		CALCIUM	100			96.4	mg/L	96.4	
SER01	Q2748799	A997577	CALCIUM	279			290	mg/L		3.9
DUP02	Q2747658	A997577	CALCIUM	279			280	mg/L		0.4
SPI02	Q2747659	A997577	CALCIUM	279	100		358	mg/L	79.0	
CCV	Q2748797		CALCIUM	50.0			51.2	mg/L	102.4	
BLA01	Q2748794		CALCIUM			<	0.0400	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		CALCIUM	50.0			51.6	mg/L	103.2	
BLA01	Q2748795		CALCIUM				0.716	mg/L		
SER01	Q2749088	A998242	CALCIUM	68.4			67.0	mg/L		2.1
CCV	Q2749080		CALCIUM	50.0			51.6	mg/L	103.2	
BLA01	Q2749072		CALCIUM			<	0.0400	mg/L		

CALCIUM ICP SW846-6010B **M109.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		CALCIUM			<	0.0400	mg/L		
LCS	Q2747673		CALCIUM	100			99.5	mg/L	99.5	
SER01	Q2749087	A997755	CALCIUM	100			102	mg/L		2.0
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	CALCIUM	100			97.1	mg/L		2.9
SPI02	Q2747675	A997755	CALCIUM	100	100		194	mg/L	94.0	
CCV	Q2749081		CALCIUM	50.0			51.2	mg/L	102.4	
BLA01	Q2749073		CALCIUM			<	0.0400	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		CALCIUM	50.0			52.1	mg/L	104.2	
BLA01	Q2749074		CALCIUM			<	0.0400	mg/L		
CDL01	Q2749167		CALCIUM	0.1			0.158	mg/L	158.0	
ICS-A	Q2749168		CALCIUM	500			547	mg/L	109.4	
ICS-AB	Q2749162		CALCIUM	500			540	mg/L	108.0	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) **G301.1**

R617676 Analyst: D DICKERSON Run Date: 22-Oct-13
Analytical Reviewer: P SPENCE Review Date: 22-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2748359		CHEMICAL OXYGEN DEMAND			BDL	10	mg/L		
CDL01	Q2748360		CHEMICAL OXYGEN DEMAND	10.0			5.54	mg/L	55.4	
ICV01	Q2748361		CHEMICAL OXYGEN DEMAND	100			99.1	mg/L	99.1	
CCV	Q2748362		CHEMICAL OXYGEN DEMAND	100			96.8	mg/L	96.8	
SPI01	Q2748365	A997577	CHEMICAL OXYGEN DEMAND	72.2	50.0		113	mg/L	81.6	
DPS01	Q2748366	A997577	CHEMICAL OXYGEN DEMAND	72.2	50.0		112	mg/L	79.6	2.5
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
CCV	Q2748367		CHEMICAL OXYGEN DEMAND	100			103	mg/L	103.0	
BLA01	Q2748368		CHEMICAL OXYGEN DEMAND			BDL	10	mg/L		
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							

IEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) G301.1

R617676 Analyst: D DICKERSON Run Date: 22-Oct-13
Analytical Reviewer: P SPENCE Review Date: 22-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
ICV01	Q2748369		CHEMICAL OXYGEN DEMAND	100			92.2	mg/L	92.2	
CCV	Q2748370		CHEMICAL OXYGEN DEMAND	100			102	mg/L	102.0	
BLA01	Q2748371		CHEMICAL OXYGEN DEMAND			BDL	10	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2748372		CHEMICAL OXYGEN DEMAND	100			91.7	mg/L	91.7	
BLA01	Q2748373		CHEMICAL OXYGEN DEMAND			BDL	5	mg/L		
ICV01	Q2748374		CHEMICAL OXYGEN DEMAND	100			103	mg/L	103.0	

Q2748365 MS and/or MSD do not meet control limits. Results for this sample are
Q2748365 estimated.
Q2748366 MS and/or MSD do not meet control limits. Results for this sample are
Q2748366 estimated.

R617677 Analyst: D DICKERSON Run Date: 22-Oct-13
Analytical Reviewer: P SPENCE Review Date: 24-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748380		CHEMICAL OXYGEN DEMAND	500			507	mg/L	101.4	
CCV	Q2748382		CHEMICAL OXYGEN DEMAND	500			501	mg/L	100.2	
BLA01	Q2748383		CHEMICAL OXYGEN DEMAND			BDL	5	mg/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
CCV	Q2748384		CHEMICAL OXYGEN DEMAND	500			506	mg/L	101.2	
BLA01	Q2748385		CHEMICAL OXYGEN DEMAND			BDL	5	mg/L		
SPI01	Q2749195	A998466	CHEMICAL OXYGEN DEMAND	587	100	NQR	569	mg/L		
DPS01	Q2749196	A998466	CHEMICAL OXYGEN DEMAND	587	100	NQR	554	mg/L		

R617798 Analyst: D DICKERSON Run Date: 24-Oct-13
Analytical Reviewer: P SPENCE Review Date: 24-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2749405		CHEMICAL OXYGEN DEMAND			BDL	5	mg/L		
CDL01	Q2749406		CHEMICAL OXYGEN DEMAND	10.0			9.05	mg/L	90.5	
ICV01	Q2749407		CHEMICAL OXYGEN DEMAND	100			97.9	mg/L	97.9	
CCV	Q2749408		CHEMICAL OXYGEN DEMAND	100			96.7	mg/L	96.7	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SPI01	Q2749409	A997746	CHEMICAL OXYGEN DEMAND	4.62	50.0		54.3	mg/L	99.4	
DPS01	Q2749410	A997746	CHEMICAL OXYGEN DEMAND	4.62	50.0		57.3	mg/L	105.4	5.8
CCV	Q2749413		CHEMICAL OXYGEN DEMAND	100			101	mg/L	101.0	

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 REV. 2.0 (1993) G301.1

R617798 Analyst: D DICKERSON Run Date: 24-Oct-13
Analytical Reviewer: P SPENCE Review Date: 24-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2749414		CHEMICAL OXYGEN DEMAND			BDL	5	mg/L		
ICV01	Q2749415		CHEMICAL OXYGEN DEMAND	100			99.9	mg/L	99.9	
ICV01	Q2749420		CHEMICAL OXYGEN DEMAND	100			98.6	mg/L	98.6	

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 G310.2

R617333 Analyst: R DALAL Run Date: 11-Oct-13 Instrument: IC
Analytical Reviewer: E WERNZ Review Date: 14-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LFB01H	Q2745306		CHLORIDE	12.5			12.1	mg/L	96.8	
CCVL	Q2745317		CHLORIDE	1.25			1.26	mg/L	100.8	
CCVH	Q2745318		CHLORIDE	5.00			4.69	mg/L	93.8	
BLA01	Q2745319		CHLORIDE			J	0.092	mg/L		
LFB01L	Q2745321		CHLORIDE	1.25			1.23	mg/L	98.4	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SPI01	Q2745322	A997746	CHLORIDE	8.60	1.25		9.89	mg/L	103.2	
DPS01	Q2745323	A997746	CHLORIDE	8.60	1.25		9.78	mg/L	94.4	8.9
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
CCVL	Q2745324		CHLORIDE	1.25			1.29	mg/L	103.2	
CCVH	Q2745325		CHLORIDE	5.00			4.69	mg/L	93.8	
BLA01	Q2745326		CHLORIDE			BDL	0.05	mg/L		
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
CCVL	Q2745327		CHLORIDE	1.25			1.29	mg/L	103.2	
CCVH	Q2745328		CHLORIDE	5.00			4.68	mg/L	93.6	
BLA01	Q2745329		CHLORIDE			BDL	0.05	mg/L		
LFB01L	Q2745330		CHLORIDE	1.25			1.24	mg/L	99.2	

R617339 Analyst: R DALAL Run Date: 11-Oct-13 Instrument: IC
Analytical Reviewer: E WERNZ Review Date: 14-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LFB01H	Q2745425		CHLORIDE	12.5			11.6	mg/L	92.8	
LFB01L	Q2745432		CHLORIDE	1.25			1.24	mg/L	99.2	
CCVL	Q2745440		CHLORIDE	1.25			1.27	mg/L	101.6	
CCVH	Q2745441		CHLORIDE	5.00			4.75	mg/L	95.0	
BLA01	Q2745442		CHLORIDE			BDL	0.05	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SPI01	Q2745443	A997756	CHLORIDE	3.34	1.25		4.43	mg/L	87.2	
DPS01	Q2745444	A997756	CHLORIDE	3.34	1.25		4.36	mg/L	81.6	6.6
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							

ILORIDE BY ION CHROMATOGRAPHY SW846-9056 G310.2

R617339 Analyst: R DALAL Run Date: 11-Oct-13
Analytical Reviewer: E WERNZ Review Date: 14-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
CCVL	Q2745445		CHLORIDE	1.25			1.26	mg/L	100.8	
CCVH	Q2745446		CHLORIDE	5.00			4.82	mg/L	96.4	
LFB01L	Q2745448		CHLORIDE	1.25			1.25	mg/L	100.0	
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCVH	Q2745451		CHLORIDE	5.00			4.73	mg/L	94.6	
CCVL	Q2745452		CHLORIDE	1.25			1.26	mg/L	100.8	
BLA01	Q2745453		CHLORIDE			J	0.11	mg/L		

R617506 Analyst: K VEST Run Date: 15-Oct-13 Instrument: IC
Analytical Reviewer: E WERNZ Review Date: 16-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LFB01H	Q2746773		CHLORIDE	12.5			12.0	mg/L	96.0	
LFB01L	Q2746774		CHLORIDE	1.25			1.23	mg/L	98.4	
SPI01	Q2746777	A998087	CHLORIDE	86.5	31.3		114	mg/L	87.8	
DPS01	Q2746778	A998087	CHLORIDE	86.5	31.3		114	mg/L	87.8	0
CCVL	Q2746779		CHLORIDE	1.25			1.29	mg/L	103.2	
CCVH	Q2746780		CHLORIDE	5.00			4.85	mg/L	97.0	
BLA01	Q2746781		CHLORIDE			BDL	0.05	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
CCVL	Q2746784		CHLORIDE	1.25			1.27	mg/L	101.6	
CCVH	Q2746785		CHLORIDE	5.00			4.90	mg/L	98.0	
BLA01	Q2746786		CHLORIDE			BDL	0.05	mg/L		
LFB01L	Q2746787		CHLORIDE	1.25			1.23	mg/L	98.4	

Q2746777 1:25 Dilution.
Q2746778 1:25 Dilution.

CHROMIUM ICP/MS SW846-6020 V110.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							

CHROMIUM ICP/MS SW846-6020 V110.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617487 Analyst: K KAMARA Run Date: 17-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		CHROMIUM	2			1.91	ug/L	95.5	
ICV01	Q2747879		CHROMIUM	50			49.4	ug/L	98.8	
LCCV	Q2747908		CHROMIUM	2			1.85	ug/L	92.5	
CDL01	Q2747897		CHROMIUM	2			2.17	ug/L	108.5	
ICS-A	Q2747901		CHROMIUM	40			38.9	ug/L	97.2	
CCV	Q2747889		CHROMIUM	20			18.6	ug/L	93.0	
BLA01	Q2747883		CHROMIUM			<	0.400	ug/L		
BLA02	Q2746617		CHROMIUM				0.678	ug/L		
LCS	Q2746618		CHROMIUM	40			37.9	ug/L	94.8	
SER01	Q2747903	A997747	CHROMIUM	0		BDL		ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	CHROMIUM	0		BDL		ug/L		
SPI02	Q2746620	A997747	CHROMIUM	0	40		38.0	ug/L	95.0	
CCV	Q2747890		CHROMIUM	20			18.8	ug/L	94.0	
BLA01	Q2747884		CHROMIUM			<	0.400	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							

IROMIUM ICP/MS SW846-6020 **V110.3**

Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analyst: J KRAMER Run Date: 19-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		CHROMIUM	20			18.9	ug/L	94.5	
BLA01	Q2747885		CHROMIUM			<	0.400	ug/L		
BLA02	Q2747193		CHROMIUM				0.567	ug/L		
LCS	Q2747194		CHROMIUM	40			38.4	ug/L	96.0	
SER01	Q2747904	A997757	CHROMIUM	0		BDL		ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	CHROMIUM	0		BDL		ug/L		
SPI02	Q2747196	A997757	CHROMIUM	0	40		36.7	ug/L	91.8	
CCV	Q2747892		CHROMIUM	20			18.9	ug/L	94.5	
BLA01	Q2747909		CHROMIUM			<	0.400	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		CHROMIUM	20			19.0	ug/L	95.0	
BLA01	Q2747910		CHROMIUM			<	0.400	ug/L		
SER01	Q2747935	A997633	CHROMIUM	3.34			3.90	ug/L		15.5
CDL01	Q2747938		CHROMIUM	2			1.55	ug/L	77.5	
ICS-A	Q2747933		CHROMIUM	40			33.2	ug/L	83.0	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748938		CHROMIUM	2			2.17	ug/L	108.5	
ICV01	Q2748892		CHROMIUM	50			54.0	ug/L	108.0	
CDL01	Q2748927		CHROMIUM	2			2.42	ug/L	121.0	
ICS-A	Q2748931		CHROMIUM	40			50.1	ug/L	125.2	
LCCV	Q2748939		CHROMIUM	2			2.17	ug/L	108.5	
CCV	Q2748919		CHROMIUM	20			21.3	ug/L	106.5	
BLA01	Q2748902		CHROMIUM			<	0.400	ug/L		
BLA02	Q2746613		CHROMIUM			<	0.400	ug/L		
LCS	Q2746614		CHROMIUM	40			43.0	ug/L	107.5	
SER01	Q2748933	A997659	CHROMIUM	2.56		CNA	2.78	ug/L		
DUP02	Q2746615	A997659	CHROMIUM	0		BDL		ug/L		
SPI02	Q2746616	A997659	CHROMIUM	0	40		41.9	ug/L	104.8	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		CHROMIUM	20			22.1	ug/L	110.5	
BLA01	Q2748903		CHROMIUM			<	0.400	ug/L		

CHROMIUM ICP/MS SW846-6020 V110.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617744 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2748937		CHROMIUM	2			2.15	ug/L	107.5	
ICS-A	Q2748932		CHROMIUM	40			45.2	ug/L	113.0	
Q2748931	1:5 Dilution.									

COBALT ICP SW846-6010B M111.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		COBALT			<	0.000300	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		COBALT	0.0100			0.00936	mg/L	93.6	

JBALT ICP SW846-6010B **M111.3**

Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748710		COBALT	1			1.00	mg/L	100.0	
LCCV	Q2748713		COBALT	0.0100			0.00961	mg/L	96.1	
CDL01	Q2748697		COBALT	0.100			0.103	mg/L	103.0	
ICS-AB	Q2748681		COBALT	0.500			0.472	mg/L	94.4	
LCS	Q2747657		COBALT	0.5			0.480	mg/L	96.0	
SER01	Q2748799	A997577	COBALT	0		BDL		mg/L		
DUP02	Q2747658	A997577	COBALT	0		BDL		mg/L		
SPI02	Q2747659	A997577	COBALT	0	0.500		0.451	mg/L	90.2	
CCV	Q2748797		COBALT	5.00			4.99	mg/L	99.8	
BLA01	Q2748794		COBALT			<	0.000800	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		COBALT	5.00			5.02	mg/L	100.4	
BLA01	Q2748795		COBALT			<	0.000800	mg/L		
SER01	Q2749088	A998242	COBALT	0		BDL		mg/L		
CCV	Q2749080		COBALT	5.00			5.02	mg/L	100.4	
BLA01	Q2749072		COBALT			<	0.000800	mg/L		
BLA02	Q2747672		COBALT			<	0.000800	mg/L		
LCS	Q2747673		COBALT	0.5			0.496	mg/L	99.2	
SER01	Q2749087	A997755	COBALT	0		BDL		mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	COBALT	0		BDL		mg/L		
SPI02	Q2747675	A997755	COBALT	0	0.500		0.479	mg/L	95.8	
CCV	Q2749081		COBALT	5.00			4.98	mg/L	99.6	
BLA01	Q2749073		COBALT			<	0.000800	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		COBALT	5.00			5.08	mg/L	101.6	
BLA01	Q2749074		COBALT			<	0.000800	mg/L		
CDL01	Q2749167		COBALT	0.0100			0.0109	mg/L	109.0	
ICS-AB	Q2749162		COBALT	0.500			0.506	mg/L	101.2	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na

COBALT ICP SW846-6010B M111.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
Q2749087	as indicated by the serial dilution results.									
Q2749088	1:5 Dilution.									
Q2749088	There was possible matrix interference for K and Na									
Q2749088	as indicated by the serial dilution results.									

COPPER ICP/MS SW846-6020 V112.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

)PPER ICP/MS SW846-6020 **V112.3**

Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		COPPER	0.5			0.463	ug/L	92.6	
ICV01	Q2747879		COPPER	50			49.5	ug/L	99.0	
LCCV	Q2747908		COPPER	0.5			0.454	ug/L	90.8	
CDL01	Q2747897		COPPER	0.4			0.415	ug/L	103.8	
ICS-A	Q2747901		COPPER	40			38.0	ug/L	95.0	
CCV	Q2747889		COPPER	20			18.5	ug/L	92.5	
BLA01	Q2747883		COPPER			<	0.400	ug/L		
BLA02	Q2746617		COPPER			<	0.400	ug/L		
LCS	Q2746618		COPPER	40			36.8	ug/L	92.0	
SER01	Q2747903	A997747	COPPER	0		CNA	2.85	ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	COPPER	0		BDL		ug/L		
SPI02	Q2746620	A997747	COPPER	0	40		36.6	ug/L	91.5	
CCV	Q2747890		COPPER	20			18.6	ug/L	93.0	
BLA01	Q2747884		COPPER			<	0.400	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		COPPER	20			19.1	ug/L	95.5	
BLA01	Q2747885		COPPER			<	0.400	ug/L		
BLA02	Q2747193		COPPER			<	0.400	ug/L		
LCS	Q2747194		COPPER	40			36.8	ug/L	92.0	
SER01	Q2747904	A997757	COPPER	0		CNA	1.28	ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	COPPER	0		BDL		ug/L		
SPI02	Q2747196	A997757	COPPER	0	40		35.6	ug/L	89.0	
CCV	Q2747892		COPPER	20			18.9	ug/L	94.5	
BLA01	Q2747909		COPPER			<	0.400	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		COPPER	20			18.6	ug/L	93.0	
BLA01	Q2747910		COPPER			<	0.400	ug/L		
SER01	Q2747935	A997633	COPPER	0		CNA	1.40	ug/L		
CDL01	Q2747938		COPPER	0.5			0.377	ug/L	75.4	
ICS-A	Q2747933		COPPER	40			33.5	ug/L	83.8	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP/MS

COPPER ICP/MS SW846-6020 **V112.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617744 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748892		COPPER	50			51.1	ug/L	102.2	
CDL01	Q2748927		COPPER	0.4			0.467	ug/L	116.8	
ICS-A	Q2748931		COPPER	40			45.6	ug/L	114.0	
LCCV	Q2748939		COPPER	0.5			0.565	ug/L	113.0	
CCV	Q2748919		COPPER	20			20.5	ug/L	102.5	
BLA01	Q2748902		COPPER			<	0.200	ug/L		
BLA02	Q2746613		COPPER			<	0.200	ug/L		
LCS	Q2746614		COPPER	40			39.8	ug/L	99.5	
SER01	Q2748933	A997659	COPPER	1.10		CNA	2.25	ug/L		
DUP02	Q2746615	A997659	COPPER	0		BDL		ug/L		
SPI02	Q2746616	A997659	COPPER	0	40		39.4	ug/L	98.5	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		COPPER	20			20.2	ug/L	101.0	
BLA01	Q2748903		COPPER			<	0.200	ug/L		
CDL01	Q2748937		COPPER	0.5			0.567	ug/L	113.4	
ICS-A	Q2748932		COPPER	40			41.5	ug/L	103.8	
Q2748931	1:5 Dilution.									

FIELD PH (AQUEOUS) SW846-9040C **G607.0**

R618076 Analyst: Run Date: 07-Oct-13 Instrument: FIELD
Analytical Reviewer: Review Date: 31-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							

FIELD SPECIFIC CONDUCTANCE SW846-9050A **G604.0**

R618076 Analyst: Run Date: 07-Oct-13 Instrument: FIELD
Analytical Reviewer: Review Date: 31-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							

ELD SPECIFIC CONDUCTANCE SW846-9050A G604.0

R618076 Analyst: Run Date: 07-Oct-13
Analytical Reviewer: Review Date: 31-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							

FIELD TEMPERATURE SM2550 B 2000 G603.1

R618076 Analyst: Run Date: 07-Oct-13 Instrument: FIELD
Analytical Reviewer: Review Date: 31-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							

FIELD TURBIDITY EPA 180.1 G602.0

R618076 Analyst: Run Date: 07-Oct-13 Instrument: FIELD
Analytical Reviewer: Review Date: 31-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							

FIELD TURBIDITY EPA 180.1 **G602.0**

R618076 Analyst:
Analytical Reviewer:
Run Date: 07-Oct-13
Review Date: 31-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							

FLUORIDE BY ION CHROMATOGRAPHY SW846-9056 **G310.1**

R617333 Analyst: R DALAL
Analytical Reviewer: E WERNZ
Run Date: 11-Oct-13 Instrument: IC
Review Date: 14-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LFB01H	Q2745306		FLUORIDE	5.00			5.10	mg/L	102.0	
CCVL	Q2745317		FLUORIDE	0.500			0.544	mg/L	108.8	
CCVH	Q2745318		FLUORIDE	2.00			2.01	mg/L	100.5	
BLA01	Q2745319		FLUORIDE			BDL	0.02	mg/L		
LFB01L	Q2745321		FLUORIDE	0.500			0.533	mg/L	106.6	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SPI01	Q2745322	A997746	FLUORIDE	1.94	0.500		2.48	mg/L	108.0	
DPS01	Q2745323	A997746	FLUORIDE	1.94	0.500		2.50	mg/L	112.0	3.(
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
CCVL	Q2745324		FLUORIDE	0.500			0.544	mg/L	108.8	
CCVH	Q2745325		FLUORIDE	2.00			2.03	mg/L	101.5	
BLA01	Q2745326		FLUORIDE			BDL	0.02	mg/L		
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
CCVL	Q2745327		FLUORIDE	0.500			0.550	mg/L	110.0	
CCVH	Q2745328		FLUORIDE	2.00			2.03	mg/L	101.5	
BLA01	Q2745329		FLUORIDE			BDL	0.02	mg/L		
LFB01L	Q2745330		FLUORIDE	0.500			0.533	mg/L	106.6	

R617339 Analyst: R DALAL
Analytical Reviewer: E WERNZ
Run Date: 11-Oct-13 Instrument: IC
Review Date: 14-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LFB01H	Q2745425		FLUORIDE	5.00			4.91	mg/L	98.2	
LFB01L	Q2745432		FLUORIDE	0.500			0.509	mg/L	101.8	
CCVL	Q2745440		FLUORIDE	0.500			0.527	mg/L	105.4	
CCVH	Q2745441		FLUORIDE	2.00			1.96	mg/L	98.0	
BLA01	Q2745442		FLUORIDE			BDL	0.02	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SPI01	Q2745443	A997756	FLUORIDE	2.04	0.500		2.53	mg/L	98.0	

.UORIDE BY ION CHROMATOGRAPHY SW846-9056 G310.1

R617339 Analyst: R DALAL Run Date: 11-Oct-13
Analytical Reviewer: E WERNZ Review Date: 14-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DPS01	Q2745444	A997756	FLUORIDE	2.04	0.500		2.49	mg/L	90.0	8.5
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
CCVL	Q2745445		FLUORIDE	0.500			0.521	mg/L	104.2	
CCVH	Q2745446		FLUORIDE	2.00			2.00	mg/L	100.0	
BLA01	Q2745447		FLUORIDE			BDL	0.02	mg/L		
LFB01L	Q2745448		FLUORIDE	0.500			0.512	mg/L	102.4	
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCVH	Q2745451		FLUORIDE	2.00			1.98	mg/L	99.0	
CCVL	Q2745452		FLUORIDE	0.500			0.527	mg/L	105.4	
BLA01	Q2745453		FLUORIDE			BDL	0.02	mg/L		

GROUNDWATER MONITORING WELL DATA SAS G600.0

R618076 Analyst: Run Date: 07-Oct-13 Instrument: FIELD
Analytical Reviewer: Review Date: 31-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							

HARDNESS SM2340 B 1997 G608.0
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

HARDNESS SM2340 B 1997 G608.0
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							

IRON ICP SW846-6010B M115.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

ON ICP SW846-6010B **M115.3**

Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617801							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617801							
SAMPLE	A997758	Rep: 0	Analytical Run: R617801							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617801							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		IRON			<	0.00112	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		IRON	0.02			0.0213	mg/L	106.5	
ICV01	Q2748710		IRON	1			1.01	mg/L	101.0	
LCCV	Q2748713		IRON	0.02			0.0206	mg/L	103.0	
CDL01	Q2748699		IRON	0.02			0.0211	mg/L	105.5	
ICS-A	Q2748702		IRON	200			193	mg/L	96.5	
ICS-AB	Q2748681		IRON	200			193	mg/L	96.5	
LCS	Q2747657		IRON	1			0.951	mg/L	95.1	
SER01	Q2748799	A997577	IRON	0.374		CNA	0.392	mg/L		
DUP02	Q2747658	A997577	IRON	0.374			0.373	mg/L		0.3
SPI02	Q2747659	A997577	IRON	0.374	1.00		1.26	mg/L	88.6	
CCV	Q2748797		IRON	5.00			4.92	mg/L	98.4	
BLA01	Q2748794		IRON			<	0.00800	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		IRON	5.00			4.93	mg/L	98.6	
BLA01	Q2748795		IRON			<	0.00800	mg/L		
SER01	Q2749088	A998242	IRON	0.612			0.613	mg/L		0.2
CCV	Q2749080		IRON	5.00			4.94	mg/L	98.8	
BLA01	Q2749072		IRON			<	0.00800	mg/L		

IRON ICP SW846-6010B M115.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		IRON			<	0.00800	mg/L		
LCS	Q2747673		IRON	1			0.980	mg/L	98.0	
SER01	Q2749087	A997755	IRON	2.13			2.14	mg/L		0.5
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	IRON	2.13			2.07	mg/L		2.8
SPI02	Q2747675	A997755	IRON	2.13	1.00		3.01	mg/L	88.0	
CCV	Q2749081		IRON	5.00			4.91	mg/L	98.2	
BLA01	Q2749073		IRON				0.150	mg/L		
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		IRON	5.00			4.99	mg/L	99.8	
BLA01	Q2749074		IRON			<	0.00800	mg/L		
CDL01	Q2749167		IRON	0.02			0.0231	mg/L	115.5	
ICS-A	Q2749168		IRON	200			204	mg/L	102.0	
ICS-AB	Q2749162		IRON	200			202	mg/L	101.0	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

R617801 Analyst: J KRAMER Run Date: 23-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 24-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2749512		IRON	0.02			0.0216	mg/L	108.0	
ICV01	Q2749511		IRON	1			1.01	mg/L	101.0	
CDL01	Q2749494		IRON	0.02			0.0206	mg/L	103.0	
ICS-A	Q2749498		IRON	200			195	mg/L	97.5	
ICS-AB	Q2749457		IRON	200			193	mg/L	96.5	
SER01	Q2749502	A998332	IRON	0.534			0.542	mg/L		1.5
CCV	Q2749467		IRON	5.00			4.89	mg/L	97.8	
BLA01	Q2749436		IRON			<	0.00800	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
CCV	Q2749468		IRON	5.00			4.88	mg/L	97.6	
BLA01	Q2749437		IRON			<	0.00800	mg/L		
SER01	Q2749509	A998640	IRON	0.0896		CNA	0.101	mg/L		
CDL01	Q2749495		IRON	0.02			0.0294	mg/L	147.0	

ON ICP SW846-6010B M115.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617801 Analyst: J KRAMER Run Date: 23-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 24-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICS-A	Q2749499		IRON	200			191	mg/L	95.5	
ICS-AB	Q2749458		IRON	200			191	mg/L	95.5	
Q2749509	1:5 Dilution.									

LEAD ICP/MS SW846-6020 V116.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

LEAD ICP/MS SW846-6020 **V116.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		LEAD	0.05			0.0530	ug/L	106.0	
ICV01	Q2747879		LEAD	50			49.6	ug/L	99.2	
LCCV	Q2747908		LEAD	0.05			0.0460	ug/L	92.0	
CDL01	Q2747897		LEAD	0.2			0.205	ug/L	102.5	
ICS-A	Q2747901		LEAD	40			39.2	ug/L	98.0	
CCV	Q2747889		LEAD	20			18.8	ug/L	94.0	
BLA01	Q2747883		LEAD			<	0.400	ug/L		
BLA02	Q2746617		LEAD			<	0.400	ug/L		
LCS	Q2746618		LEAD	40			36.3	ug/L	90.8	
SER01	Q2747903	A997747	LEAD	0		BDL		ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	LEAD	0		BDL		ug/L		
SPI02	Q2746620	A997747	LEAD	0	40		36.9	ug/L	92.2	
CCV	Q2747890		LEAD	20			18.7	ug/L	93.5	
BLA01	Q2747884		LEAD			<	0.400	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		LEAD	20			19.1	ug/L	95.5	
BLA01	Q2747885		LEAD			<	0.400	ug/L		
BLA02	Q2747193		LEAD			<	0.400	ug/L		
LCS	Q2747194		LEAD	40			36.8	ug/L	92.0	
SER01	Q2747904	A997757	LEAD	0		BDL		ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	LEAD	0		BDL		ug/L		
SPI02	Q2747196	A997757	LEAD	0	40		35.6	ug/L	89.0	
CCV	Q2747892		LEAD	20			18.7	ug/L	93.5	
BLA01	Q2747909		LEAD			<	0.400	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		LEAD	20			18.8	ug/L	94.0	
BLA01	Q2747910		LEAD			<	0.400	ug/L		
SER01	Q2747935	A997633	LEAD	0		BDL		ug/L		
CDL01	Q2747938		LEAD	0.05			0.130	ug/L	260.0	
ICS-A	Q2747933		LEAD	40			34.6	ug/L	86.5	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP/MS

.AD ICP/MS SW846-6020 V116.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617744 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748892		LEAD	50			51.3	ug/L	102.6	
CDL01	Q2748927		LEAD	0.2			0.226	ug/L	113.0	
ICS-A	Q2748931		LEAD	40			46.1	ug/L	115.2	
LCCV	Q2748939		LEAD	0.05			0.0410	ug/L	82.0	
CCV	Q2748919		LEAD	20			20.9	ug/L	104.5	
BLA01	Q2748902		LEAD			<	0.0400	ug/L		
BLA02	Q2746613		LEAD			<	0.0400	ug/L		
LCS	Q2746614		LEAD	40			40.7	ug/L	101.8	
SER01	Q2748933	A997659	LEAD	0		BDL		ug/L		
DUP02	Q2746615	A997659	LEAD	0		BDL		ug/L		
SPI02	Q2746616	A997659	LEAD	0	40		40.5	ug/L	101.2	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		LEAD	20			20.8	ug/L	104.0	
BLA01	Q2748903		LEAD			<	0.0400	ug/L		
CDL01	Q2748937		LEAD	0.05			0.150	ug/L	300.0	
ICS-A	Q2748932		LEAD	40			43.2	ug/L	108.0	

Q2748931 1:5 Dilution.

MAGNESIUM ICP SW846-6010B M118.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							

MAGNESIUM ICP SW846-6010B M118.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		MAGNESIUM				0.00253	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		MAGNESIUM	0.1			0.101	mg/L	101.0	
ICV01	Q2748710		MAGNESIUM	20			20.9	mg/L	104.5	
LCCV	Q2748713		MAGNESIUM	0.1			0.101	mg/L	101.0	
CDL01	Q2748699		MAGNESIUM	0.1			0.101	mg/L	101.0	
ICS-A	Q2748702		MAGNESIUM	500			517	mg/L	103.4	
ICS-AB	Q2748681		MAGNESIUM	500			517	mg/L	103.4	
LCS	Q2747657		MAGNESIUM	100			96.0	mg/L	96.0	
SER01	Q2748799	A997577	MAGNESIUM	247			239	mg/L		3.3
DUP02	Q2747658	A997577	MAGNESIUM	247			248	mg/L		0.4
SPI02	Q2747659	A997577	MAGNESIUM	247	100		324	mg/L	77.0	
CCV	Q2748797		MAGNESIUM	50.0			49.2	mg/L	98.4	
BLA01	Q2748794		MAGNESIUM			<	0.0400	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		MAGNESIUM	50.0			49.5	mg/L	99.0	
BLA01	Q2748795		MAGNESIUM			<	0.0400	mg/L		
SER01	Q2749088	A998242	MAGNESIUM	24.7			24.8	mg/L		0.4
CCV	Q2749080		MAGNESIUM	50.0			49.5	mg/L	99.0	
BLA01	Q2749072		MAGNESIUM			<	0.0400	mg/L		
BLA02	Q2747672		MAGNESIUM			<	0.0400	mg/L		
LCS	Q2747673		MAGNESIUM	100			99.0	mg/L	99.0	
SER01	Q2749087	A997755	MAGNESIUM	50.2			49.8	mg/L		0.8
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	MAGNESIUM	50.2			48.4	mg/L		3.6
SPI02	Q2747675	A997755	MAGNESIUM	50.2	100		147	mg/L	96.8	
CCV	Q2749081		MAGNESIUM	50.0			49.2	mg/L	98.4	
BLA01	Q2749073		MAGNESIUM			<	0.0400	mg/L		

AGNESIUM ICP SW846-6010B **M118.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		MAGNESIUM	50.0			50.0	mg/L	100.0	
BLA01	Q2749074		MAGNESIUM			<	0.0400	mg/L		
CDL01	Q2749167		MAGNESIUM	0.1			0.112	mg/L	112.0	
ICS-A	Q2749168		MAGNESIUM	500			564	mg/L	112.8	
ICS-AB	Q2749162		MAGNESIUM	500			556	mg/L	111.2	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

MANGANESE ICP SW846-6010B **M119.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							

MANGANESE ICP SW846-6010B **M119.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		MANGANESE			<	0.000216	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		MANGANESE	0.0100			0.0101	mg/L	101.0	
ICV01	Q2748710		MANGANESE	1			1.01	mg/L	101.0	
LCCV	Q2748713		MANGANESE	0.0100			0.0102	mg/L	102.0	
CDL01	Q2748697		MANGANESE	0.030			0.0307	mg/L	102.3	
ICS-AB	Q2748681		MANGANESE	0.500			0.491	mg/L	98.2	
LCS	Q2747657		MANGANESE	0.5			0.464	mg/L	92.8	
SER01	Q2748799	A997577	MANGANESE	2.22			2.28	mg/L		2.7
DUP02	Q2747658	A997577	MANGANESE	2.22			2.23	mg/L		0.4
SPI02	Q2747659	A997577	MANGANESE	2.22	0.500	NQR	2.58	mg/L		
CCV	Q2748797		MANGANESE	5.00			4.83	mg/L	96.6	
BLA01	Q2748794		MANGANESE			<	0.00400	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		MANGANESE	5.00			4.84	mg/L	96.8	
BLA01	Q2748795		MANGANESE			<	0.00400	mg/L		
SER01	Q2749088	A998242	MANGANESE	0.321			0.323	mg/L		0.6
CCV	Q2749080		MANGANESE	5.00			4.85	mg/L	97.0	
BLA01	Q2749072		MANGANESE			<	0.00400	mg/L		
BLA02	Q2747672		MANGANESE			<	0.00400	mg/L		
LCS	Q2747673		MANGANESE	0.5			0.478	mg/L	95.6	
SER01	Q2749087	A997755	MANGANESE	0.0664		CNA	0.0642	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							

ANGANESE ICP SW846-6010B **M119.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DUP02	Q2747674	A997755	MANGANESE	0.0664			0.0636	mg/L		4.3
SPI02	Q2747675	A997755	MANGANESE	0.0664	0.500		0.527	mg/L	92.1	
CCV	Q2749081		MANGANESE	5.00			4.82	mg/L	96.4	
BLA01	Q2749073		MANGANESE			<	0.00400	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		MANGANESE	5.00			4.89	mg/L	97.8	
BLA01	Q2749074		MANGANESE			<	0.00400	mg/L		
CDL01	Q2749167		MANGANESE	0.0100			0.0102	mg/L	102.0	
ICS-AB	Q2749162		MANGANESE	0.500			0.506	mg/L	101.2	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

MERCURY CVAA SW846-7470A **M120.1**
Prep : MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A

R617446 Analyst: S O'NEAL Run Date: 16-Oct-13 Instrument: PREP
Prep Reviewer: W WATNESS Review Date: 16-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS	Q2746321		Analytical Run: R617516							
BLA02	Q2746322		Analytical Run: R617516							
SPI02	Q2746324		Analytical Run: R617516							
DPS02	Q2746325		Analytical Run: R617516							
SPI01	Q2746326		Analytical Run: R617516							
SAMPLE	A997746	Rep: 0	Analytical Run: R617516							
SAMPLE	A997747	Rep: 0	Analytical Run: R617516							
SAMPLE	A997748	Rep: 0	Analytical Run: R617516							
SAMPLE	A997749	Rep: 0	Analytical Run: R617516							
SAMPLE	A997750	Rep: 0	Analytical Run: R617516							
SAMPLE	A997751	Rep: 0	Analytical Run: R617516							
SAMPLE	A997752	Rep: 0	Analytical Run: R617516							
SAMPLE	A997753	Rep: 0	Analytical Run: R617516							

Q2746323 There was possible matrix interference for Hg
Q2746323 as indicated by the serial dilution results.

MERCURY CVAA SW846-7470A M120.1
Prep : MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A

R617446 Analyst: S O'NEAL Run Date: 16-Oct-13
Prep Reviewer: W WATNESS Review Date: 16-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
Q2746324	1:5 Dilution.									
Q2746325	1:5 Dilution.									
Q2746326	1:5 Dilution.									

R617447 Analyst: S O'NEAL Run Date: 16-Oct-13 Instrument: PREP
Prep Reviewer: W WATNESS Review Date: 16-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS	Q2746327		Analytical Run: R617503							
BLA02	Q2746328		Analytical Run: R617503							
SAMPLE	A997754	Rep: 0	Analytical Run: R617503							
SPI02	Q2746330		Analytical Run: R617503							
DPS02	Q2746331		Analytical Run: R617503							
SPI01	Q2746332		Analytical Run: R617503							
SAMPLE	A997755	Rep: 0	Analytical Run: R617503							
SAMPLE	A997756	Rep: 0	Analytical Run: R617503							
SAMPLE	A997757	Rep: 0	Analytical Run: R617503							
SAMPLE	A997758	Rep: 0	Analytical Run: R617503							
SAMPLE	A997759	Rep: 0	Analytical Run: R617503							
SAMPLE	A997760	Rep: 0	Analytical Run: R617503							
SAMPLE	A997761	Rep: 0	Analytical Run: R617503							

R617503 Analyst: S O'NEAL Run Date: 16-Oct-13 Instrument: CVAA
Analytical Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2746729		MERCURY	0.002			0.00197	mg/L	98.5	
CCV	Q2746730		MERCURY	0.003			0.00312	mg/L	104.0	
BLA01	Q2746743		MERCURY			<	0.000080	mg/L		
CDL01	Q2746755		MERCURY	0.0002			0.000203	mg/L	101.5	
LCS	Q2746327		MERCURY	0.002			0.00207	mg/L	103.5	
BLA02	Q2746328		MERCURY			<	0.000080	mg/L		
SER01	Q2746329	A997754	MERCURY	0		BDL		mg/L		
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SPI02	Q2746330	A997754	MERCURY	0	0.001		0.000945	mg/L	94.5	
DPS02	Q2746331	A997754	MERCURY	0	0.001		0.000931	mg/L	93.1	1.5
SPI01	Q2746332	A997754	MERCURY	0	0.002		0.00203	mg/L	101.5	
CCV	Q2746731		MERCURY	0.003			0.00324	mg/L	108.0	
BLA01	Q2746744		MERCURY			<	0.000080	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CDL01	Q2746756		MERCURY	0.0002			0.000218	mg/L	109.0	
CCV	Q2746732		MERCURY	0.003			0.00324	mg/L	108.0	

ERCURY CVAA SW846-7470A **M120.1**
Prep : MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A

R617503 Analyst: S O'NEAL Run Date: 16-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 17-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2746745		MERCURY			<	0.000080	mg/L		
SER01	Q2746299	A997581	MERCURY	0		BDL		mg/L		

R617516 Analyst: S O'NEAL Run Date: 17-Oct-13 Instrument: CVAA
Analytical Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2746890		MERCURY	0.002			0.00200	mg/L	100.0	
CDL01	Q2746898		MERCURY	0.0002			0.000199	mg/L	99.5	
LCS	Q2746321		MERCURY	0.002			0.00201	mg/L	100.5	
BLA02	Q2746322		MERCURY			<	0.000080	mg/L		
SER01	Q2746323	A997658	MERCURY	0.0146			0.0103	mg/L		34.5
SPI02	Q2746324	A997658	MERCURY	0.0146	0.001	NQR	0.0156	mg/L		
DPS02	Q2746325	A997658	MERCURY	0.0146	0.001	NQR	0.0159	mg/L		
SPI01	Q2746326	A997658	MERCURY	0.0146	0.0100		0.0258	mg/L	112.0	
CCV	Q2746892		MERCURY	0.003			0.00288	mg/L	96.0	
BLA01	Q2746896		MERCURY			<	0.000080	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
CDL01	Q2746899		MERCURY	0.0002			0.000192	mg/L	96.0	
CCV	Q2746893		MERCURY	0.003			0.00278	mg/L	92.7	
BLA01	Q2746897		MERCURY			<	0.000080	mg/L		

Q2746323 There was possible matrix interference for Hg
Q2746323 as indicated by the serial dilution results.
Q2746324 1:5 Dilution.
Q2746325 1:5 Dilution.
Q2746326 1:5 Dilution.

NICKEL ICP SW846-6010B **M122.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617801							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							

NICKEL ICP SW846-6010B M122.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617801							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		NICKEL				0.000582	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		NICKEL	0.005			0.00553	mg/L	110.6	
ICV01	Q2748710		NICKEL	1			0.997	mg/L	99.7	
LCCV	Q2748713		NICKEL	0.005			0.00501	mg/L	100.2	
CDL01	Q2748697		NICKEL	0.080			0.0822	mg/L	102.8	
ICS-AB	Q2748681		NICKEL	1.00			0.951	mg/L	95.1	
LCS	Q2747657		NICKEL	0.5			0.480	mg/L	96.0	
SER01	Q2748799	A997577	NICKEL	0.0335		CNA	0.0360	mg/L		
DUP02	Q2747658	A997577	NICKEL	0.0335			0.0334	mg/L		0.3
SPI02	Q2747659	A997577	NICKEL	0.0335	0.500		0.479	mg/L	89.1	
CCV	Q2748797		NICKEL	5.00			4.96	mg/L	99.2	
BLA01	Q2748794		NICKEL			<	0.00200	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		NICKEL	5.00			4.98	mg/L	99.6	

CKEL ICP SW846-6010B **M122.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2748795		NICKEL				0.00658	mg/L		
SER01	Q2749088	A998242	NICKEL	0.397			0.400	mg/L		0.8
CCV	Q2749080		NICKEL	5.00			4.98	mg/L	99.6	
BLA01	Q2749072		NICKEL			<	0.00200	mg/L		
BLA02	Q2747672		NICKEL			<	0.00200	mg/L		
LCS	Q2747673		NICKEL	0.5			0.496	mg/L	99.2	
SER01	Q2749087	A997755	NICKEL	0		BDL		mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	NICKEL	0		BDL		mg/L		
SPI02	Q2747675	A997755	NICKEL	0	0.500		0.480	mg/L	96.0	
CCV	Q2749081		NICKEL	5.00			4.96	mg/L	99.2	
BLA01	Q2749073		NICKEL			<	0.00200	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		NICKEL	5.00			5.05	mg/L	101.0	
BLA01	Q2749074		NICKEL			<	0.00200	mg/L		
CDL01	Q2749167		NICKEL	0.005			0.00598	mg/L	119.6	
ICS-AB	Q2749162		NICKEL	1.00			1.02	mg/L	102.0	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

R617801 Analyst: J KRAMER Run Date: 23-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 24-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2749512		NICKEL	0.005			0.00456	mg/L	91.2	
ICV01	Q2749511		NICKEL	1			0.996	mg/L	99.6	
LCCV	Q2749513		NICKEL	0.005			0.00486	mg/L	97.2	
CDL01	Q2749491		NICKEL	0.080			0.0812	mg/L	101.5	
ICS-AB	Q2749457		NICKEL	1.00			0.953	mg/L	95.3	
SER01	Q2749502	A998332	NICKEL	0		BDL		mg/L		
CCV	Q2749467		NICKEL	5.00			4.88	mg/L	97.6	
BLA01	Q2749436		NICKEL			<	0.00200	mg/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							

NICKEL ICP SW846-6010B M122.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617801 Analyst: J KRAMER Run Date: 23-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 24-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
CCV	Q2749468		NICKEL	5.00			4.86	mg/L	97.2	
BLA01	Q2749437		NICKEL			<	0.00200	mg/L		
SER01	Q2749509	A998640	NICKEL	0		BDL		mg/L		
CDL01	Q2749495		NICKEL	0.005			0.00504	mg/L	100.8	
ICS-AB	Q2749458		NICKEL	1.00			0.942	mg/L	94.2	

Q2749509 1:5 Dilution.

NITROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) G113.3

R617511 Analyst: E SKALA Run Date: 17-Oct-13 Instrument: AUTO-ANALYZER
Analytical Reviewer: P SPENCE Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2746805		NITROGEN, NITRATE-NITRITE	0.0500			0.0480	mg/L	96.0	
ICV01	Q2746806		NITROGEN, NITRATE-NITRITE	0.500			0.466	mg/L	93.2	
CCV	Q2746807		NITROGEN, NITRATE-NITRITE	0.200			0.204	mg/L	102.0	
BLA01	Q2746808		NITROGEN, NITRATE-NITRITE			BDL	0.01	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
CCV	Q2746811		NITROGEN, NITRATE-NITRITE	0.200			0.205	mg/L	102.5	
BLA01	Q2746812		NITROGEN, NITRATE-NITRITE			BDL	0.01	mg/L		
SPI01	Q2746813	A997949	NITROGEN, NITRATE-NITRITE	0	0.1		0.0946	mg/L	94.6	
DPS01	Q2746814	A997949	NITROGEN, NITRATE-NITRITE	0	0.1		0.0909	mg/L	90.9	4.0
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
CCV	Q2746815		NITROGEN, NITRATE-NITRITE	0.200			0.209	mg/L	104.5	
BLA01	Q2746816		NITROGEN, NITRATE-NITRITE			BDL	0.01	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
SPI01	Q2746817	A997888	NITROGEN, NITRATE-NITRITE	0	0.1		0.0912	mg/L	91.2	
DPS01	Q2746818	A997888	NITROGEN, NITRATE-NITRITE	0	0.1		0.0899	mg/L	89.9	1.4
CCV	Q2746819		NITROGEN, NITRATE-NITRITE	0.200			0.205	mg/L	102.5	
BLA01	Q2746820		NITROGEN, NITRATE-NITRITE			BDL	0.01	mg/L		

Q2746805 1:20 Dilution
Q2746807 1:5 Dilution
Q2746811 1:5 Dilution

TROGEN, NITRATE-NITRITE EPA 353.2 REV. 2.0 (1993) G113.3

R617511 Analyst: E SKALA Run Date: 17-Oct-13
Analytical Reviewer: P SPENCE Review Date: 17-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
Q2746813	Adjusted sample pH to 7 before analysis.									
Q2746814	Adjusted sample pH to 7 before analysis.									
Q2746815	1:5 Dilution									
Q2746818	MS and/or MSD do not meet control limits. Results for this sample are									
Q2746818	estimated.									
Q2746819	1:5 Dilution									

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) G207.2

R617568 Analyst: S BOXUM Run Date: 18-Oct-13 Instrument: AUTO-ANALYZER
Analytical Reviewer: P SPENCE Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2747405		PHOSPHORUS	0.0500			0.0595	mg/L	119.0	
ICV01	Q2747406		PHOSPHORUS	0.500			0.532	mg/L	106.4	
CCV	Q2747415		PHOSPHORUS	0.500			0.535	mg/L	107.0	
BLA01	Q2747416		PHOSPHORUS			BDL	0.05	mg/L		
BLA04	Q2747417		PHOSPHORUS			BDL	0.05	mg/L		
LFB01	Q2747418		PHOSPHORUS	0.500			0.490	mg/L	98.0	
SPI01	Q2747419	A997700	PHOSPHORUS	0.0669	0.5		0.538	mg/L	94.2	
DPS01	Q2747420	A997700	PHOSPHORUS	0.0669	0.5		0.523	mg/L	91.2	3.2
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
CCV	Q2747421		PHOSPHORUS	0.500			0.526	mg/L	105.2	
BLA01	Q2747422		PHOSPHORUS			BDL	0.05	mg/L		
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
CCV	Q2747423		PHOSPHORUS	0.500			0.528	mg/L	105.6	
BLA01	Q2747424		PHOSPHORUS			BDL	0.05	mg/L		
SPI01	Q2747427	A997707	PHOSPHORUS	0.607	0.5		1.09	mg/L	96.6	
DPS01	Q2747428	A997707	PHOSPHORUS	0.607	0.5		1.09	mg/L	96.6	0
CCV	Q2747431		PHOSPHORUS	0.500			0.524	mg/L	104.8	
BLA01	Q2747432		PHOSPHORUS			BDL	0.05	mg/L		
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2747433		PHOSPHORUS	0.500			0.525	mg/L	105.0	
BLA01	Q2747434		PHOSPHORUS			BDL	0.05	mg/L		
Q2747427	1:2 Dilution									
Q2747428	1:2 Dilution									

R617722 Analyst: S BOXUM Run Date: 22-Oct-13 Instrument: AUTO-ANALYZER
Analytical Reviewer: P SPENCE Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2748604		PHOSPHORUS	0.0500			0.0544	mg/L	108.8	
ICV01	Q2748605		PHOSPHORUS	0.500			0.534	mg/L	106.8	

PHOSPHORUS, TOTAL (AUTOMATED) EPA 365.1 REV. 2.0 (1993) G207.2

R617722 Analyst: S BOXUM Run Date: 22-Oct-13
Analytical Reviewer: P SPENCE Review Date: 23-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA04	Q2748606		PHOSPHORUS			BDL	0.05	mg/L		
LFB01	Q2748607		PHOSPHORUS	0.500			0.483	mg/L	96.6	
CCV	Q2748610		PHOSPHORUS	0.500			0.525	mg/L	105.0	
BLA01	Q2748611		PHOSPHORUS			BDL	0.05	mg/L		
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
CCV	Q2748612		PHOSPHORUS	0.500			0.528	mg/L	105.6	
BLA01	Q2748613		PHOSPHORUS			BDL	0.05	mg/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SPI01	Q2748616	A997760	PHOSPHORUS	0	0.5		0.474	mg/L	94.8	
DPS01	Q2748617	A997760	PHOSPHORUS	0	0.5		0.461	mg/L	92.2	2.8
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2748618		PHOSPHORUS	0.500			0.531	mg/L	106.2	
BLA01	Q2748619		PHOSPHORUS			BDL	0.05	mg/L		
BLA04	Q2748652		PHOSPHORUS			BDL	0.05	mg/L		
LFB01	Q2748653		PHOSPHORUS	0.500			0.491	mg/L	98.2	

SELENIUM ICP/MS SW846-6020 V128.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							

LENIUM ICP/MS SW846-6020 **V128.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617487 Analyst: K KAMARA Run Date: 17-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		SELENIUM	1			1.10	ug/L	110.0	
ICV01	Q2747879		SELENIUM	50			50.1	ug/L	100.2	
LCCV	Q2747908		SELENIUM	1			1.13	ug/L	113.0	
CDL01	Q2747897		SELENIUM	2			2.61	ug/L	130.5	
ICS-A	Q2747901		SELENIUM	40			37.8	ug/L	94.5	
CCV	Q2747889		SELENIUM	100			95.9	ug/L	95.9	
BLA01	Q2747883		SELENIUM			<	0.400	ug/L		
BLA02	Q2746617		SELENIUM			<	0.400	ug/L		
LCS	Q2746618		SELENIUM	40			33.0	ug/L	82.5	
SER01	Q2747903	A997747	SELENIUM	0		BDL		ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	SELENIUM	0		BDL		ug/L		
SPI02	Q2746620	A997747	SELENIUM	0	40		35.1	ug/L	87.8	
CCV	Q2747890		SELENIUM	100			94.6	ug/L	94.6	
BLA01	Q2747884		SELENIUM			<	0.400	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		SELENIUM	100			92.4	ug/L	92.4	
BLA01	Q2747885		SELENIUM			<	0.400	ug/L		

SELENIUM ICP/MS SW846-6020 **V128.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analyst: J KRAMER Run Date: 19-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747193		SELENIUM			<	0.400	ug/L		
LCS	Q2747194		SELENIUM	40			32.3	ug/L	80.8	
SER01	Q2747904	A997757	SELENIUM	0		BDL		ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	SELENIUM	0		BDL		ug/L		
SPI02	Q2747196	A997757	SELENIUM	0	40		33.7	ug/L	84.2	
CCV	Q2747892		SELENIUM	100			91.1	ug/L	91.1	
BLA01	Q2747909		SELENIUM			<	0.400	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		SELENIUM	100			93.8	ug/L	93.8	
BLA01	Q2747910		SELENIUM			<	0.400	ug/L		
SER01	Q2747935	A997633	SELENIUM	0		BDL		ug/L		
CDL01	Q2747938		SELENIUM	1			0.645	ug/L	64.5	
ICS-A	Q2747933		SELENIUM	40			31.2	ug/L	78.0	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748938		SELENIUM	1			1.15	ug/L	115.0	
ICV01	Q2748892		SELENIUM	50			54.4	ug/L	108.8	
CDL01	Q2748927		SELENIUM	2			2.43	ug/L	121.5	
ICS-A	Q2748931		SELENIUM	40			50.7	ug/L	126.8	
LCCV	Q2748939		SELENIUM	1			1.08	ug/L	108.0	
CCV	Q2748919		SELENIUM	100			103	ug/L	103.0	
BLA01	Q2748902		SELENIUM			<	0.400	ug/L		
BLA02	Q2746613		SELENIUM			<	0.400	ug/L		
LCS	Q2746614		SELENIUM	40			36.5	ug/L	91.2	
SER01	Q2748933	A997659	SELENIUM	0		CNA	1.40	ug/L		
DUP02	Q2746615	A997659	SELENIUM	0		BDL		ug/L		
SPI02	Q2746616	A997659	SELENIUM	0	40		37.8	ug/L	94.5	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		SELENIUM	100			106	ug/L	106.0	
BLA01	Q2748903		SELENIUM			<	0.400	ug/L		
CDL01	Q2748937		SELENIUM	1			1.22	ug/L	122.0	
ICS-A	Q2748932		SELENIUM	40			43.6	ug/L	109.0	

Q2748931 1:5 Dilution.

_VER ICP/MS SW846-6020 **V130.3**

Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		SILVER	0.05			0.0520	ug/L	104.0	
ICV01	Q2747879		SILVER	50			50.1	ug/L	100.2	
LCCV	Q2747908		SILVER	0.05			0.0490	ug/L	98.0	
CDL01	Q2747897		SILVER	0.5			0.542	ug/L	108.4	
ICS-A	Q2747901		SILVER	40			38.0	ug/L	95.0	
CCV	Q2747889		SILVER	20			19.0	ug/L	95.0	

SILVER ICP/MS SW846-6020 **V130.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analyst: J KRAMER Run Date: 19-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2747883		SILVER			<	0.120	ug/L		
BLA02	Q2746617		SILVER			<	0.120	ug/L		
LCS	Q2746618		SILVER	40			37.6	ug/L	94.0	
SER01	Q2747903	A997747	SILVER	0		CNA	0.325	ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	SILVER	0		BDL		ug/L		
SPI02	Q2746620	A997747	SILVER	0	40		37.5	ug/L	93.8	
CCV	Q2747890		SILVER	20			19.0	ug/L	95.0	
BLA01	Q2747884		SILVER			<	0.120	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		SILVER	20			19.2	ug/L	96.0	
BLA01	Q2747885		SILVER			<	0.120	ug/L		
BLA02	Q2747193		SILVER			<	0.120	ug/L		
LCS	Q2747194		SILVER	40			38.0	ug/L	95.0	
SER01	Q2747904	A997757	SILVER	0		CNA	0.350	ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	SILVER	0		BDL		ug/L		
SPI02	Q2747196	A997757	SILVER	0	40		36.4	ug/L	91.0	
CCV	Q2747892		SILVER	20			19.0	ug/L	95.0	
BLA01	Q2747909		SILVER			<	0.120	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		SILVER	20			18.8	ug/L	94.0	
BLA01	Q2747910		SILVER			<	0.120	ug/L		
SER01	Q2747935	A997633	SILVER	0		CNA	0.375	ug/L		
CDL01	Q2747938		SILVER	0.05			0.0310	ug/L	62.0	
ICS-A	Q2747933		SILVER	40			33.0	ug/L	82.5	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748892		SILVER	50			51.2	ug/L	102.4	
CDL01	Q2748927		SILVER	0.5			0.584	ug/L	116.8	
ICS-A	Q2748931		SILVER	40			45.0	ug/L	112.5	

LVER ICP/MS SW846-6020 V130.3
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617744 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCCV	Q2748939		SILVER	0.05			0.0570	ug/L	114.0	
CCV	Q2748919		SILVER	20			21.0	ug/L	105.0	
BLA01	Q2748902		SILVER			<	0.400	ug/L		
BLA02	Q2746613		SILVER			<	0.400	ug/L		
LCS	Q2746614		SILVER	40			41.3	ug/L	103.2	
SER01	Q2748933	A997659	SILVER	0		BDL		ug/L		
DUP02	Q2746615	A997659	SILVER	0		BDL		ug/L		
SPI02	Q2746616	A997659	SILVER	0	40		40.6	ug/L	101.5	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		SILVER	20			20.9	ug/L	104.5	
BLA01	Q2748903		SILVER			<	0.400	ug/L		
CDL01	Q2748937		SILVER	0.05			0.0480	ug/L	96.0	
ICS-A	Q2748932		SILVER	40			40.0	ug/L	100.0	
Q2748931	1:5 Dilution.									

SODIUM ICP SW846-6010B M131.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							

SODIUM ICP SW846-6010B M131.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		SODIUM			<	0.00104	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		SODIUM	0.1			0.0701	mg/L	70.1	
ICV01	Q2748710		SODIUM	20			18.9	mg/L	94.5	
LCCV	Q2748713		SODIUM	0.1			0.0780	mg/L	78.0	
CDL01	Q2748699		SODIUM	0.1			0.0715	mg/L	71.5	
LCS	Q2747657		SODIUM	100			98.4	mg/L	98.4	
SER01	Q2748799	A997577	SODIUM	145			127	mg/L		13.2
DUP02	Q2747658	A997577	SODIUM	145			146	mg/L		0.7
SPI02	Q2747659	A997577	SODIUM	145	100		247	mg/L	102.0	
CCV	Q2748797		SODIUM	50			51.5	mg/L	103.0	
BLA01	Q2748794		SODIUM			<	0.0400	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		SODIUM	50			52.1	mg/L	104.2	
BLA01	Q2748795		SODIUM			<	0.0400	mg/L		
SER01	Q2749088	A998242	SODIUM	663			588	mg/L		12.0
CCV	Q2749080		SODIUM	50			51.5	mg/L	103.0	
BLA01	Q2749072		SODIUM			<	0.0400	mg/L		
BLA02	Q2747672		SODIUM			<	0.0400	mg/L		
LCS	Q2747673		SODIUM	100			102	mg/L	102.0	
SER01	Q2749087	A997755	SODIUM	11.4			9.12	mg/L		22.2
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	SODIUM	11.4			10.8	mg/L		5.4
SPI02	Q2747675	A997755	SODIUM	11.4	100		115	mg/L	103.6	
CCV	Q2749081		SODIUM	50			51.4	mg/L	102.8	
BLA01	Q2749073		SODIUM			<	0.0400	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							

)DIUM ICP SW846-6010B **M131.3**

Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		SODIUM	50			52.3	mg/L	104.6	
BLA01	Q2749074		SODIUM			<	0.0400	mg/L		
CDL01	Q2749167		SODIUM	0.1			0.0892	mg/L	89.2	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

SULFATE BY ION CHROMATOGRAPHY SW846-9056 **G310.7**

R617333 Analyst: R DALAL Run Date: 11-Oct-13 Instrument: IC
Analytical Reviewer: E WERNZ Review Date: 14-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LFB01H	Q2745306		SULFATE	25.0			24.8	mg/L	99.2	
SPI01	Q2745310	A997905	SULFATE	56.9	25.0		78.3	mg/L	85.6	
DPS01	Q2745311	A997905	SULFATE	56.9	25.0		78.9	mg/L	88.0	2.8
LFB01L	Q2745321		SULFATE	2.50			2.48	mg/L	99.2	
CCVL	Q2745324		SULFATE	2.50			2.51	mg/L	100.4	
CCVH	Q2745325		SULFATE	10.0			9.44	mg/L	94.4	
BLA01	Q2745326		SULFATE			BDL	0.05	mg/L		
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
CCVL	Q2745327		SULFATE	2.50			2.55	mg/L	102.0	
CCVH	Q2745328		SULFATE	10.0			9.49	mg/L	94.9	
BLA01	Q2745329		SULFATE			BDL	0.05	mg/L		
LFB01L	Q2745330		SULFATE	2.50			2.49	mg/L	99.6	

Q2745310 1:10 Dilution.
Q2745311 1:10 Dilution.

R617339 Analyst: R DALAL Run Date: 11-Oct-13 Instrument: IC
Analytical Reviewer: E WERNZ Review Date: 14-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LFB01H	Q2745425		SULFATE	25.0			23.9	mg/L	95.6	
LFB01L	Q2745432		SULFATE	2.50			2.57	mg/L	102.8	
CCVL	Q2745440		SULFATE	2.50			2.61	mg/L	104.4	
CCVH	Q2745441		SULFATE	10.0			9.71	mg/L	97.1	

SULFATE BY ION CHROMATOGRAPHY SW846-9056 **G310.7**

R617339 Analyst: R DALAL Run Date: 11-Oct-13
Analytical Reviewer: E WERNZ Review Date: 14-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2745442		SULFATE			BDL	0.05	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SPI01	Q2745443	A997756	SULFATE	29.4	2.50		31.6	mg/L	88.0	
DPS01	Q2745444	A997756	SULFATE	29.4	2.50		31.4	mg/L	80.0	9.5
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
CCVL	Q2745445		SULFATE	2.50			2.55	mg/L	102.0	
CCVH	Q2745446		SULFATE	10.0			9.93	mg/L	99.3	
BLA01	Q2745447		SULFATE			BDL	0.05	mg/L		
LFB01L	Q2745448		SULFATE	2.50			2.55	mg/L	102.0	

R617423 Analyst: K VEST Run Date: 14-Oct-13 Instrument: IC
Analytical Reviewer: E WERNZ Review Date: 15-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2746127		SULFATE			BDL	0.05	mg/L		
CCVL	Q2746128		SULFATE	2.50			2.54	mg/L	101.6	
CCVH	Q2746129		SULFATE	10.0			9.65	mg/L	96.5	
LFB01H	Q2746130		SULFATE	25.0			25.1	mg/L	100.4	
LFB01L	Q2746131		SULFATE	2.50			2.59	mg/L	103.6	
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
SPI01	Q2746132	A997767	SULFATE	74.2	62.5		142	mg/L	108.5	
DPS01	Q2746133	A997767	SULFATE	74.2	62.5		144	mg/L	111.7	2.9
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
CCVL	Q2746134		SULFATE	2.50			2.54	mg/L	101.6	
CCVH	Q2746135		SULFATE	10.0			9.96	mg/L	99.6	
BLA01	Q2746136		SULFATE			BDL	0.05	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
CCVL	Q2746139		SULFATE	2.50			2.59	mg/L	103.6	
CCVH	Q2746140		SULFATE	10.0			9.90	mg/L	99.0	
BLA01	Q2746141		SULFATE			BDL	0.05	mg/L		

Q2746132 1:25 Dilution.
Q2746133 1:25 Dilution.

ALLIUM ICP/MS SW846-6020 **V134.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617486 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997746	Rep: 0	Analytical Run: R617744							
BLA02	Q2746613		Analytical Run: R617744							
LCS	Q2746614		Analytical Run: R617744							
DUP02	Q2746615		Analytical Run: R617744							
SPI02	Q2746616		Analytical Run: R617744							

R617487 Analyst: K KAMARA Run Date: 17-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		Analytical Run: R617622							
LCS	Q2746618		Analytical Run: R617622							
DUP02	Q2746619		Analytical Run: R617622							
SPI02	Q2746620		Analytical Run: R617622							
SAMPLE	A997747	Rep: 0	Analytical Run: R617622							
SAMPLE	A997748	Rep: 0	Analytical Run: R617622							
SAMPLE	A997749	Rep: 0	Analytical Run: R617622							
SAMPLE	A997750	Rep: 0	Analytical Run: R617622							
SAMPLE	A997751	Rep: 0	Analytical Run: R617622							
SAMPLE	A997752	Rep: 0	Analytical Run: R617622							
SAMPLE	A997753	Rep: 0	Analytical Run: R617622							
SAMPLE	A997754	Rep: 0	Analytical Run: R617622							
SAMPLE	A997755	Rep: 0	Analytical Run: R617622							
SAMPLE	A997756	Rep: 0	Analytical Run: R617622							

R617540 Analyst: K KAMARA Run Date: 18-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757	Rep: 0	Analytical Run: R617622							
SAMPLE	A997758	Rep: 0	Analytical Run: R617622							
SAMPLE	A997759	Rep: 0	Analytical Run: R617622							
SAMPLE	A997760	Rep: 0	Analytical Run: R617622							
SAMPLE	A997761	Rep: 0	Analytical Run: R617622							
BLA02	Q2747193		Analytical Run: R617622							
LCS	Q2747194		Analytical Run: R617622							
DUP02	Q2747195		Analytical Run: R617622							
SPI02	Q2747196		Analytical Run: R617622							

R617622 Analyst: J KRAMER Run Date: 19-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2747907		THALLIUM	0.1			0.0930	ug/L	93.0	
ICV01	Q2747879		THALLIUM	50			49.5	ug/L	99.0	
CDL01	Q2747897		THALLIUM	0.2			0.177	ug/L	88.5	
CS-A	Q2747901		THALLIUM	40			38.8	ug/L	97.0	
CCV	Q2747889		THALLIUM	20			18.9	ug/L	94.5	
BLA01	Q2747883		THALLIUM			<	0.0800	ug/L		

THALLIUM ICP/MS SW846-6020 **V134.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617622 Analyst: J KRAMER Run Date: 19-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2746617		THALLIUM			<	0.0800	ug/L		
LCS	Q2746618		THALLIUM	40			35.6	ug/L	89.0	
SER01	Q2747903	A997747	THALLIUM	0		CNA	2.48	ug/L		
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
DUP02	Q2746619	A997747	THALLIUM	0		BDL		ug/L		
SPI02	Q2746620	A997747	THALLIUM	0	40		35.5	ug/L	88.8	
CCV	Q2747890		THALLIUM	20			18.7	ug/L	93.5	
BLA01	Q2747884		THALLIUM			<	0.0800	ug/L		
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
CCV	Q2747891		THALLIUM	20			19.6	ug/L	98.0	
BLA01	Q2747885		THALLIUM			<	0.0800	ug/L		
BLA02	Q2747193		THALLIUM			<	0.0800	ug/L		
LCS	Q2747194		THALLIUM	40			35.8	ug/L	89.5	
SER01	Q2747904	A997757	THALLIUM	0		CNA	2.40	ug/L		
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP02	Q2747195	A997757	THALLIUM	0		BDL		ug/L		
SPI02	Q2747196	A997757	THALLIUM	0	40		34.6	ug/L	86.5	
CCV	Q2747892		THALLIUM	20			19.3	ug/L	96.5	
BLA01	Q2747909		THALLIUM			<	0.0800	ug/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2747919		THALLIUM	20			19.1	ug/L	95.5	
BLA01	Q2747910		THALLIUM			<	0.0800	ug/L		
SER01	Q2747935	A997633	THALLIUM	0		CNA	2.50	ug/L		
CDL01	Q2747938		THALLIUM	0.1			0.0320	ug/L	32.0	
ICS-A	Q2747933		THALLIUM	40			34.0	ug/L	85.0	

Q2747933 1:5 Dilution.
Q2747935 1:25 Dilution.

R617744 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP/MS
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2748892		THALLIUM	50			51.2	ug/L	102.4	
CDL01	Q2748927		THALLIUM	0.2			0.231	ug/L	115.5	
ICS-A	Q2748931		THALLIUM	40			45.9	ug/L	114.8	
LCCV	Q2748939		THALLIUM	0.1			0.109	ug/L	109.0	

ALLIUM ICP/MS SW846-6020 **V134.3**
Prep : ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE EPA 200.2 REV. 2.8

R617744 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCV	Q2748919		THALLIUM	20			21.5	ug/L	107.5	
BLA01	Q2748902		THALLIUM			<	0.0800	ug/L		
BLA02	Q2746613		THALLIUM			<	0.0800	ug/L		
LCS	Q2746614		THALLIUM	40			40.2	ug/L	100.5	
SER01	Q2748933	A997659	THALLIUM	0		CNA	1.58	ug/L		
DUP02	Q2746615	A997659	THALLIUM	0		BDL		ug/L		
SPI02	Q2746616	A997659	THALLIUM	0	40		39.2	ug/L	98.0	
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
CCV	Q2748920		THALLIUM	20			21.7	ug/L	108.5	
BLA01	Q2748903		THALLIUM			<	0.0800	ug/L		
CDL01	Q2748937		THALLIUM	0.1			0.100	ug/L	100.0	
ICS-A	Q2748932		THALLIUM	40			42.8	ug/L	107.0	
Q2748931	1:5 Dilution.									

TOTAL DISSOLVED SOLIDS SM2540 C 1997 **G402.9**

R617313 Analyst: A CORNWELL Run Date: 11-Oct-13
Analytical Reviewer: P SPENCE Review Date: 16-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2745009		DISSOLVED SOLIDS			BDL	10	mg/L		
LFB01	Q2745010		DISSOLVED SOLIDS	500			469	mg/L	93.8	
SPI01	Q2745013	A997714	DISSOLVED SOLIDS	165	250		386	mg/L	88.4	
DPS01	Q2745014	A997714	DISSOLVED SOLIDS	165	250		394	mg/L	91.6	3.6
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
DUP01	Q2745015	A997746	DISSOLVED SOLIDS	468			464	mg/L		0.8
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
DUP01	Q2745016	A997753	DISSOLVED SOLIDS	915			930	mg/L		1.6
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
LFB01	Q2745017		DISSOLVED SOLIDS	500			463	mg/L	92.6	
BLA01	Q2745018		DISSOLVED SOLIDS			BDL	10	mg/L		

R617415 Analyst: A CORNWELL Run Date: 15-Oct-13
Analytical Reviewer: P SPENCE Review Date: 17-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2746059		DISSOLVED SOLIDS			BDL	10	mg/L		
LFB01	Q2746060		DISSOLVED SOLIDS	500			456	mg/L	91.2	
SPI01	Q2746063	A997701	DISSOLVED SOLIDS	189	250		416	mg/L	90.8	
DPS01	Q2746064	A997701	DISSOLVED SOLIDS	189	250		405	mg/L	86.4	5.0
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							

TOTAL DISSOLVED SOLIDS SM2540 C 1997 G402.9

R617415 Analyst: A CORNWELL Run Date: 15-Oct-13
Analytical Reviewer: P SPENCE Review Date: 17-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
DUP01	Q2746065	A997757	DISSOLVED SOLIDS	501			515	mg/L		2.8
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
LFB01	Q2746066		DISSOLVED SOLIDS	500			488	mg/L	97.6	
BLA01	Q2746067		DISSOLVED SOLIDS			BDL	10	mg/L		

TOTAL ORGANIC CARBON SW846-9060A O401.0

R617536 Analyst: T DRIGGERS Run Date: 16-Oct-13 Instrument: TOC
Analytical Reviewer: P SPENCE Review Date: 18-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2747077		TOTAL ORGANIC CARBON (TOC)	1.00			1.32	mg/L	132.0	
ICV01	Q2747078		TOTAL ORGANIC CARBON (TOC)	12.5			12.9	mg/L	103.2	
CCVL	Q2747084		TOTAL ORGANIC CARBON (TOC)	5.00			5.23	mg/L	104.6	
BLA01	Q2747085		TOTAL ORGANIC CARBON (TOC)			BDL	1.0	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SPI01	Q2747086	A997749	TOTAL ORGANIC CARBON (TOC)	1.92	12.5		13.3	mg/L	91.0	
DPS01	Q2747087	A997749	TOTAL ORGANIC CARBON (TOC)	1.92	12.5		13.3	mg/L	91.0	0
CCVH	Q2747088		TOTAL ORGANIC CARBON (TOC)	15.0			14.7	mg/L	98.0	
BLA01	Q2747089		TOTAL ORGANIC CARBON (TOC)			BDL	1.0	mg/L		
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SPI01	Q2747090	A997757	TOTAL ORGANIC CARBON (TOC)	1.86	12.5		13.0	mg/L	89.1	
DPS01	Q2747091	A997757	TOTAL ORGANIC CARBON (TOC)	1.86	12.5		12.6	mg/L	85.9	3.6
CCVL	Q2747094		TOTAL ORGANIC CARBON (TOC)	5.0			4.97	mg/L	99.4	
BLA01	Q2747095		TOTAL ORGANIC CARBON (TOC)			BDL	1.0	mg/L		
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCVH	Q2747098		TOTAL ORGANIC CARBON (TOC)	15.0			14.1	mg/L	94.0	
BLA01	Q2747099		TOTAL ORGANIC CARBON (TOC)			BDL	1.0	mg/L		

R617619 Analyst: C ANYANWUTAKU Run Date: 17-Oct-13 Instrument: TOC
Analytical Reviewer: T DRIGGERS Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2747827		TOTAL ORGANIC CARBON (TOC)	1.00			1.22	mg/L	122.0	

)TAL ORGANIC CARBON SW846-9060A **O401.0**

R617619 Analyst: C ANYANWUTAKU Run Date: 17-Oct-13
Analytical Reviewer: T DRIGGERS Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2747828		TOTAL ORGANIC CARBON (TOC)	12.5			12.5	mg/L	100.0	
CCVH	Q2747831		TOTAL ORGANIC CARBON (TOC)	15.0			14.0	mg/L	93.3	
SPI01	Q2747835	A997699	TOTAL ORGANIC CARBON (TOC)	4.00	25.0		27.2	mg/L	92.8	
DPS01	Q2747836	A997699	TOTAL ORGANIC CARBON (TOC)	4.00	25.0		27.1	mg/L	92.4	0.4
CCVL	Q2747837		TOTAL ORGANIC CARBON (TOC)	5.00			5.35	mg/L	107.0	
BLA01	Q2747838		TOTAL ORGANIC CARBON (TOC)			BDL	1.0	mg/L		
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SPI01	Q2747839	A997701	TOTAL ORGANIC CARBON (TOC)	3.92	25.0		26.2	mg/L	89.1	
DPS01	Q2747840	A997701	TOTAL ORGANIC CARBON (TOC)	3.92	25.0		26.1	mg/L	88.7	0.4
CCVH	Q2747841		TOTAL ORGANIC CARBON (TOC)	15.0			14.8	mg/L	98.7	
BLA01	Q2747842		TOTAL ORGANIC CARBON (TOC)			BDL	1.0	mg/L		
CCVL	Q2747845		TOTAL ORGANIC CARBON (TOC)	5.00			4.95	mg/L	99.0	

Q2747835 1:2 Dilution.
Q2747836 1:2 Dilution.
Q2747839 1:2 Dilution.
Q2747840 1:2 Dilution.

'ANADIUM ICP SW846-6010B **M138.3**
'ep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							

VANADIUM ICP SW846-6010B M138.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617593 Analyst: K KAMARA Run Date: 21-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		VANADIUM			<	0.000216	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		VANADIUM	0.0100			0.0102	mg/L	102.0	
ICV01	Q2748710		VANADIUM	1			1.02	mg/L	102.0	
LCCV	Q2748713		VANADIUM	0.0100			0.0101	mg/L	101.0	
CDL01	Q2748697		VANADIUM	0.100			0.102	mg/L	102.0	
ICS-AB	Q2748681		VANADIUM	0.500			0.514	mg/L	102.8	
LCS	Q2747657		VANADIUM	0.5			0.487	mg/L	97.4	
SER01	Q2748799	A997577	VANADIUM	0		BDL		mg/L		
DUP02	Q2747658	A997577	VANADIUM	0		BDL		mg/L		
SPI02	Q2747659	A997577	VANADIUM	0	0.500		0.470	mg/L	94.0	
CCV	Q2748797		VANADIUM	2			2.01	mg/L	100.5	
BLA01	Q2748794		VANADIUM			<	0.00400	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
CCV	Q2748798		VANADIUM	2			2.02	mg/L	101.0	
BLA01	Q2748795		VANADIUM			<	0.00400	mg/L		
SER01	Q2749088	A998242	VANADIUM	0		BDL		mg/L		
CCV	Q2749080		VANADIUM	2			2.02	mg/L	101.0	
BLA01	Q2749072		VANADIUM			<	0.00400	mg/L		
BLA02	Q2747672		VANADIUM			<	0.00400	mg/L		
LCS	Q2747673		VANADIUM	0.5			0.504	mg/L	100.8	
SER01	Q2749087	A997755	VANADIUM	0		BDL		mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	VANADIUM	0		BDL		mg/L		
SPI02	Q2747675	A997755	VANADIUM	0	0.500		0.496	mg/L	99.2	
CCV	Q2749081		VANADIUM	2			2.01	mg/L	100.5	
BLA01	Q2749073		VANADIUM			<	0.00400	mg/L		

VANADIUM ICP SW846-6010B **M138.3**

Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		VANADIUM	2			2.04	mg/L	102.0	
BLA01	Q2749074		VANADIUM			<	0.00400	mg/L		
CDL01	Q2749167		VANADIUM	0.0100			0.0102	mg/L	102.0	
ICS-AB	Q2749162		VANADIUM	0.500			0.528	mg/L	105.6	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13 Instrument: GC/MS VOA
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2743086		Analysis Date/Time: 04-Oct-13 07:44							
CAL01	Q2743086		ACETONE (2-PROPANONE)	0.1309						13.3
CAL01	Q2743086		ACRYLONITRILE	0.0738						6
CAL01	Q2743086		BENZENE	1.3766						6.7
CAL01	Q2743086		BROMOCHLOROMETHANE	0.1770						7.7
CAL01	Q2743086		BROMODICHLOROMETHANE	0.4076						8.4
CAL01	Q2743086		BROMOFORM	0.6059						11.3
CAL01	Q2743086		BROMOMETHANE			QDR				0.997
CAL01	Q2743086		CARBON DISULFIDE	0.9890						8.2
CAL01	Q2743086		CARBON TETRACHLORIDE	0.3110						10.2
CAL01	Q2743086		CHLOROBENZENE	2.8325						7.9
CAL01	Q2743086		DIBROMOCHLOROMETHANE	0.8859						9
CAL01	Q2743086		CHLOROETHANE	0.1205						13.8
CAL01	Q2743086		CHLOROFORM	0.5955						8.1
CAL01	Q2743086		CHLOROMETHANE	0.1717						10.1
CAL01	Q2743086		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.2445						11.6
CAL01	Q2743086		1,2-DIBROMOETHANE (EDB)	0.3199						7.3
CAL01	Q2743086		DIBROMOMETHANE	0.2151						7
CAL01	Q2743086		1,2-DICHLOROBENZENE (O-			LIN				0.996

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
			DICHLOROBENZENE)							
CAL01	Q2743086		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	2.0344						14.7
CAL01	Q2743086		TRANS-1,4-DICHLORO-2-BUTENE	0.3962						8.1
CAL01	Q2743086		1,1-DICHLOROETHANE	0.5963						6.7
CAL01	Q2743086		1,2-DICHLOROETHANE	0.4648						6.7
CAL01	Q2743086		1,1-DICHLOROETHENE	0.2751						7.1
CAL01	Q2743086		CIS-1,2-DICHLOROETHENE	0.3809						6.5
CAL01	Q2743086		TRANS-1,2-DICHLOROETHENE	0.3410						6.5
CAL01	Q2743086		1,2-DICHLOROPROPANE	0.3366						5.6
CAL01	Q2743086		CIS-1,3-DICHLOROPROPENE	0.5316						9.7
CAL01	Q2743086		TRANS-1,3-DICHLOROPROPENE	0.4361						11.2
CAL01	Q2743086		ETHYL BENZENE	1.4085						7.2
CAL01	Q2743086		2-HEXANONE	0.9441						11.8
CAL01	Q2743086		IODOMETHANE	0.4610						7.8
CAL01	Q2743086		DICHLOROMETHANE (METHYLENE CHLORIDE)			LIN				0.995
CAL01	Q2743086		METHYL ETHYL KETONE	0.0617						9.2
CAL01	Q2743086		4-METHYL-2-PENTANONE	0.4452						9.3
CAL01	Q2743086		STYRENE	2.9062						7.2
CAL01	Q2743086		1,1,1,2-TETRACHLOROETHANE	0.8093						8.
CAL01	Q2743086		1,1,2,2-TETRACHLOROETHANE			LIN				0.997
CAL01	Q2743086		TETRACHLOROETHENE	0.9795						6.5
CAL01	Q2743086		TOLUENE	1.4048						6.1
CAL01	Q2743086		1,1,1-TRICHLOROETHANE	0.4222						7.4
CAL01	Q2743086		1,1,2-TRICHLOROETHANE	0.3197						7.4
CAL01	Q2743086		TRICHLOROETHENE	0.3462						6.6
CAL01	Q2743086		TRICHLOROFLUOROMETHANE	0.2914						9.5
CAL01	Q2743086		1,2,3-TRICHLOROPROPANE	0.4256						14
CAL01	Q2743086		VINYL ACETATE	0.2572						7.9
CAL01	Q2743086		VINYL CHLORIDE	0.1911						6.5
CAL01	Q2743086		DICHLOROETHANE-D4	0.2793						1.1
CAL01	Q2743086		TOLUENE-D8	0.9127						1.8
CAL01	Q2743086		4-BROMOFLUOROBENZENE	0.7738						3.5
CAL01	Q2743086		DIBROMOFLUOROMETHANE	0.2315						0.9
ICV01	Q2743091		Analysis Date/Time: 04-Oct-13 10:59							
ICV01	Q2743091		ACETONE (2-PROPANONE)	50			49.3	ug/L	98.6	
ICV01	Q2743091		ACRYLONITRILE	100			106	ug/L	106	
ICV01	Q2743091		BENZENE	10			11.1	ug/L	111	
ICV01	Q2743091		BROMOCHLOROMETHANE	10			11.3	ug/L	113	
ICV01	Q2743091		BROMODICHLOROMETHANE	10			10.7	ug/L	107	
ICV01	Q2743091		BROMOFORM	10			9.9	ug/L	99	
ICV01	Q2743091		BROMOMETHANE	10			12.4	ug/L	124	
ICV01	Q2743091		CARBON DISULFIDE	10			11	ug/L	110	
ICV01	Q2743091		CARBON TETRACHLORIDE	10			11.6	ug/L	116	
ICV01	Q2743091		CHLOROBENZENE	10			10.3	ug/L	103	
ICV01	Q2743091		DIBROMOCHLOROMETHANE	10			10.8	ug/L	108	
ICV01	Q2743091		CHLOROETHANE	10			12.4	ug/L	124	

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R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2743091		CHLOROFORM	10			10.9	ug/L	109	
ICV01	Q2743091		CHLOROMETHANE	10			12.5	ug/L	125	
ICV01	Q2743091		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	10			10.8	ug/L	108	
ICV01	Q2743091		1,2-DIBROMOETHANE (EDB)	10			10.4	ug/L	104	
ICV01	Q2743091		DIBROMOMETHANE	10			10.6	ug/L	106	
ICV01	Q2743091		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	10			10.4	ug/L	104	
ICV01	Q2743091		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	10			10.9	ug/L	109	
ICV01	Q2743091		TRANS-1,4-DICHLORO-2-BUTENE	20			19.8	ug/L	99	
ICV01	Q2743091		1,1-DICHLOROETHANE	10			11.3	ug/L	113	
ICV01	Q2743091		1,2-DICHLOROETHANE	10			10.8	ug/L	108	
ICV01	Q2743091		1,1-DICHLOROETHENE	10			12.3	ug/L	123	
ICV01	Q2743091		CIS-1,2-DICHLOROETHENE	10			11.1	ug/L	111	
ICV01	Q2743091		TRANS-1,2-DICHLOROETHENE	10			11.3	ug/L	113	
ICV01	Q2743091		1,2-DICHLOROPROPANE	10			10.7	ug/L	107	
ICV01	Q2743091		CIS-1,3-DICHLOROPROPENE	10			9.89	ug/L	98.9	
ICV01	Q2743091		TRANS-1,3-DICHLOROPROPENE	10			10.5	ug/L	105	
ICV01	Q2743091		ETHYL BENZENE	10			11	ug/L	110	
ICV01	Q2743091		2-HEXANONE	50			50.7	ug/L	101.4	
ICV01	Q2743091		IODOMETHANE	10			10.7	ug/L	107	
ICV01	Q2743091		DICHLOROMETHANE (METHYLENE CHLORIDE)	10			11	ug/L	110	
ICV01	Q2743091		METHYL ETHYL KETONE	50			48	ug/L	96	
ICV01	Q2743091		4-METHYL-2-PENTANONE	50			51.3	ug/L	102.6	
ICV01	Q2743091		STYRENE	10			10.7	ug/L	107	
ICV01	Q2743091		1,1,1,2-TETRACHLOROETHANE	10			10.8	ug/L	108	
ICV01	Q2743091		1,1,2,2-TETRACHLOROETHANE	10			10.7	ug/L	107	
ICV01	Q2743091		TETRACHLOROETHENE	10			11.3	ug/L	113	
ICV01	Q2743091		TOLUENE	10			10.9	ug/L	109	
ICV01	Q2743091		1,1,1-TRICHLOROETHANE	10			11.4	ug/L	114	
ICV01	Q2743091		1,1,2-TRICHLOROETHANE	10			10.4	ug/L	104	
ICV01	Q2743091		TRICHLOROETHENE	10			11	ug/L	110	
ICV01	Q2743091		TRICHLOROFLUOROMETHANE	10			11.2	ug/L	112	
ICV01	Q2743091		1,2,3-TRICHLOROPROPANE	10			10.5	ug/L	105	
ICV01	Q2743091		VINYL ACETATE	10			10	ug/L	100	
ICV01	Q2743091		VINYL CHLORIDE	10			11.7	ug/L	117	
CCVD	Q2746353		Analysis Date/Time: 15-Oct-13 05:38							
CCVD	Q2746353		ACETONE (2-PROPANONE)	0.1309			0.1733			32.4
CCVD	Q2746353		ACRYLONITRILE	0.0738			0.0579			21.5
CCVD	Q2746353		BENZENE	1.3766			1.5470			12.4
CCVD	Q2746353		BROMOCHLOROMETHANE	0.1770			0.2004			13.2
CCVD	Q2746353		BROMODICHLOROMETHANE	0.4076			0.4654			14.2
CCVD	Q2746353		BROMOFORM	0.6059			0.6653			9.8
CCVD	Q2746353		BROMOMETHANE	10.0		QDR	10.0			0
CCVD	Q2746353		CARBON DISULFIDE	0.9890			1.0754			8.7
CCVD	Q2746353		CARBON TETRACHLORIDE	0.3110			0.3956			27.2
CCVD	Q2746353		CHLOROBENZENE	2.8325			2.8304			0.1

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCVD	Q2746353		DIBROMOCHLOROMETHANE	0.8859			0.9694			9.4
CCVD	Q2746353		CHLOROETHANE	0.1205			0.1235			2.5
CCVD	Q2746353		CHLOROFORM	0.5955			0.6802			14.2
CCVD	Q2746353		CHLOROMETHANE	0.1717			0.1415			17.6
CCVD	Q2746353		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.2445			0.2964			21.2
CCVD	Q2746353		1,2-DIBROMOETHANE (EDB)	0.3199			0.3350			4.7
CCVD	Q2746353		DIBROMOMETHANE	0.2151			0.2427			12.8
CCVD	Q2746353		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	10.0		LIN	12.2			22
CCVD	Q2746353		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	2.0344			2.2638			11.3
CCVD	Q2746353		TRANS-1,4-DICHLORO-2-BUTENE	0.3962			0.3785			4.5
CCVD	Q2746353		1,1-DICHLOROETHANE	0.5963			0.6827			14.5
CCVD	Q2746353		1,2-DICHLOROETHANE	0.4648			0.5653			21.6
CCVD	Q2746353		1,1-DICHLOROETHENE	0.2751			0.2786			1.3
CCVD	Q2746353		CIS-1,2-DICHLOROETHENE	0.3809			0.4204			10.4
CCVD	Q2746353		TRANS-1,2-DICHLOROETHENE	0.3410			0.3811			11.8
CCVD	Q2746353		1,2-DICHLOROPROPANE	0.3366			0.3751			11.4
CCVD	Q2746353		CIS-1,3-DICHLOROPROPENE	0.5316			0.5461			2.7
CCVD	Q2746353		TRANS-1,3-DICHLOROPROPENE	0.4361			0.4331			0.7
CCVD	Q2746353		ETHYL BENZENE	1.4085			1.4489			2.
CCVD	Q2746353		2-HEXANONE	0.9441			1.0282			8.9
CCVD	Q2746353		IODOMETHANE	0.4610			0.4995			8.4
CCVD	Q2746353		DICHLOROMETHANE (METHYLENE CHLORIDE)	10.0		LIN	11.0			10
CCVD	Q2746353		METHYL ETHYL KETONE	0.0617			0.0677			9.7
CCVD	Q2746353		4-METHYL-2-PENTANONE	0.4452			0.5271			18.4
CCVD	Q2746353		STYRENE	2.9062			3.0798			6
CCVD	Q2746353		1,1,1,2-TETRACHLOROETHANE	0.8093			0.9155			13.1
CCVD	Q2746353		1,1,2,2-TETRACHLOROETHANE	10.0		LIN	11.5			15
CCVD	Q2746353		TETRACHLOROETHENE	0.9795			0.9993			2
CCVD	Q2746353		TOLUENE	1.4048			1.4702			4.7
CCVD	Q2746353		1,1,1-TRICHLOROETHANE	0.4222			0.4946			17.1
CCVD	Q2746353		1,1,2-TRICHLOROETHANE	0.3197			0.3371			5.4
CCVD	Q2746353		TRICHLOROETHENE	0.3462			0.3798			9.7
CCVD	Q2746353		TRICHLOROFLUOROMETHANE	0.2914			0.3142			7.8
CCVD	Q2746353		1,2,3-TRICHLOROPROPANE	0.4256			0.4796			12.7
CCVD	Q2746353		VINYL ACETATE	0.2572			0.2607			1.4
CCVD	Q2746353		VINYL CHLORIDE	0.1911			0.1564			18.2
CCVD	Q2746353		DICHLOROETHANE-D4	0.2793			0.3259			16.7
CCVD	Q2746353		TOLUENE-D8	0.9127			0.9226			1.1
CCVD	Q2746353		4-BROMOFLUOROBENZENE	0.7738			0.7500			3.1
CCVD	Q2746353		DIBROMOFLUOROMETHANE	0.2315			0.2515			8.6
BLA01	Q2746354		Analysis Date/Time: 15-Oct-13 06:11							
BLA01	Q2746354		ACETONE (2-PROPANONE)			BDL	10.	ug/L		
BLA01	Q2746354		ACRYLONITRILE			BDL	5.0	ug/L		
BLA01	Q2746354		BENZENE			BDL	1.0	ug/L		
BLA01	Q2746354		BROMOCHLOROMETHANE			BDL	1.0	ug/L		

)LATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13
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QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2746354		BROMODICHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		BROMOFORM			BDL	1.0	ug/L		
BLA01	Q2746354		BROMOMETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		CARBON DISULFIDE			BDL	1.0	ug/L		
BLA01	Q2746354		CARBON TETRACHLORIDE			BDL	1.0	ug/L		
BLA01	Q2746354		CHLOROBENZENE			BDL	1.0	ug/L		
BLA01	Q2746354		DIBROMOCHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		CHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		CHLOROFORM			BDL	1.0	ug/L		
BLA01	Q2746354		CHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			BDL	1.0	ug/L		
BLA01	Q2746354		1,2-DIBROMOETHANE (EDB)			BDL	1.0	ug/L		
BLA01	Q2746354		DIBROMOMETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2746354		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2746354		TRANS-1,4-DICHLORO-2-BUTENE			BDL	1.0	ug/L		
BLA01	Q2746354		1,1-DICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		1,2-DICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		1,1-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2746354		CIS-1,2-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2746354		TRANS-1,2-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2746354		1,2-DICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2746354		CIS-1,3-DICHLOROPROPENE			BDL	1.0	ug/L		
BLA01	Q2746354		TRANS-1,3-DICHLOROPROPENE			BDL	1.0	ug/L		
BLA01	Q2746354		ETHYL BENZENE			BDL	1.0	ug/L		
BLA01	Q2746354		2-HEXANONE			BDL	5.0	ug/L		
BLA01	Q2746354		IODOMETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		DICHLOROMETHANE (METHYLENE CHLORIDE)			BDL	1.0	ug/L		
BLA01	Q2746354		METHYL ETHYL KETONE			BDL	5.0	ug/L		
BLA01	Q2746354		4-METHYL-2-PENTANONE			BDL	5.0	ug/L		
BLA01	Q2746354		STYRENE			BDL	1.0	ug/L		
BLA01	Q2746354		1,1,1,2-TETRACHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		1,1,2,2-TETRACHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		TETRACHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2746354		TOLUENE			BDL	1.0	ug/L		
BLA01	Q2746354		1,1,1-TRICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		1,1,2-TRICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		TRICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2746354		TRICHLOROFLUOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2746354		1,2,3-TRICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2746354		VINYL ACETATE			BDL	1.0	ug/L		
BLA01	Q2746354		VINYL CHLORIDE			BDL	1.0	ug/L		
BLA01	Q2746354		XYLENES (O/M/P-XYLENE)			BDL	2.0	ug/L		
BLA01	Q2746354		DICHLOROETHANE-D4						116	
BLA01	Q2746354		TOLUENE-D8						94	

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13
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QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2746354		4-BROMOFLUOROBENZENE						85	
BLA01	Q2746354		DIBROMOFLUOROMETHANE						109	
LCS01	Q2746355		Analysis Date/Time: 15-Oct-13 06:41							
LCS01	Q2746355		ACETONE (2-PROPANONE)	50			50.9	ug/L	101.8	
LCS01	Q2746355		ACRYLONITRILE	100			190	ug/L	190	
LCS01	Q2746355		BENZENE	10			9.83	ug/L	98.3	
LCS01	Q2746355		BROMOCHLOROMETHANE	10			10.1	ug/L	101	
LCS01	Q2746355		BROMODICHLOROMETHANE	10			9.98	ug/L	99.8	
LCS01	Q2746355		BROMOFORM	10			8.9	ug/L	89	
LCS01	Q2746355		BROMOMETHANE	10			10.9	ug/L	109	
LCS01	Q2746355		CARBON DISULFIDE	10			9.18	ug/L	91.8	
LCS01	Q2746355		CARBON TETRACHLORIDE	10			10.6	ug/L	106	
LCS01	Q2746355		CHLOROBENZENE	10			8.51	ug/L	85.1	
LCS01	Q2746355		DIBROMOCHLOROMETHANE	10			9.85	ug/L	98.5	
LCS01	Q2746355		CHLOROETHANE	10			10.6	ug/L	106	
LCS01	Q2746355		CHLOROFORM	10			9.82	ug/L	98.2	
LCS01	Q2746355		CHLOROMETHANE	10			9.61	ug/L	96.1	
LCS01	Q2746355		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	10			9.93	ug/L	99.3	
LCS01	Q2746355		1,2-DIBROMOETHANE (EDB)	10			9.18	ug/L	91.8	
LCS01	Q2746355		DIBROMOMETHANE	10			10.2	ug/L	102	
LCS01	Q2746355		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	10			9.94	ug/L	99.4	
LCS01	Q2746355		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	10			9.84	ug/L	98.4	
LCS01	Q2746355		TRANS-1,4-DICHLORO-2-BUTENE	20			16.5	ug/L	82.5	
LCS01	Q2746355		1,1-DICHLOROETHANE	10			10.2	ug/L	102	
LCS01	Q2746355		1,2-DICHLOROETHANE	10			10.7	ug/L	107	
LCS01	Q2746355		1,1-DICHLOROETHENE	10			9.77	ug/L	97.7	
LCS01	Q2746355		CIS-1,2-DICHLOROETHENE	10			9.56	ug/L	95.6	
LCS01	Q2746355		TRANS-1,2-DICHLOROETHENE	10			9.48	ug/L	94.8	
LCS01	Q2746355		1,2-DICHLOROPROPANE	10			9.71	ug/L	97.1	
LCS01	Q2746355		CIS-1,3-DICHLOROPROPENE	10			8.62	ug/L	86.2	
LCS01	Q2746355		TRANS-1,3-DICHLOROPROPENE	10			8.89	ug/L	88.9	
LCS01	Q2746355		ETHYL BENZENE	10			9.04	ug/L	90.4	
LCS01	Q2746355		2-HEXANONE	50			46.1	ug/L	92.2	
LCS01	Q2746355		IODOMETHANE	10			9.13	ug/L	91.3	
LCS01	Q2746355		DICHLOROMETHANE (METHYLENE CHLORIDE)	10			9.46	ug/L	94.6	
LCS01	Q2746355		METHYL ETHYL KETONE	50			45.6	ug/L	91.2	
LCS01	Q2746355		4-METHYL-2-PENTANONE	50			50	ug/L	100	
LCS01	Q2746355		STYRENE	10			9.09	ug/L	90.9	
LCS01	Q2746355		1,1,1,2-TETRACHLOROETHANE	10			10	ug/L	100	
LCS01	Q2746355		1,1,2,2-TETRACHLOROETHANE	10			10	ug/L	100	
LCS01	Q2746355		TETRACHLOROETHENE	10			9.22	ug/L	92.2	
LCS01	Q2746355		TOLUENE	10			9.26	ug/L	92.6	
LCS01	Q2746355		1,1,1-TRICHLOROETHANE	10			9.95	ug/L	99.5	
LCS01	Q2746355		1,1,2-TRICHLOROETHANE	10			9.24	ug/L	92.4	
LCS01	Q2746355		TRICHLOROETHENE	10			9.26	ug/L	92.6	

JLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B O510.6

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS01	Q2746355		TRICHLOROFLUOROMETHANE	10			8.85	ug/L	88.5	
LCS01	Q2746355		1,2,3-TRICHLOROPROPANE	10			9.72	ug/L	97.2	
LCS01	Q2746355		VINYL ACETATE	10			8.29	ug/L	82.9	
LCS01	Q2746355		VINYL CHLORIDE	10			8.28	ug/L	82.8	
LCS01	Q2746355		XYLENES (O/M/P-XYLENE)	30			26.8	ug/L	89.3	
SAMPLE	A997746		Analysis Date/Time: 15-Oct-13 08:06							
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		Analysis Date/Time: 15-Oct-13 08:32							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		Analysis Date/Time: 15-Oct-13 08:58							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		Analysis Date/Time: 15-Oct-13 09:24							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		Analysis Date/Time: 15-Oct-13 09:49							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		Analysis Date/Time: 15-Oct-13 10:15							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SPI01	Q2746356	A997751	Analysis Date/Time: 15-Oct-13 10:41							
SPI01	Q2746356	A997751	ACETONE (2-PROPANONE)	0	50		54.3	ug/L	108.6	
SPI01	Q2746356	A997751	ACRYLONITRILE	0	100		67.8	ug/L	67.8	
SPI01	Q2746356	A997751	BENZENE	0	10		11.3	ug/L	113	
SPI01	Q2746356	A997751	BROMOCHLOROMETHANE	0	10		11.6	ug/L	116	
SPI01	Q2746356	A997751	BROMODICHLOROMETHANE	0	10		11	ug/L	110	
SPI01	Q2746356	A997751	BROMOFORM	0	10		8.13	ug/L	81.3	
SPI01	Q2746356	A997751	BROMOMETHANE	0	10		9.59	ug/L	95.9	
SPI01	Q2746356	A997751	CARBON DISULFIDE	0	10		9.16	ug/L	91.6	
SPI01	Q2746356	A997751	CARBON TETRACHLORIDE	0	10		12.4	ug/L	124	
SPI01	Q2746356	A997751	CHLOROBENZENE	0	10		9.87	ug/L	98.7	
SPI01	Q2746356	A997751	DIBROMOCHLOROMETHANE	0	10		9.52	ug/L	95.2	
SPI01	Q2746356	A997751	CHLOROETHANE	0	10		10.2	ug/L	102	
SPI01	Q2746356	A997751	CHLOROFORM	0	10		11.4	ug/L	114	
SPI01	Q2746356	A997751	CHLOROMETHANE	0	10		8.68	ug/L	86.8	
SPI01	Q2746356	A997751	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0	10		10.2	ug/L	102	
SPI01	Q2746356	A997751	1,2-DIBROMOETHANE (EDB)	0	10		10	ug/L	100	
SPI01	Q2746356	A997751	DIBROMOMETHANE	0	10		11.3	ug/L	113	
SPI01	Q2746356	A997751	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10		11.2	ug/L	112	
SPI01	Q2746356	A997751	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10		10.5	ug/L	105	
SPI01	Q2746356	A997751	TRANS-1,4-DICHLORO-2-BUTENE	0	20		5.25	ug/L	26.3	
SPI01	Q2746356	A997751	1,1-DICHLOROETHANE	0	10		11.6	ug/L	116	
SPI01	Q2746356	A997751	1,2-DICHLOROETHANE	0	10		11.8	ug/L	118	
SPI01	Q2746356	A997751	1,1-DICHLOROETHENE	0	10		11	ug/L	110	
SPI01	Q2746356	A997751	CIS-1,2-DICHLOROETHENE	0	10		11.2	ug/L	112	
SPI01	Q2746356	A997751	TRANS-1,2-DICHLOROETHENE	0	10		11.2	ug/L	112	
SPI01	Q2746356	A997751	1,2-DICHLOROPROPANE	0	10		11.1	ug/L	111	
SPI01	Q2746356	A997751	CIS-1,3-DICHLOROPROPENE	0	10		8.32	ug/L	83.2	
SPI01	Q2746356	A997751	TRANS-1,3-DICHLOROPROPENE	0	10		7.92	ug/L	79.2	

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI01	Q2746356	A997751	ETHYL BENZENE	0	10		10.2	ug/L	102	
SPI01	Q2746356	A997751	2-HEXANONE	0	50		50.5	ug/L	101	
SPI01	Q2746356	A997751	IODOMETHANE	0	10		10.5	ug/L	105	
SPI01	Q2746356	A997751	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10		10.7	ug/L	107	
SPI01	Q2746356	A997751	METHYL ETHYL KETONE	0	50		49.2	ug/L	98.4	
SPI01	Q2746356	A997751	4-METHYL-2-PENTANONE	0	50	!	54.9	ug/L	109.8	
SPI01	Q2746356	A997751	STYRENE	0	10		8.8	ug/L	88	
SPI01	Q2746356	A997751	1,1,1,2-TETRACHLOROETHANE	0	10		10.5	ug/L	105	
SPI01	Q2746356	A997751	1,1,2,2-TETRACHLOROETHANE	0	10		10.8	ug/L	108	
SPI01	Q2746356	A997751	TETRACHLOROETHENE	0	10		10.3	ug/L	103	
SPI01	Q2746356	A997751	TOLUENE	0	10		10.5	ug/L	105	
SPI01	Q2746356	A997751	1,1,1-TRICHLOROETHANE	0	10		11.8	ug/L	118	
SPI01	Q2746356	A997751	1,1,2-TRICHLOROETHANE	0	10		10.2	ug/L	102	
SPI01	Q2746356	A997751	TRICHLOROETHENE	0	10		11.6	ug/L	116	
SPI01	Q2746356	A997751	TRICHLOROFLUOROMETHANE	0	10		10.8	ug/L	108	
SPI01	Q2746356	A997751	1,2,3-TRICHLOROPROPANE	0	10		10.3	ug/L	103	
SPI01	Q2746356	A997751	VINYL ACETATE	0	10	!	10.6	ug/L	106	
SPI01	Q2746356	A997751	VINYL CHLORIDE	0	10		9.02	ug/L	90.2	
SPI01	Q2746356	A997751	XYLENES (O/M/P-XYLENE)	0	30		30.9	ug/L	103.0	
DPS01	Q2746357	A997751	Analysis Date/Time: 15-Oct-13 11:07							
DPS01	Q2746357	A997751	ACETONE (2-PROPANONE)	0	50		53.2	ug/L	106.5	2
DPS01	Q2746357	A997751	ACRYLONITRILE	0	100		70.3	ug/L	70.3	3.6
DPS01	Q2746357	A997751	BENZENE	0	10		11	ug/L	109.8	3.2
DPS01	Q2746357	A997751	BROMOCHLOROMETHANE	0	10		10.9	ug/L	108.9	6.1
DPS01	Q2746357	A997751	BROMODICHLOROMETHANE	0	10		10.6	ug/L	106.2	3.4
DPS01	Q2746357	A997751	BROMOFORM	0	10		8.29	ug/L	82.9	1.9
DPS01	Q2746357	A997751	BROMOMETHANE	0	10		9.49	ug/L	94.9	1
DPS01	Q2746357	A997751	CARBON DISULFIDE	0	10		8.77	ug/L	87.7	4.4
DPS01	Q2746357	A997751	CARBON TETRACHLORIDE	0	10		12.3	ug/L	122.9	0.6
DPS01	Q2746357	A997751	CHLOROBENZENE	0	10		9.96	ug/L	99.6	0.9
DPS01	Q2746357	A997751	DIBROMOCHLOROMETHANE	0	10		9.54	ug/L	95.4	0.2
DPS01	Q2746357	A997751	CHLOROETHANE	0	10		10.7	ug/L	107.1	5.4
DPS01	Q2746357	A997751	CHLOROFORM	0	10		10.9	ug/L	109	4.4
DPS01	Q2746357	A997751	CHLOROMETHANE	0	10		8.32	ug/L	83.2	4.2
DPS01	Q2746357	A997751	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0	10		10.1	ug/L	100.6	1.3
DPS01	Q2746357	A997751	1,2-DIBROMOETHANE (EDB)	0	10		9.8	ug/L	98	2.1
DPS01	Q2746357	A997751	DIBROMOMETHANE	0	10		10.9	ug/L	108.5	4.2
DPS01	Q2746357	A997751	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10		11	ug/L	110.1	1.3
DPS01	Q2746357	A997751	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10		10.7	ug/L	107.1	2.2
DPS01	Q2746357	A997751	TRANS-1,4-DICHLORO-2-BUTENE	0	20		5.48	ug/L	27.4	4.1
DPS01	Q2746357	A997751	1,1-DICHLOROETHANE	0	10		10.8	ug/L	108	6.7
DPS01	Q2746357	A997751	1,2-DICHLOROETHANE	0	10		11.5	ug/L	115.1	2.6
DPS01	Q2746357	A997751	1,1-DICHLOROETHENE	0	10		10.2	ug/L	102.2	7.1
DPS01	Q2746357	A997751	CIS-1,2-DICHLOROETHENE	0	10		10.6	ug/L	105.8	5.
DPS01	Q2746357	A997751	TRANS-1,2-DICHLOROETHENE	0	10		10.8	ug/L	107.5	3.9

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DPS01	Q2746357	A997751	1,2-DICHLOROPROPANE	0	10		10.6	ug/L	105.6	5
DPS01	Q2746357	A997751	CIS-1,3-DICHLOROPROPENE	0	10		8.22	ug/L	82.2	1.2
DPS01	Q2746357	A997751	TRANS-1,3-DICHLOROPROPENE	0	10		8.1	ug/L	81	2.2
DPS01	Q2746357	A997751	ETHYL BENZENE	0	10		10.3	ug/L	103.4	1.3
DPS01	Q2746357	A997751	2-HEXANONE	0	50		50.4	ug/L	100.8	0.2
DPS01	Q2746357	A997751	IODOMETHANE	0	10		10.2	ug/L	102	2.8
DPS01	Q2746357	A997751	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10		9.89	ug/L	98.9	7.7
DPS01	Q2746357	A997751	METHYL ETHYL KETONE	0	50		46.2	ug/L	92.4	6.2
DPS01	Q2746357	A997751	4-METHYL-2-PENTANONE	0	50		53.3	ug/L	106.5	3.1
DPS01	Q2746357	A997751	STYRENE	0	10		8.61	ug/L	86.1	2.2
DPS01	Q2746357	A997751	1,1,1,2-TETRACHLOROETHANE	0	10		10.4	ug/L	104.5	0.4
DPS01	Q2746357	A997751	1,1,2,2-TETRACHLOROETHANE	0	10		10.6	ug/L	105.6	2.2
DPS01	Q2746357	A997751	TETRACHLOROETHENE	0	10		10.6	ug/L	106.4	3.1
DPS01	Q2746357	A997751	TOLUENE	0	10		10.3	ug/L	103.3	2
DPS01	Q2746357	A997751	1,1,1-TRICHLOROETHANE	0	10		11.5	ug/L	114.6	3.3
DPS01	Q2746357	A997751	1,1,2-TRICHLOROETHANE	0	10		10	ug/L	100	2.2
DPS01	Q2746357	A997751	TRICHLOROETHENE	0	10		11	ug/L	110.2	5
DPS01	Q2746357	A997751	TRICHLOROFLUOROMETHANE	0	10		10.5	ug/L	104.6	3.2
DPS01	Q2746357	A997751	1,2,3-TRICHLOROPROPANE	0	10		10.2	ug/L	102.4	0.8
DPS01	Q2746357	A997751	VINYL ACETATE	0	10	!	10.5	ug/L	105.3	0.5
DPS01	Q2746357	A997751	VINYL CHLORIDE	0	10		8.95	ug/L	89.5	0.8
DPS01	Q2746357	A997751	XYLENES (O/M/P-XYLENE)	0	30		31.2	ug/L	104.0	1.0
SAMPLE	A997752		Analysis Date/Time: 15-Oct-13 11:33							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							
SAMPLE	A997753		Analysis Date/Time: 15-Oct-13 11:59							
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		Analysis Date/Time: 15-Oct-13 12:25							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997755		Analysis Date/Time: 15-Oct-13 12:51							
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		Analysis Date/Time: 15-Oct-13 13:17							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		Analysis Date/Time: 15-Oct-13 13:43							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		Analysis Date/Time: 15-Oct-13 14:08							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		Analysis Date/Time: 15-Oct-13 14:34							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		Analysis Date/Time: 15-Oct-13 15:00							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		Analysis Date/Time: 15-Oct-13 15:25							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
SAMPLE	A997762		Analysis Date/Time: 15-Oct-13 15:51							
SAMPLE	A997762		See Certificate of Analysis, Rep: 0							
Q2743086	Value reported for analytes calibrated by linear (LIN) or									
Q2743086	quadratic (QDR) equations is r2 (Coef. of Determination).									

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617451 Analyst: H WILLIAMS Run Date: 15-Oct-13
Analytical Reviewer: S BROTHERTON Review Date: 16-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
Q2746353	Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)									
Q2746353	equations is concentration.(UG/L)									
Q2746356	2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery									
Q2746356	possible. Unacidified sample not available.									
Q2746357	2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery									
Q2746357	possible. Unacidified sample not available.									

R617546 Analyst: H WILLIAMS Run Date: 16-Oct-13 Instrument: GC/MS VOA
Analytical Reviewer: R SHAMP Review Date: 20-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2743128		Analysis Date/Time: 04-Oct-13 08:37							
CAL01	Q2743128		ACETONE (2-PROPANONE)			LIN				1.000
CAL01	Q2743128		BENZENE	0.8852						5.9
CAL01	Q2743128		METHYL ETHYL KETONE	0.0381						6.6
CAL01	Q2743128		TOLUENE	0.9454						9.4
CAL01	Q2743128		DICHLOROETHANE-D4	0.3025						1.8
CAL01	Q2743128		TOLUENE-D8	0.9017						3.3
CAL01	Q2743128		4-BROMOFLUOROBENZENE	0.8200						2.6
CAL01	Q2743128		DIBROMOFLUOROMETHANE	0.2192						1.1
ICV01	Q2743135		Analysis Date/Time: 04-Oct-13 11:13							
ICV01	Q2743135		ACETONE (2-PROPANONE)	50			46.8	ug/L	93.6	
ICV01	Q2743135		BENZENE	10			11.3	ug/L	113	
ICV01	Q2743135		METHYL ETHYL KETONE	50			50.2	ug/L	100.4	
ICV01	Q2743135		TOLUENE	10			10.8	ug/L	108	
CCVD	Q2747171		Analysis Date/Time: 16-Oct-13 04:54							
CCVD	Q2747171		ACETONE (2-PROPANONE)	50.0		LIN	47.4			5.2
CCVD	Q2747171		BENZENE	0.8852			0.8791			0.7
CCVD	Q2747171		METHYL ETHYL KETONE	0.0381			0.0395			3.7
CCVD	Q2747171		TOLUENE	0.9454			0.9355			1
CCVD	Q2747171		DICHLOROETHANE-D4	0.3025			0.2941			2.8
CCVD	Q2747171		TOLUENE-D8	0.9017			0.9016			0
CCVD	Q2747171		4-BROMOFLUOROBENZENE	0.8200			0.8529			4
CCVD	Q2747171		DIBROMOFLUOROMETHANE	0.2192			0.2278			3.9
BLA01	Q2747172		Analysis Date/Time: 16-Oct-13 05:35							
BLA01	Q2747172		ACETONE (2-PROPANONE)			BDL	10.	ug/L		
BLA01	Q2747172		BENZENE			BDL	1.0	ug/L		
BLA01	Q2747172		METHYL ETHYL KETONE			BDL	5.0	ug/L		
BLA01	Q2747172		TOLUENE			BDL	1.0	ug/L		
BLA01	Q2747172		DICHLOROETHANE-D4						94	
BLA01	Q2747172		TOLUENE-D8						94	
BLA01	Q2747172		4-BROMOFLUOROBENZENE						105	
BLA01	Q2747172		DIBROMOFLUOROMETHANE						98	
LCS01	Q2747173		Analysis Date/Time: 16-Oct-13 06:08							
LCS01	Q2747173		ACETONE (2-PROPANONE)	50			40.3	ug/L	80.6	
LCS01	Q2747173		BENZENE	10			9.9	ug/L	99	
LCS01	Q2747173		METHYL ETHYL KETONE	50			46.3	ug/L	92.6	
LCS01	Q2747173		TOLUENE	10			9.69	ug/L	96.9	

OLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B O510.6

R617546 Analyst: H WILLIAMS Run Date: 16-Oct-13
Analytical Reviewer: R SHAMP Review Date: 20-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997748		Analysis Date/Time: 16-Oct-13 08:02							
SAMPLE	A997748		See Certificate of Analysis, Rep: 1							
SPI01	Q2747174	A997761	Analysis Date/Time: 16-Oct-13 10:34							
SPI01	Q2747174	A997761	ACETONE (2-PROPANONE)	0	50		43.1	ug/L	86.2	
SPI01	Q2747174	A997761	BENZENE	271	10	NQR	265	ug/L		
SPI01	Q2747174	A997761	METHYL ETHYL KETONE	0	50		45.8	ug/L	91.6	
SPI01	Q2747174	A997761	TOLUENE	21.5	10		30.5	ug/L	90	
DPS01	Q2747175	A997761	Analysis Date/Time: 16-Oct-13 10:59							
DPS01	Q2747175	A997761	ACETONE (2-PROPANONE)	0	50		45.8	ug/L	91.7	6.2
DPS01	Q2747175	A997761	BENZENE	271	10	NQR	270	ug/L		
DPS01	Q2747175	A997761	METHYL ETHYL KETONE	0	50		48.3	ug/L	96.6	5.3
DPS01	Q2747175	A997761	TOLUENE	21.5	10		32.2	ug/L	107	17.3

Q2743128 Value reported for analytes calibrated by linear (LIN) or
Q2743128 quadratic (QDR) equations is r2 (Coef. of Determination).
Q2747171 Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)
Q2747171 equations is concentration.(UG/L)
Q2747172 Analytes present greater than 1/2 of the detection limit are reported.
Q2747174 2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery
Q2747174 possible. Unacidified sample not available.
Q2747175 2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery
Q2747175 possible. Unacidified sample not available.

R617586 Analyst: H WILLIAMS Run Date: 17-Oct-13 Instrument: GC/MS VOA
Analytical Reviewer: R SHAMP Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2743128		Analysis Date/Time: 04-Oct-13 08:37							
CAL01	Q2743128		BENZENE	0.8852						5.9
CAL01	Q2743128		TOLUENE	0.9454						9.4
CAL01	Q2743128		DICHLOROETHANE-D4	0.3025						1.8
CAL01	Q2743128		TOLUENE-D8	0.9017						3.3
CAL01	Q2743128		4-BROMOFLUOROBENZENE	0.8200						2.6
CAL01	Q2743128		DIBROMOFLUOROMETHANE	0.2192						1.1
ICV01	Q2743135		Analysis Date/Time: 04-Oct-13 11:13							
ICV01	Q2743135		BENZENE	10			11.3	ug/L	113	
ICV01	Q2743135		TOLUENE	10			10.8	ug/L	108	
CCVD	Q2747754		Analysis Date/Time: 17-Oct-13 05:38							
CCVD	Q2747754		BENZENE	0.8852			0.9810			10.8
CCVD	Q2747754		TOLUENE	0.9454			1.0379			9.8
CCVD	Q2747754		DICHLOROETHANE-D4	0.3025			0.3039			0.5
CCVD	Q2747754		TOLUENE-D8	0.9017			0.8993			0.3
CCVD	Q2747754		4-BROMOFLUOROBENZENE	0.8200			0.8453			3.1
CCVD	Q2747754		DIBROMOFLUOROMETHANE	0.2192			0.2298			4.8
BLA01	Q2747763		Analysis Date/Time: 17-Oct-13 06:42							
BLA01	Q2747763		BENZENE			BDL	1.0	ug/L		
BLA01	Q2747763		TOLUENE			BDL	1.0	ug/L		
BLA01	Q2747763		DICHLOROETHANE-D4						102	

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B O510.6

R617586 Analyst: H WILLIAMS Run Date: 17-Oct-13
Analytical Reviewer: R SHAMP Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2747763		TOLUENE-D8						94	
BLA01	Q2747763		4-BROMOFLUOROBENZENE						106	
BLA01	Q2747763		DIBROMOFLUOROMETHANE						104	
LCS01	Q2747764		Analysis Date/Time: 17-Oct-13 07:17							
LCS01	Q2747764		BENZENE	10			10.3	ug/L	103	
LCS01	Q2747764		TOLUENE	10			10.3	ug/L	103	
SAMPLE	A997761		Analysis Date/Time: 17-Oct-13 08:14							
SAMPLE	A997761		See Certificate of Analysis, Rep: 1							
SPI01	Q2747771	A997996	Analysis Date/Time: 17-Oct-13 12:53							
SPI01	Q2747771	A997996	BENZENE	7.95	10	!	14.8	ug/L	68.5	
SPI01	Q2747771	A997996	TOLUENE	0	10		10.7	ug/L	107	
DPS01	Q2747772	A997996	Analysis Date/Time: 17-Oct-13 13:18							
DPS01	Q2747772	A997996	BENZENE	7.95	10		17.4	ug/L	94.5	32
DPS01	Q2747772	A997996	TOLUENE	0	10		11.1	ug/L	110.7	3

Q2743128 Value reported for analytes calibrated by linear (LIN) or
Q2743128 quadratic (QDR) equations is r2 (Coef. of Determination).
Q2747754 Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)
Q2747754 equations is concentration.(UG/L)
Q2747764 ! COMPOUNDS FAIL QC CRITERIA HIGH.
Q2747771 2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery
Q2747771 possible. Unacidified sample not available.
Q2747772 2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery
Q2747772 possible. Unacidified sample not available.

R617671 Analyst: R SHAMP Run Date: 21-Oct-13 Instrument: GC/MS VOA
Analytical Reviewer: H WILLIAMS Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2747689		Analysis Date/Time: 14-Oct-13 07:22							
CAL01	Q2747689		BENZENE	3.3718						5.8
CAL01	Q2747689		TOLUENE	3.4696						7.8
CAL01	Q2747689		DICHLOROETHANE-D4	0.2627						1.3
CAL01	Q2747689		TOLUENE-D8	0.9835						3.2
CAL01	Q2747689		4-BROMOFLUOROBENZENE	0.9341						6.1
CAL01	Q2747689		DIBROMOFLUOROMETHANE	0.2357						2.5
ICV01	Q2747690		Analysis Date/Time: 14-Oct-13 09:54							
ICV01	Q2747690		BENZENE	10			10.8	ug/L	108	
ICV01	Q2747690		TOLUENE	10			10.9	ug/L	109	
CCVD	Q2748340		Analysis Date/Time: 21-Oct-13 06:10							
CCVD	Q2748340		BENZENE	3.3718			3.5270			4.6
CCVD	Q2748340		TOLUENE	3.4696			3.7672			8.6
CCVD	Q2748340		DICHLOROETHANE-D4	0.2627			0.2704			2.9
CCVD	Q2748340		TOLUENE-D8	0.9835			0.9973			1.4
CCVD	Q2748340		4-BROMOFLUOROBENZENE	0.9341			0.9927			6.3
CCVD	Q2748340		DIBROMOFLUOROMETHANE	0.2357			0.2304			2.2
BLA01	Q2748341		Analysis Date/Time: 21-Oct-13 06:36							
BLA01	Q2748341		BENZENE			BDL	1.0	ug/L		

)LATILE ORGANICS (CAPILLARY COLUMN) SW846-8260B **O510.6**

R617671 Analyst: R SHAMP Run Date: 21-Oct-13
Analytical Reviewer: H WILLIAMS Review Date: 23-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2748341		TOLUENE			BDL	1.0	ug/L		
BLA01	Q2748341		DICHLOROETHANE-D4						102	
BLA01	Q2748341		TOLUENE-D8						96	
BLA01	Q2748341		4-BROMOFLUOROBENZENE						99	
BLA01	Q2748341		DIBROMOFLUOROMETHANE						98	
LCS01	Q2748342		Analysis Date/Time: 21-Oct-13 07:12							
LCS01	Q2748342		BENZENE	10			9.9	ug/L	99	
LCS01	Q2748342		TOLUENE	10			9.96	ug/L	99.6	
SPI01	Q2748343	A998132	Analysis Date/Time: 21-Oct-13 08:33							
SPI01	Q2748343	A998132	BENZENE	0	10	!	7.39	ug/L	73.9	
SPI01	Q2748343	A998132	TOLUENE	0	10	!	7.38	ug/L	73.8	
DPS01	Q2748344	A998132	Analysis Date/Time: 21-Oct-13 08:59							
DPS01	Q2748344	A998132	BENZENE	0	10	!	7.44	ug/L	74.4	0.7
DPS01	Q2748344	A998132	TOLUENE	0	10	!	7.15	ug/L	71.5	3.2
SAMPLE	A997759		Analysis Date/Time: 21-Oct-13 16:12							
SAMPLE	A997759		See Certificate of Analysis, Rep: 1							
HLDBLK	Q2748348		Analysis Date/Time: 21-Oct-13 17:03							
HLDBLK	Q2748348		BENZENE			BDL	0.24	ug/L		
HLDBLK	Q2748348		TOLUENE			BDL	0.22	ug/L		
HLDBLK	Q2748348		DICHLOROETHANE-D4						99	
HLDBLK	Q2748348		TOLUENE-D8						93	
HLDBLK	Q2748348		4-BROMOFLUOROBENZENE						114	
HLDBLK	Q2748348		DIBROMOFLUOROMETHANE						94	

Q2747689 Value reported for analytes calibrated by linear (LIN) or
Q2747689 quadratic (QDR) equations is r2 (Coef. of Determination).
Q2748340 Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)
Q2748340 equations is concentration.
Q2748343 2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery
Q2748343 possible. Unacidified sample not available.
Q2748344 2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery
Q2748344 possible. Unacidified sample not available.

ZINC ICP SW846-6010B **M139.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		Analytical Run: R617723							
LCS	Q2747657		Analytical Run: R617726							
DUP02	Q2747658		Analytical Run: R617726							
SPI02	Q2747659		Analytical Run: R617726							
SAMPLE	A997746	Rep: 0	Analytical Run: R617726							
SAMPLE	A997747	Rep: 0	Analytical Run: R617726							
SAMPLE	A997748	Rep: 0	Analytical Run: R617726							
SAMPLE	A997749	Rep: 0	Analytical Run: R617726							
SAMPLE	A997750	Rep: 0	Analytical Run: R617726							

ZINC ICP SW846-6010B M139.3
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617591 Analyst: K KAMARA Run Date: 21-Oct-13
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A997751	Rep: 0	Analytical Run: R617726							
SAMPLE	A997752	Rep: 0	Analytical Run: R617726							

R617593 Analyst: K KAMARA Run Date: 21-Oct-13 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 21-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747672		Analytical Run: R617726							
LCS	Q2747673		Analytical Run: R617726							
DUP02	Q2747674		Analytical Run: R617726							
SPI02	Q2747675		Analytical Run: R617726							
SAMPLE	A997753	Rep: 0	Analytical Run: R617726							
SAMPLE	A997754	Rep: 0	Analytical Run: R617726							
SAMPLE	A997755	Rep: 0	Analytical Run: R617726							
SAMPLE	A997756	Rep: 0	Analytical Run: R617726							
SAMPLE	A997757	Rep: 0	Analytical Run: R617726							
SAMPLE	A997758	Rep: 0	Analytical Run: R617726							
SAMPLE	A997759	Rep: 0	Analytical Run: R617726							
SAMPLE	A997760	Rep: 0	Analytical Run: R617726							
SAMPLE	A997761	Rep: 0	Analytical Run: R617726							

R617723 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2747656		ZINC			<	0.00116	mg/L		

R617726 Analyst: J KRAMER Run Date: 22-Oct-13 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2748711		ZINC	0.0200			0.0195	mg/L	97.5	
ICV01	Q2748710		ZINC	1			0.994	mg/L	99.4	
LCCV	Q2748713		ZINC	0.0200			0.0238	mg/L	119.0	
CDL01	Q2748697		ZINC	0.040			0.0427	mg/L	106.8	
ICS-AB	Q2748681		ZINC	1.00			0.998	mg/L	99.8	
LCS	Q2747657		ZINC	0.5			0.515	mg/L	103.0	
SER01	Q2748799	A997577	ZINC	0		CNA	0.0123	mg/L		
DUP02	Q2747658	A997577	ZINC	0		BDL		mg/L		
SPI02	Q2747659	A997577	ZINC	0	0.500		0.478	mg/L	95.6	
CCV	Q2748797		ZINC	5.00			5.25	mg/L	105.0	
BLA01	Q2748794		ZINC			<	0.00160	mg/L		
SAMPLE	A997746		See Certificate of Analysis, Rep: 0							
SAMPLE	A997747		See Certificate of Analysis, Rep: 0							
SAMPLE	A997748		See Certificate of Analysis, Rep: 0							
SAMPLE	A997749		See Certificate of Analysis, Rep: 0							
SAMPLE	A997750		See Certificate of Analysis, Rep: 0							
SAMPLE	A997751		See Certificate of Analysis, Rep: 0							
SAMPLE	A997752		See Certificate of Analysis, Rep: 0							

NC ICP SW846-6010B **M139.3**

Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R617726 Analyst: J KRAMER Run Date: 22-Oct-13
Analytical Reviewer: S ENDERSEN Review Date: 23-Oct-13
Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCV	Q2748798		ZINC	5.00			5.35	mg/L	107.0	
BLA01	Q2748795		ZINC				0.0240	mg/L		
SER01	Q2749088	A998242	ZINC	0.867			0.852	mg/L		1.7
CCV	Q2749080		ZINC	5.00			5.29	mg/L	105.8	
BLA01	Q2749072		ZINC			<	0.00160	mg/L		
BLA02	Q2747672		ZINC				0.00306	mg/L		
LCS	Q2747673		ZINC	0.5			0.536	mg/L	107.2	
SER01	Q2749087	A997755	ZINC	0.0108		CNA	0.0159	mg/L		
SAMPLE	A997755		See Certificate of Analysis, Rep: 0							
DUP02	Q2747674	A997755	ZINC	0.0108		CNA	0.0109	mg/L		
SPI02	Q2747675	A997755	ZINC	0.0108	0.500		0.517	mg/L	101.2	
CCV	Q2749081		ZINC	5.00			5.28	mg/L	105.6	
BLA01	Q2749073		ZINC				0.00190	mg/L		
SAMPLE	A997753		See Certificate of Analysis, Rep: 0							
SAMPLE	A997754		See Certificate of Analysis, Rep: 0							
SAMPLE	A997756		See Certificate of Analysis, Rep: 0							
SAMPLE	A997757		See Certificate of Analysis, Rep: 0							
SAMPLE	A997758		See Certificate of Analysis, Rep: 0							
SAMPLE	A997759		See Certificate of Analysis, Rep: 0							
SAMPLE	A997760		See Certificate of Analysis, Rep: 0							
SAMPLE	A997761		See Certificate of Analysis, Rep: 0							
CCV	Q2749082		ZINC	5.00			5.39	mg/L	107.8	
BLA01	Q2749074		ZINC				0.00287	mg/L		
CDL01	Q2749167		ZINC	0.0200			0.0267	mg/L	133.5	
ICS-AB	Q2749162		ZINC	1.00			1.19	mg/L	119.0	

Q2748799 1:5 Dilution.
Q2748799 There was possible matrix interference for K and Na
Q2748799 as indicated by the serial dilution results.
Q2749087 1:5 Dilution.
Q2749087 There was possible matrix interference for K and Na
Q2749087 as indicated by the serial dilution results.
Q2749088 1:5 Dilution.
Q2749088 There was possible matrix interference for K and Na
Q2749088 as indicated by the serial dilution results.

RQL	Result Qualifier Definition
!	Outside Lab Generated Control Limits
<	Less Than
BDL	Below Detection Limit
CNA	RPD Calculation Not Applicable, < DL
J	Estimated, below calibration range.
LIN	Linear Regression Used
NQR	No QC Result. High Sample Concentration.
QDR	Quadratic Equation Used

QC Type	Definition
BLA01	CALIBRATION (INSTRUMENT) BLANK
BLA02	PREPPED (CALIBRATION) BLANK OR METHOD BLANK
BLA04	PREPPED (REAGENT) BLANK, NO PREP TEST CODE

QC Type	Definition
CAL01	INITIAL CALIBRATION
CCV	CONTINUING CALIBRATION VERIFICATION
CCVD	CONTINUING CALIBRATION VERIFICATION (USING %D)
CCVH	HIGH CONTINUING CALIBRATION VERIFICATION
CCVL	LOW CONTINUING CALIBRATION VERIFICATION
CDL01	DETECTION LIMIT STANDARD
DPS01	DUPLICATE MATRIX SPIKE
DPS02	PREPPED DUPLICATE MATRIX SPIKE
DUP01	DUPLICATE SAMPLE ANALYSIS
DUP02	PREPPED DUPLICATE SAMPLE ANALYSIS
HLDBLK	HOLDING BLANK (GCMS VOLATILE)
ICS-A	INTERFERENCE CHECK SAMPLE A
ICS-AB	INTERFERENCE CHECK SAMPLE AB
ICV01	INITIAL CALIBRATION VERIFICATION DIFFERENT SOURCE
LCCV	LOW LEVEL CONTINUING CALIBRATION VERIFICATION
LCS	LABORATORY CONTROL SAMPLE PREPPED
LCS01	LABORATORY CONTROL SAMPLE
LFB01	LABORATORY FORTIFIED BLANK
LFB01H	HIGH LEVEL LABORATORY FORTIFIED BLANK
LFB01L	LOW LEVEL LABORATORY FORTIFIED BLANK
LICV01	LOW LEVEL CALIBRATION VERIFICATION DIFFERENT SOURCE
SER01	ICP SERIAL DILUTION
SPI01	MATRIX SPIKE
SPI02	PREPPED MATRIX SPIKE

Approved By : CHRISTINE SARKAN