2018 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

UPPER AQC IMPOUNDMENT
LA CYGNE GENERATING STATION
LA CYGNE, KANSAS

Presented To:
Kansas City Power & Light Company

SCS ENGINEERS

27217233.18 | January 2019, Revised December 16, 2022

8575 W 110th Street, Suite 100
Overland Park, Kansas 66210
913-681-0030

CERTIFICATIONS

I, John R. Rockhold, being a qualified groundwater scientist and Professional Geologist in the State of Kansas, do hereby certify that the 2018 Annual Groundwater Monitoring and Corrective Action Report for the Upper AQC Impoundment at the La Cygne Generating Station was prepared by me or under my direct supervision and fulfills the requirements of 40 CFR 257.90(e).

JOHN R. ROCKHOLD LICENSED 29 12-16-22 KANSAS PROFESSIONAL GEOLOGIST

John R. Rockhold, P.G.

SCS Engineers

I, Douglas L. Doerr, being a qualified licensed Professional Engineer in the State of Kansas, do hereby certify that the 2018 Annual Groundwater Monitoring and Corrective Action Report for the Upper AQC Impoundment at the La Cygne Generating Station was prepared by me or under my direct supervision and fulfills the requirements of 40 CFR 257.90(e).

DOUGLAS L. DOERR LICENSED 14136 KANSAS PROFESSIONAL ENGINEER

12-16-22

Douglas L. Doerr, P.E.

SCS Engineers

Revision Number	Revision Date	Revision Section	Summary of Revisions
0	January 2019	NA	Original
1	December 16, 2022	Addendum 1	Added Addendum 1

Table of Contents

Section **Page**

Appendices

1 INTRODUCTION

This 2018 Annual Groundwater Monitoring and Corrective Action Report was prepared to support compliance with the groundwater monitoring requirements of the "Coal Combustion Residuals (CCR) Final Rule" (Rule) published by the United States Environmental Protection Agency (USEPA) in the *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, dated April 17, 2015 (USEPA, 2015). Specifically, this report was prepared to fulfill the requirements of 40 CFR 257.90 (e). The applicable sections of the Rule are provided below in *italics*, followed by applicable information relative to the 2018 Annual Groundwater Monitoring and Corrective Action Report for the Upper AQC Impoundment at the La Cygne Generating Station.

2 § 257.90(E) ANNUAL REPORT REQUIREMENTS

Annual groundwater monitoring and corrective action report. *For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:*

2.1 § 257.90(E)(1) SITE MAP

A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

> A site map with an aerial image showing the Upper AQC Impoundment and all background (or upgradient) and downgradient monitoring wells with identification numbers for the Upper AQC Impoundment groundwater monitoring program is provided as **Figure 1** in **Appendix A.**

2.2 § 257.90(E)(2) MONITORING SYSTEM CHANGES

Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

> No new monitoring wells were installed and no wells were decommissioned as part of the CCR groundwater monitoring program for the Upper AQC Impoundment in 2018.

2.3 § 257.90(E)(3) SUMMARY OF SAMPLING EVENTS

In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

Only detection monitoring was conducted during the reporting period (2018). Samples collected in 2018 were collected and analyzed for Appendix III detection monitoring constituents as indicated in **Appendix B**, **Table 1** (Appendix III Detection Monitoring Results, and **Table 2** (Detection Monitoring Field Measurements). The dates of sample collection, the monitoring program requiring the sample, and the results of the analyses are also provided in these tables. These tables include both the Spring 2018 semiannual detection monitoring data and the Fall 2018 semiannual detection monitoring data.

2.4 § 257.90(E)(4) MONITORING TRANSITION NARRATIVE

A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

There was no transition between monitoring programs in 2018. Only detection monitoring was conducted in 2018.

2.5 § 257.90(e)(5) OTHER REQUIREMENTS

Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.

A summary of potentially required information and the corresponding section of the Rule is provided in the following sections. In addition, the information, if applicable, is provided.

2.5.1 § 257.90(e) Program Status

Status of Groundwater Monitoring and Corrective Action Program.

The groundwater monitoring and corrective action program is in detection monitoring.

Summary of Key Actions Completed.

a. completion of the statistical evaluation of the initial Fall 2017 semiannual detection monitoring event per the certified statistical method,

b. completion of the 2017 Annual Groundwater Monitoring and Corrective Action Report,

c. completion of a successful alternative source demonstration for the Fall 2017 semiannual detection monitoring event,

d. completion of the Spring 2018 semiannual detection monitoring sampling and analysis event, and subsequent verification sampling per the certified statistical method,

e. completion of the statistical evaluation of the Spring 2018 semiannual detection monitoring event per the certified statistical method, and

f. initiation of the Fall 2018 semiannual detection monitoring sampling and analysis event.

Description of Any Problems Encountered.

No noteworthy problems were encountered.

Discussion of Actions to Resolve the Problems.

Not applicable because no noteworthy problems were encountered.

Projection of Key Activities for the Upcoming Year (2019).

Semiannual Spring and Fall 2019 groundwater sampling and analysis. Completion of verification sampling and analyses and statistical evaluation of Fall 2018 and Spring 2019 detection monitoring data and, if required, alternative source demonstration(s).

2.5.2 § 257.94(d)(3) Demonstration for Alternative Detection Monitoring Frequency

The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority in the annual groundwater monitoring and corrective action report required by § 257.90(e).

Not applicable because no alternative monitoring frequency for detection monitoring and certification was pursued.

2.5.3 § 257.94(e)(2) Detection Monitoring Alternate Source Demonstration

Demonstration that a source other than the CCR unit caused the statistically significant increase (SSI) over background levels for a constituent or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. In addition, certification of the demonstration is to be included in the annual report.

The following report is included as **Appendix C**:

- CCR Groundwater Monitoring Alternative Source Demonstration Report, October 2017 Groundwater Monitoring Event, Upper AQC Impoundment, La Cygne Generating Station (April 2018).

2.5.4 § 257.95(c)(3) Demonstration for Alternative Assessment Monitoring Frequency

The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer or the approval from the Participating State Director or the approval from EPA where EPA is the permitting authority in the annual groundwater monitoring and corrective action report required by § 257.90(e).

Not applicable because there was no assessment monitoring conducted.

2.5.5 § 257.95(d)(3) Assessment Monitoring Concentrations and Groundwater Protection Standards

Include the concentrations of Appendix III and detected Appendix IV constituents from the assessment monitoring, the established background concentrations, and the established groundwater protection standards.

Not applicable because there was no assessment monitoring conducted.

2.5.6 § 257.95(g)(3)(ii) Assessment Monitoring Alternate Source Demonstration

Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and must be certified to be accurate by a qualified professional engineer. If a successful demonstration is made, the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section, and may return to detection monitoring if the constituents in appendices III and IV to this part are at or below background as specified in paragraph (e) of this section. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority.

Not applicable because there was no assessment monitoring conducted.

2.5.7 § 257.96(a) Demonstration for Additional Time for Assessment of Corrective Measures

Within 90 days of finding that any constituent listed in appendix IV to this part has been detected at a statistically significant level exceeding the groundwater protection standard defined under § 257.95(h), or immediately upon detection of a release from a CCR unit, the owner or operator must initiate an assessment of corrective measures to prevent further releases, to remediate any releases and to restore affected area to original conditions. The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer attesting that *the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority.*

Not applicable because there was no assessment monitoring conducted.

3 GENERAL COMMENTS

This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. The information contained in this report is a reflection of the conditions encountered at the La Cygne Generating Station at the time of fieldwork. This report includes a review and compilation of the required information and does not reflect any variations of the subsurface, which may occur between sampling locations. Actual subsurface conditions may vary and the extent of such variations may not become evident without further investigation.

Conclusions drawn by others from the result of this work should recognize the limitation of the methods used. Please note that SCS Engineers does not warrant the work of regulatory agencies or other third parties supplying information used in the assimilation of this report. This report is prepared in accordance with generally accepted environmental engineering and geological practices, within the constraints of the client's directives. It is intended for the exclusive use of Kansas City Power & Light Company for specific application to the La Cygne Generating Station Upper AQC Impoundment. No warranties, express or implied, are intended or made.

APPENDIX A

FIGURES

Figure 1: Site Map

LEGEND

CCR UNIT BOUNDARY (APPROXIMATE LIMITS OF UPPER AQC IMPOUNDMENT)

MW-702 CCR GROUNDWATER MONITORING SYSTEM WELLS

NOTES:

1. KDHE FACILITY PERMIT AREA BOUNDARY VARIES FROM THAT SHOWN.
2. GOOGLE EARTH IMAGE DATED OCTOBER 2014. BOUNDARY AND MONITOR WELL LOCATIONS ARE APPROXIMATE.
3. BOUNDARY AND MONITOR WELL LOCATIONS ARE PROVIDED BY AECOM.

800 0 800 1600

SCALE FEET

REV.	DATE	CK. BY
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-

SHEET TITLE
SITE MAP
UPPER AQC IMPOUNDMENT
CCR GROUNDWATER MONITORING SYSTEM

PROJECT TITLE
2018 CCR GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
KANSAS CITY POWER & LIGHT COMPANY
LA CYGNE GENERATING STATION
LA CYGNE, KANSAS

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO. 27217233.18 | DSN. BY: TGW | DWN. BY: TGW | CHK. BY: JRR | Q/A RVW BY: JRR | PROJ. MGR JRR

CADD FILE: FIG 1 - LA CYGNE UAQC IMP.DWG

DATE: 1/21/19

FIGURE NO. 1

N:\KCPL\Projects\Groundwater\DWG\La Cygne\CCR Annual Report\2018\Fig 1 - La Cygne UAQC Imp.dwg Jan 21, 2019 - 1:25pm Layout Name: Fig 1 By: 4338t_w

APPENDIX B

TABLES

Table 1
Upper AQC Impoundment
Appendix III Detection Monitoring Results
KCP&L LaCygne Generating Station

Well Number	Sample Date	Appendix III Constituents						
		Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	pH (S.U.)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)
MW-6	5/23/2018	1.23	85.6	197	0.595	7.26	151	1160
MW-6	12/4/2018	1.18	86.3	193	0.612	7.13	142	1150
MW-7	5/23/2018	1.65	22.6	96.9	1.29	7.83	<5.00	868
MW-7	12/4/2018	1.62	20.5	94.6	1.32	7.85	<5.00	890
MW-11	5/23/2018	1.26	53.4	80.2	0.637	7.35	167	902
MW-11	7/11/2018	*1.17	---	---	*0.532	**7.37	---	---
MW-11	12/3/2018	1.13	60.4	72.6	0.529	7.42	215	1030
MW-701	5/24/2018	1.06	39.5	53.0	0.785	7.60	78.6	599
MW-701	12/3/2018	0.979	44.8	49.4	0.642	7.52	79.1	569
MW-702	5/24/2018	1.74	7.13	45.8	1.50	8.26	<5.00	590
MW-702	12/3/2018	1.47	3.24	40.9	1.63	8.49	<5.00	423
MW-703	5/24/2018	1.90	21.8	108	1.49	7.60	<5.00	918
MW-703	12/3/2018	1.87	17.7	106	1.52	7.46	<5.00	892
MW-704	5/24/2018	2.14	22.7	85.9	0.943	7.74	166	1230
MW-704	7/11/2018	---	---	*87.1	---	**7.53	---	---
MW-704	8/16/2018	---	---	*83.3	---	**7.54	---	---
MW-704	12/3/2018	2.02	24.0	82.2	0.918	7.46	168	1130
MW-705	5/24/2018	2.30	28.9	135	1.07	7.29	41.0	912
MW-705	12/4/2018	2.19	30.3	132	1.07	7.32	38.9	994
MW-706	1/9/2018	---	---	---	---	*7.14	---	---
MW-706	5/24/2018	2.18	23.8	252	1.20	7.44	<5.00	1170
MW-706	12/4/2018	2.09	24.7	241	1.15	7.42	7.69	1200
MW-707B	5/24/2018	2.04	396	197	0.392	6.92	4650	7260
MW-707B	12/4/2018	1.95	381	205	0.328	6.84	4490	8080
MW-708	5/23/2018	1.45	29.2	46.3	0.653	7.39	9.25	639
MW-708	12/4/2018	1.41	30.1	46.0	0.618	7.31	9.24	633
TW-1	5/24/2018	1.67	25.7	44.5	0.463	7.60	61.1	1000
TW-1	12/4/2018	1.48	26.8	41.4	0.39	7.45	66.4	962

* Verification sample obtained per certified statistical method and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009.

**Extra Sample for Quality Control Validation or per Standard Sampling Procedure

mg/L - miligrams per liter

S.U. - Standard Units

--- Not Sampled

Table 2
Upper AQC Impoundment
Detection Monitoring Field Measurements
KCP&L LaCygne Generating Station

Well Number	Sample Date	pH (S.U.)	Specific Conductivity (µS)	Temperature (°C)	Turbidity (NTU)	ORP (mV)	DO (mg/L)	***Water Level (ft btoc)	Groundwater Elevation (ft NGVD)
MW-6	5/23/2018	7.26	1890	19.96	0.00	-62	1.13	9.39	851.29
MW-6	12/4/2018	7.13	2050	11.60	7.40	-125	0.00	9.38	851.30
MW-7	5/23/2018	7.83	1530	18.26	0.00	-158	1.39	5.76	849.90
MW-7	12/4/2018	7.85	1620	12.63	6.90	-184	0.84	6.96	848.70
MW-11	5/23/2018	7.35	1410	28.84	0.00	-23	1.27	3.47	873.51
MW-11	7/11/2018	**7.37	1660	17.48	0.00	-22	5.50	4.14	872.84
MW-11	12/3/2018	7.42	1700	13.04	10.90	-69	0.39	4.23	872.75
MW-701	5/24/2018	7.60	991	21.52	0.00	6	2.22	8.35	876.88
MW-701	12/3/2018	7.52	1040	12.83	21.20	-98	0.59	9.43	875.80
MW-702	5/24/2018	8.26	1130	21.55	0.00	-7	2.49	17.74	865.43
MW-702	12/3/2018	8.49	797	13.31	5.40	-73	2.36	19.34	863.83
MW-703	5/24/2018	7.60	1600	21.33	0.00	-59	2.08	6.84	877.00
MW-703	12/3/2018	7.46	1630	13.74	3.60	-52	0.45	6.11	877.73
MW-704	5/24/2018	7.74	1970	19.71	0.00	66	2.77	11.09	872.08
MW-704	7/11/2018	**7.53	2110	18.59	0.00	52	1.27	14.47	868.70
MW-704	8/16/2018	**7.54	1970	21.90	0.40	-35	4.78	15.74	867.43
MW-704	12/3/2018	7.46	2110	13.33	10.60	-25	0.42	12.53	870.64
MW-705	5/24/2018	7.29	1690	17.97	0.00	-63	1.16	9.65	846.30
MW-705	12/4/2018	7.32	1840	6.62	7.60	-29	0.00	9.54	846.41
MW-706	1/9/2018	*7.14	1641	14.37	0.88	NA	NA	8.71	845.57
MW-706	5/24/2018	7.44	2130	18.83	0.00	-69	2.12	8.42	845.86
MW-706	12/4/2018	7.42	2250	12.94	9.80	-50	0.66	9.45	844.83
MW-707B	5/24/2018	6.92	7530	18.17	4.70	80	0.97	5.79	853.01
MW-707B	12/4/2018	6.84	8070	13.18	22.40	50	0.45	6.54	852.26
MW-708	5/23/2018	7.39	1120	18.37	0.00	91	1.03	7.94	845.09
MW-708	12/4/2018	7.31	1220	13.46	10.10	22	0.72	7.86	845.17
TW-1	5/24/2018	7.60	1740	18.24	0.00	64	3.04	17.15	844.95
TW-1	12/4/2018	7.45	1780	12.57	6.10	10	0.00	17.10	845.00

* Verification sample obtained per certified statistical method and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009.

**Extra Sample for Quality Control Validation or per Standard Sampling Procedure

S.U. - Standard Units

µS - microsiemens

°C - Degrees Celsius

ft btoc - Feet Below Top of Casing

ft NGVD - National Geodetic Vertical Datum (NAVD 88)

NTU - Nephelometric Turbidity Unit

APPENDIX C

ALTERNATIVE SOURCE DEMONSTRATION

GROUNDWATER MONITORING ALTERNATIVE SOURCE DEMONSTRATION REPORT OCTOBER 2017 GROUNDWATER MONITORING EVENT

CCR GROUNDWATER MONITORING
ALTERNATIVE SOURCE DEMONSTRATION REPORT
OCTOBER 2017 GROUNDWATER MONITORING EVENT

UPPER AQC IMPOUNDMENT
LA CYGNE GENERATING STATION
LA CYGNE, KANSAS

Presented To:

Kansas City Power & Light Company

Presented By:

SCS ENGINEERS
7311 West 130th Street, Suite 100
Overland Park, Kansas 66213
(913) 681-0030

April 2018
File No. 27217233.00

CERTIFICATIONS

I, John R. Rockhold, being a qualified groundwater scientist and licensed Professional Geologist in the State of Kansas, do hereby certify the accuracy of the information in the CCR Groundwater Monitoring Alternative Source Demonstration Report for the Upper AQC Impoundment at the La Cygne Generating Station. The Alternative Source Demonstration was prepared by me or under my direct supervision in accordance with generally accepted hydrogeological practices and the local standard of care.

JOHN R. ROCKHOLD
LICENSED
29
4-16-18
KANSAS
PROFESSIONAL GEOLOGIST

John R. Rockhold, P.G.
SCS Engineers

I, Douglas L. Doerr, being a qualified licensed Professional Engineer in the State of Kansas, do hereby certify the accuracy of the information in the CCR Groundwater Monitoring Alternative Source Demonstration Report for the Upper AQC Impoundment at the La Cygne Generating Station. The Alternative Source Demonstration was prepared by me or under my direct supervision in accordance with generally accepted engineering practices and the local standard of care.

DOUGLAS L. DOERR
LICENSED
14136
KANSAS
PROFESSIONAL ENGINEER
4-16-18

Douglas L. Doerr, P.E.
SCS Engineers

Table of Contents

Section **Page**

Appendices

1 REGULATORY FRAMEWORK

In accordance with the Coal Combustion Residuals (CCR) Final Rule § 257.94(e)(2), the owner or operator of the CCR unit may demonstrate that a source other than the CCR unit caused the statistically significant increase (SSI) over background levels for a constituent, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration within 90 days of detecting a SSI over background levels to include obtaining a certification from a qualified professional engineer verifying the accuracy of the information in the report. If a successful demonstration is completed within the 90-day period, the owner or operator of the CCR unit may continue with a detection monitoring program under § 257.94. If a successful demonstration is not completed within the 90-day period, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under § 257.95. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer.

2 STATISTICAL RESULTS

Statistical analysis of monitoring data from the groundwater monitoring system for the Upper AQC Impoundment at Kansas City Power & Light Company's (KCP&L) La Cygne Generating Station has been completed in substantial compliance with the "Statistical Method Certification by a Qualified Professional Engineer" document dated October 12, 2017. Groundwater samples were collected and analyzed by October 17, 2017. A statistical analysis was conducted to determine whether there is a SSI over background values for each constituent listed in Appendix III to Part 257-Constituents for Detection Monitoring.

If an SSI is preliminarily identified by the prediction limit analysis, verification retesting will be performed in accordance with the certified statistical method and the resampling plan to verify the result is not due to an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Up to two rounds of verification sampling and retesting may be conducted. Verification retesting with a "1 of 2" or "1 of 3" resampling plan is performed by collecting a verification sample(s) and comparing it to the calculated prediction limit. If the resulting concentration of any verification sample is not an SSI, then an SSI has not occurred.

Determinations of SSIs for the Upper AQC Impoundment at the La Cygne Generating Station were completed no later than January 15, 2018 and placed into the CCR Operating Record.

The completed statistical evaluation identified one Appendix III constituent, pH, below its lower prediction limit in monitoring well MW-706. The lower prediction limit for pH in monitoring well MW-706 is 7.14 standard units (S.U.). The detection monitoring sample was reported at 7. 05 S.U. The first verification sample was collected on January 9, 2018 with a result of 7.14 S.U., which is equal to the lower prediction limit. However the, Sanitas™ Output identified the 7.14 S.U. pH value in MW-706 as a confirmed statistically significant decrease (SSD) below background, due to numerical rounding. Therefore, in accordance with the Statistical Method Certification, the detection monitoring sample for pH from monitoring well MW-706 exceeds its prediction limit and is a confirmed SSD below background. An SSD is similar to an SSI in that it indicates a statistically significant difference from background (i.e., potential impact) when a bracketed (upper and lower) prediction limit is computed such as is done for pH.

3 ALTERNATIVE SOURCE DEMONSTRATION

An Alternative Source Demonstration (ASD) is a means to provide supporting lines of evidence that something other than a release from a regulated CCR unit caused an SSI or in this case an SSD. For the above identified SSD for the Upper AQC Impoundment at the La Cygne Generating Station, there are multiple lines of supporting evidence to indicate the above SSD was not caused by a release from the Upper AQC Impoundment. Select multiple lines of supporting evidence are described as follows.

3.1 GROUNDWATER FLOW DIRECTION AND DATA SUMMARY

Figure 1 in **Appendix A** shows a potentiometric surface contour map indicating the direction of groundwater flow at and near the Upper AQC Impoundment at the time of sampling. Although the groundwater flow directions indicated are for the October 2017 groundwater monitoring event, the flow directions shown are typical. As can be seen in the map, monitoring well MW-706 is located downgradient from the Upper AQC Impoundment indicating the SSD could potentially be caused by a release from the Upper AQC Impoundment. However, if this were the case, one would expect the pH value for MW-706 to be significantly different than that from other wells both upgradient and downgradient. The mean and median pH values for MW-706 (7.54 S.U. and 7.55 S.U., respectively) are nearly the same as the mean and median pH values for the 109 pH observations from across the groundwater monitoring system (7.52 S.U. and 7.54 S.U., respectively). Additionally the 7.05 S.U. value for the detection monitoring sample and the 7.14 S.U. value for the first verification sample is well above the minimum pH observed across the monitoring system of 6.5 S.U. This demonstrates that a source other than the Upper AQC Impoundment caused the SSD below background levels for pH in MW-706, or that the SSD resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. A Summary Report for pH for all of the wells and data for the Upper AQC Impoundment is provided in **Appendix B**.

3.2 BOX AND WHISKERS PLOTS

A commonly accepted method to demonstrate and visualize the distribution of data in a given data set is to construct box and whiskers plots. The basic box plotted graphically locates the median, 25th and 75th percentiles of the data set; the "whiskers" extend to the minimum and maximum values of the data set. The range between the ends of a box plot represents the Interquartile Range, which can be used as an estimate of spread or variability. The mean is denoted by a "+".

When comparing multiple wells or well groups, box plots for each well can be lined up on the same axes to roughly compare the variability in each well. This may be used as an exploratory screening for the test of homogeneity of variance across multiple wells.

Although an SSD was only identified in well MW-706, the box and whiskers plot for pH in MW-706 was compared to box and whisker plots for pH in the other groundwater monitoring system wells for the Upper AQC Impoundment. The comparison indicates the pH levels in well

MW-706 are within the range of pH levels in both upgradient and downgradient wells across the site. This demonstrates that a source other than the Upper AQC Impoundment caused the SSD below background levels for pH, or that the SSD resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Box and whisker plots are provided in **Appendix C**.

3.3 TIME SERIES PLOTS

Time series plots provide a graphical method to view changes in data at a particular well (monitoring point) or wells over time. Time series plots display the variability in concentration levels over time and can be used to indicate possible outliers or data errors. More than one well can be compared on the same plot to look for differences between wells. Non-detect data is plotted as censored data at one-half of the laboratory reporting limit. Time series plots can also be used to examine the data for trends.

Time series plots for the CCR monitoring system wells indicate pH levels for both upgradient and downgradient wells in the monitoring system. The pH level in well MW-706 is within the range of pH levels in both upgradient and downgradient wells across the site. This demonstrates that a source other than the Upper AQC Impoundment caused the SSD below background levels for pH, or that the SSD resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Time series plots are provided in **Appendix C**.

4 CONCLUSION

Our opinion is that a sufficient body of evidence is available and presented above to demonstrate that a source other than the Upper AQC Impoundment caused the SSD below background levels, or that the SSD resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Based on the successful ASD, the owner or operator of the Upper AQC Impoundment may continue with the detection monitoring program under § 257.94.

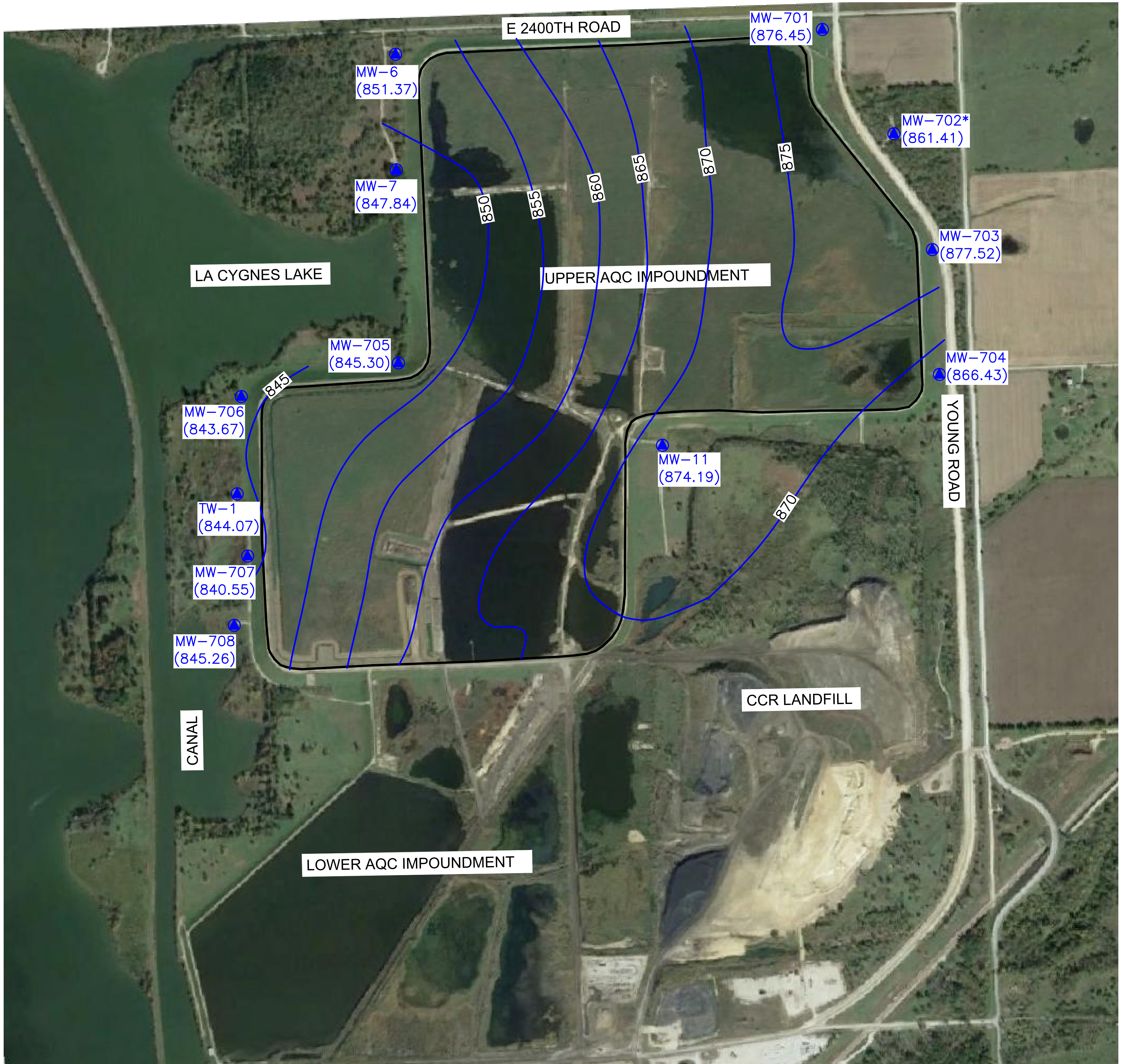
5 GENERAL COMMENTS

This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. Please note that SCS Engineers does not warrant the work of regulatory agencies or other third parties supplying information used in the assimilation of this report. This report is prepared in accordance with generally accepted environmental engineering and geological practices, within the constraints of the client's directives. It is intended for the exclusive use of KCP&L for specific application to the La Cygne Generating Station. No warranties, express or implied, are intended or made.

The signature of the certifying registered geologist and professional engineer on this document represents that to the best of his knowledge, information, and belief in the exercise of his professional judgement in accordance with the standard of practice, it is his professional opinion that the aforementioned information is accurate as of the date of such signature. Any opinion or decisions by him are made on the basis of his experience, qualifications, and professional judgement and are not to be construed as warranties or guaranties. In addition, opinions relating to regulatory, environmental, geologic, geochemical and geotechnical conditions interpretations or other estimates are based on available data, and actual conditions may vary from those encountered at the times and locations where data are obtained, despite the use of due care.

Appendix A

Figure 1



LEGEND

CCR UNIT BOUNDARY (APPROXIMATE LIMITS OF UPPER AQC IMPOUNDMENT)

MW-703 (877.52) CCR GROUNDWATER MONITORING SYSTEM WELLS (GROUNDWATER ELEVATION)

—875— GROUNDWATER SURFACE ELEVATIONS (REPRESENTATIVE FOR THIS UNIT)

MW-702* INDICATES WELL NOT USE IN POTENTIOMETRIC SURFACE MAP CREATION

NOTES:

1. KDHE FACILITY PERMIT AREA BOUNDARY VARIES FROM THAT SHOWN.
2. GOOGLE EARTH IMAGE DATED OCTOBER 2014. BOUNDARY AND MONITOR WELL LOCATIONS ARE APPROXIMATE.
3. BOUNDARY AND MONITOR WELL LOCATIONS ARE PROVIDED BY AECOM.

800 0 800 1600

SCALE FEET

REV. DATE CK. BY

SHEET TITLE: POTENTIOMETRIC SURFACE MAP (OCT 2017) UPPER AQC IMPOUNDMENT

PROJECT TITLE: CCR ALTERNATIVE SOURCE DEMONSTRATION

CLIENT: KANSAS CITY POWER & LIGHT COMPANY
LA CYGNE GENERATING STATION
LA CYGNE, KANSAS

SCS ENGINEERS
7311 W. 130th St., Ste. 100
Overland Park, Kansas 66213
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO. 27217233.00 | DSN. BY: RCW | DWN. BY: RCW | CHK. BY: JRR | Q/A RVW BY: JRR | PROJ. MGR: JRR

CADD FILE: LA CYGNE UAQC_CCR ASD_FIG 1.DWG

DATE: 4/16/18

FIGURE NO. 1

N:\KCPL\Projects\Groundwater\DWG\La Cygne\2018\CCR ASD\La Cygne UAQC_CCR ASD_Fig 1.dwg Apr 16, 2018 - 10:00am Layout Name: Fig 1 By: 4121rcw

Appendix B

Summary Report for pH

Summary Report

Constituent: pH   Analysis Run 4/11/2018 11:58 AM   View: Upper AQC III
LaCygne   Client: SCS Engineers   Data: LaC GW Data

For observations made between 6/6/2016 and 1/9/2018, a summary of the selected data set:

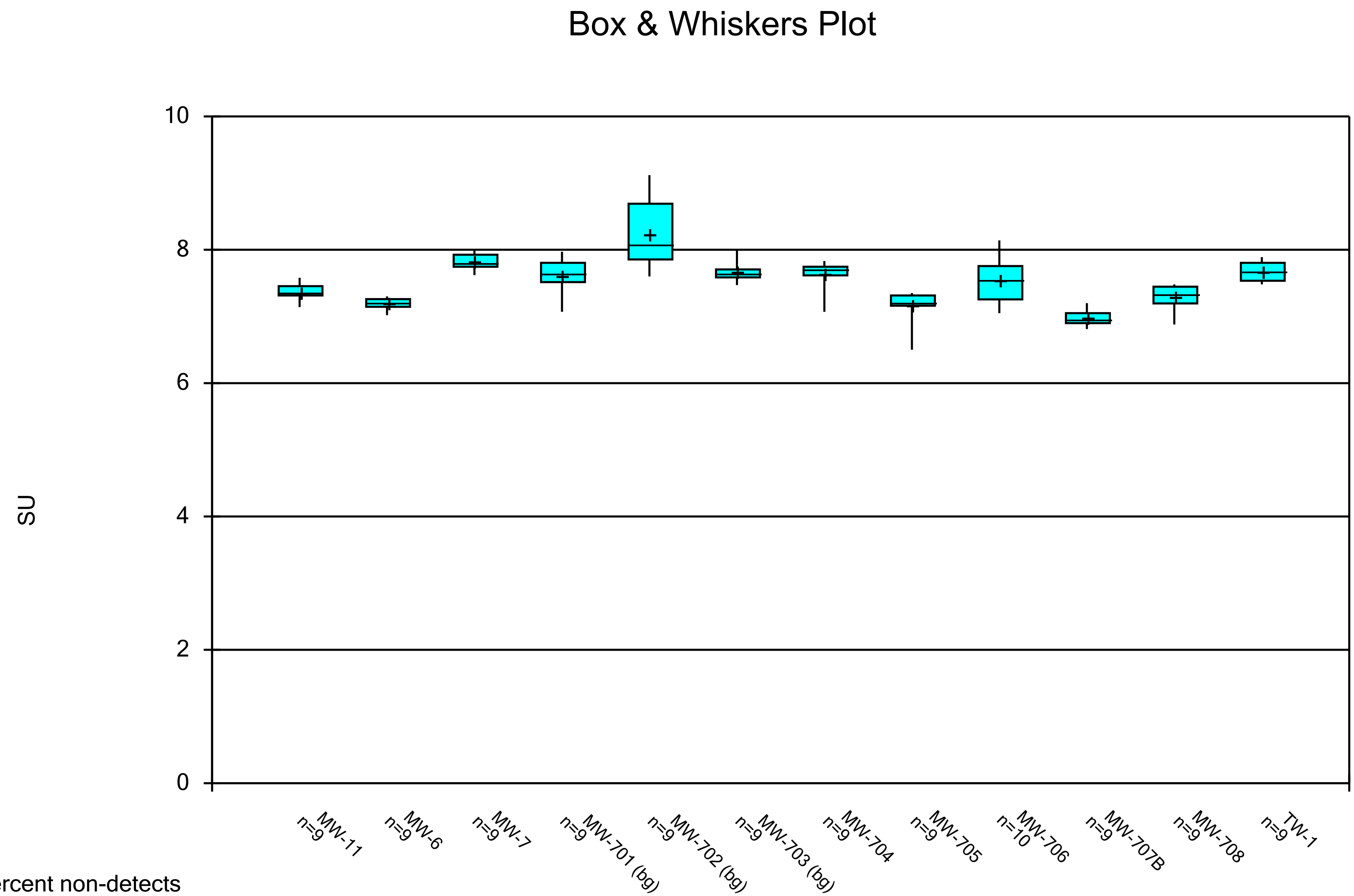
Observations = 109
ND/Trace = 0
Wells = 12
Minimum Value = 6.5
Maximum Value = 9.12
Mean Value = 7.52
Median Value = 7.54
Standard Deviation = 0.396
Coefficient of Variation = 0.0526
Skewness = 0.843

Well	#Obs.	ND/Trace	Min	Max	Mean	Median	Std.Dev.	CV	Skewness
MW-11	9	0	7.14	7.58	7.37	7.36	0.124	0.0169	-0.0486
MW-6	9	0	7.02	7.3	7.2	7.2	0.0865	0.012	-0.869
MW-7	9	0	7.62	8	7.82	7.79	0.118	0.0151	0.0828
MW-701 (bg)	9	0	7.07	7.97	7.62	7.63	0.263	0.0345	-0.653
MW-702 (bg)	9	0	7.6	9.12	8.25	8.09	0.499	0.0606	0.55
MW-703 (bg)	9	0	7.47	8	7.66	7.63	0.148	0.0194	1.32
MW-704	9	0	7.07	7.83	7.63	7.71	0.223	0.0292	-2.01
MW-705	9	0	6.5	7.35	7.17	7.21	0.26	0.0363	-2.13
MW-706	10	0	7.05	8.14	7.54	7.55	0.316	0.0419	0.188
MW-707B	9	0	6.81	7.2	6.98	6.95	0.115	0.0164	0.406
MW-708	9	0	6.88	7.48	7.29	7.32	0.189	0.0259	-1.16
TW-1	9	0	7.48	7.89	7.67	7.67	0.141	0.0184	0.126

Appendix C

Box and Whiskers Plots

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG



%nds = percent non-detects
n = number of samples
bg = background/upgradinet data

Constituent: pH   Analysis Run 3/7/2018 10:32 AM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

The basic box plot graphically locates the median, 25th and 75th percentiles of the data set; the "whiskers" extend to the minimum and maximum values of the data set. The range between the ends of a box plot represents the Interquartile Range. The mean is denoted by a "+".

Box & Whiskers Plot

Constituent: pH (SU) Analysis Run 3/7/2018 10:35 AM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-11	MW-6	MW-7	MW-701 (bg)	MW-702 (bg)	MW-703 (bg)	MW-704	MW-705	MW-706
6/6/2016	7.37								
6/7/2016				7.63		7.63	7.74	7.3	
6/8/2016		7.19	7.77		8.86				7.54
6/9/2016									
6/23/2016									
8/9/2016				7.54	9.12	7.65	7.65	7.35	7.55
8/10/2016		7.18	7.83						
8/11/2016	7.3								
10/11/2016				7.67	8.25	7.59	7.71	7.21	8.14
10/12/2016	7.33								
10/13/2016		7.24	8						
12/6/2016				7.63			7.66		7.6
12/7/2016						8		6.5	
12/8/2016					8.07				
12/9/2016	7.58								
12/12/2016		7.27	7.96						
2/7/2017				7.94		7.76	7.83		7.84
2/8/2017			7.79		8.09				
2/9/2017	7.36	7.25						7.33	
4/4/2017				7.62		7.64	7.75		7.67
4/5/2017		7.3	7.89		8.52				
4/6/2017	7.41							7.14	
6/13/2017				7.07			7.07	7.18	7.53
6/14/2017						7.62			
6/15/2017	7.5	7.2	7.75		7.84				
8/8/2017				7.97			7.71		
8/9/2017		7.02	7.62		7.87			7.29	7.37
8/10/2017	7.14					7.47			
10/3/2017				7.49	7.6		7.58	7.21	
10/4/2017									7.05
10/5/2017	7.33	7.11	7.74			7.58			
1/9/2018									7.14
Median	7.36	7.2	7.79	7.63	8.09	7.63	7.71	7.21	7.55
LowerQ.	7.32	7.15	7.75	7.52	7.86	7.59	7.62	7.16	7.26
UpperQ.	7.46	7.26	7.93	7.81	8.69	7.71	7.75	7.32	7.76
Min	7.14	7.02	7.62	7.07	7.6	7.47	7.07	6.5	7.05
Max	7.58	7.3	8	7.97	9.12	8	7.83	7.35	8.14
Mean	7.37	7.2	7.82	7.62	8.25	7.66	7.63	7.17	7.54

Box & Whiskers Plot

Constituent: pH (SU) Analysis Run 3/7/2018 10:35 AM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-707B	MW-708	TW-1
6/6/2016			
6/7/2016		7.43	
6/8/2016			
6/9/2016			7.83
6/23/2016	7.03		
8/9/2016	6.81		7.54
8/10/2016		7.48	
8/11/2016			
10/11/2016	6.95		7.69
10/12/2016		7.46	
10/13/2016			
12/6/2016	6.92		7.53
12/7/2016			
12/8/2016			
12/9/2016		7.32	
12/12/2016			
2/7/2017	6.95		7.89
2/8/2017			
2/9/2017		7.32	
4/4/2017	7.2		7.78
4/5/2017			
4/6/2017		7.12	
6/13/2017	7.06		7.67
6/14/2017		7.33	
6/15/2017			
8/8/2017	7.04	6.88	7.65
8/9/2017			
8/10/2017			
10/3/2017	6.88		7.48
10/4/2017		7.27	
10/5/2017			
1/9/2018			
Median	6.95	7.32	7.67
LowerQ.	6.9	7.2	7.54
UpperQ.	7.05	7.45	7.81
Min	6.81	6.88	7.48
Max	7.2	7.48	7.89
Mean	6.98	7.29	7.67

Box & Whiskers Plot

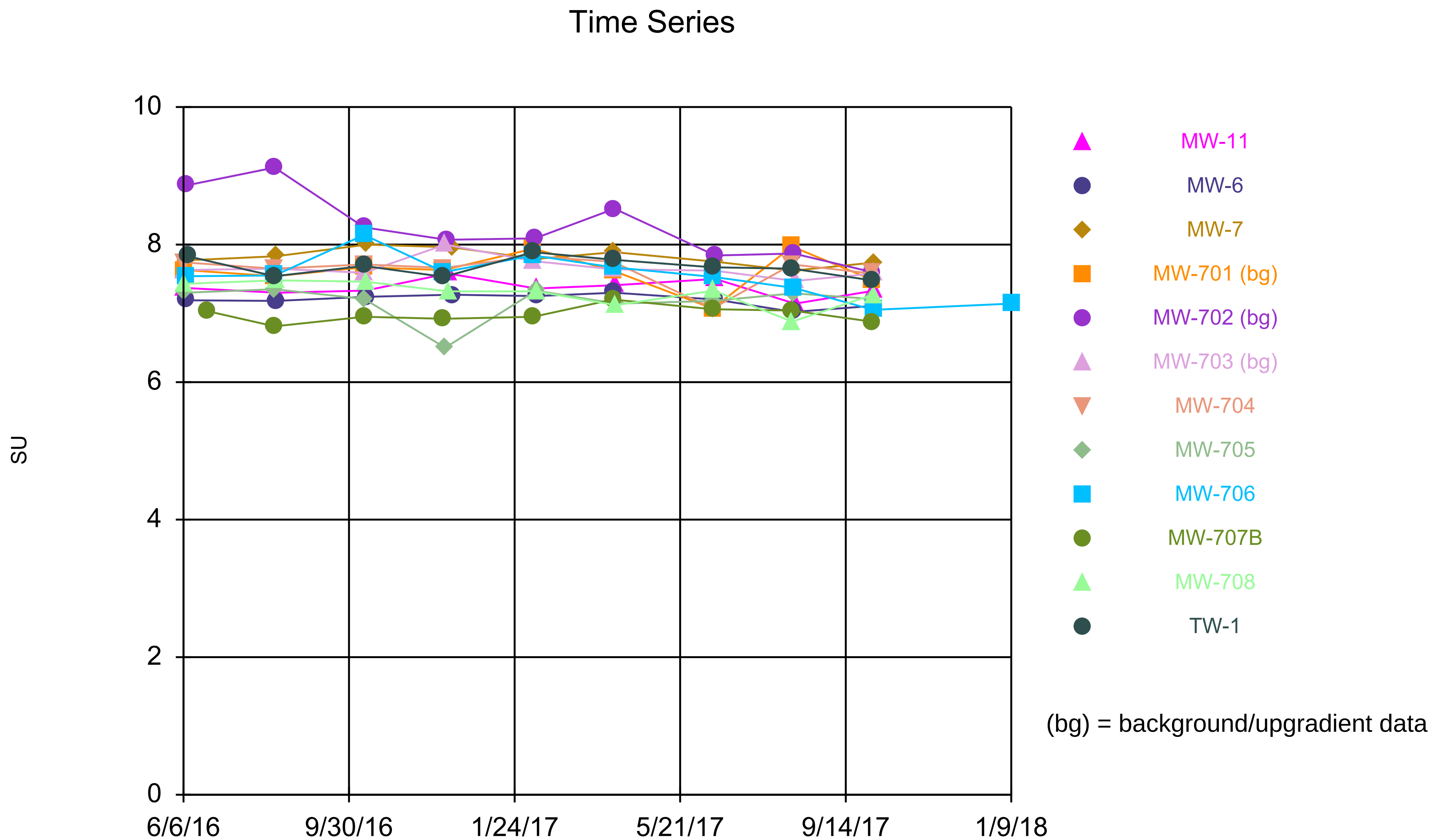
LaCygne   Client: SCS Engineers   Data: LaC GW Data   Printed 3/7/2018, 10:35 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
pH (SU)	MW-11	9	7.37	0.124	0.0414	7.36	7.14	7.58	0
pH (SU)	MW-6	9	7.2	0.0865	0.0288	7.2	7.02	7.3	0
pH (SU)	MW-7	9	7.82	0.118	0.0394	7.79	7.62	8	0
pH (SU)	MW-701 (bg)	9	7.62	0.263	0.0877	7.63	7.07	7.97	0
pH (SU)	MW-702 (bg)	9	8.25	0.499	0.166	8.09	7.6	9.12	0
pH (SU)	MW-703 (bg)	9	7.66	0.148	0.0494	7.63	7.47	8	0
pH (SU)	MW-704	9	7.63	0.223	0.0742	7.71	7.07	7.83	0
pH (SU)	MW-705	9	7.17	0.26	0.0868	7.21	6.5	7.35	0
pH (SU)	MW-706	10	7.54	0.316	0.1	7.55	7.05	8.14	0
pH (SU)	MW-707B	9	6.98	0.115	0.0382	6.95	6.81	7.2	0
pH (SU)	MW-708	9	7.29	0.189	0.063	7.32	6.88	7.48	0
pH (SU)	TW-1	9	7.67	0.141	0.0471	7.67	7.48	7.89	0

Appendix D

Time Series Plots

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG



Constituent: pH   Analysis Run 3/7/2018 10:41 AM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

Time Series

Constituent: pH (SU)   Analysis Run 3/7/2018 10:43 AM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-6	MW-7	MW-701 (bg)	MW-702 (bg)	MW-703 (bg)	MW-704	MW-705	MW-706
6/6/2016	7.37								
6/7/2016				7.63		7.63	7.74	7.3	
6/8/2016		7.19	7.77		8.86				7.54
6/9/2016									
6/23/2016									
8/9/2016				7.54	9.12	7.65	7.65	7.35	7.55
8/10/2016		7.18	7.83						
8/11/2016	7.3								
10/11/2016				7.67	8.25	7.59	7.71	7.21	8.14
10/12/2016	7.33								
10/13/2016		7.24	8						
12/6/2016				7.63			7.66		7.6
12/7/2016						8		6.5	
12/8/2016					8.07				
12/9/2016	7.58								
12/12/2016		7.27	7.96						
2/7/2017				7.94		7.76	7.83		7.84
2/8/2017			7.79		8.09				
2/9/2017	7.36	7.25						7.33	
4/4/2017				7.62		7.64	7.75		7.67
4/5/2017		7.3	7.89		8.52				
4/6/2017	7.41							7.14	
6/13/2017				7.07			7.07	7.18	7.53
6/14/2017						7.62			
6/15/2017	7.5	7.2	7.75		7.84				
8/8/2017				7.97			7.71		
8/9/2017		7.02	7.62		7.87			7.29	7.37
8/10/2017	7.14					7.47			
10/3/2017				7.49	7.6		7.58	7.21	
10/4/2017									7.05
10/5/2017	7.33	7.11	7.74			7.58			
1/9/2018									7.14

Time Series

Constituent: pH (SU)   Analysis Run 3/7/2018 10:43 AM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-708	TW-1
6/6/2016			
6/7/2016		7.43	
6/8/2016			
6/9/2016			7.83
6/23/2016	7.03		
8/9/2016	6.81		7.54
8/10/2016		7.48	
8/11/2016			
10/11/2016	6.95		7.69
10/12/2016		7.46	
10/13/2016			
12/6/2016	6.92		7.53
12/7/2016			
12/8/2016			
12/9/2016		7.32	
12/12/2016			
2/7/2017	6.95		7.89
2/8/2017			
2/9/2017		7.32	
4/4/2017	7.2		7.78
4/5/2017			
4/6/2017		7.12	
6/13/2017	7.06		7.67
6/14/2017		7.33	
6/15/2017			
8/8/2017	7.04	6.88	7.65
8/9/2017			
8/10/2017			
10/3/2017	6.88		7.48
10/4/2017		7.27	
10/5/2017			
1/9/2018			

ADDENDUM 1

2018 Annual Groundwater Monitoring and Corrective Action Report Addendum 1

December 16, 2022
File No. 27217233.18

JOHN R. ROCKHOLD LICENSED 29 12-16-22 KANSAS PROFESSIONAL GEOLOGIST

To: Evergy Metro, Inc.
Jared Morrison – Director, Water and Waste Programs

From: SCS Engineers
Douglas L. Doerr, P.E.
John R. Rockhold, P.G.

Subject: 2018 Annual Groundwater Monitoring and Corrective Action Report Addendum 1
Evergy Metro, Inc.
Upper AQC Impoundment
La Cygne Generating Station - La Cygne, Kansas

The Upper AQC Impoundment at the La Cygne Generating Station is subject to the groundwater monitoring and corrective action requirements of the "Coal Combustion Residuals (CCR) Final Rule" (Rule); as described in CFR 40 257.90 through CFR 40 257.98. An Annual Groundwater Monitoring and Corrective Action (GWMCA) Report documenting activities completed in 2018 for the Upper AQC Impoundment was completed and placed in the facility's operating record on January 30, 2019, as required by the Rule. The Annual GWMCA report was to fulfill the requirements specified in 40 CFR 257.90(e).

This Addendum has been prepared to supplement the operating record in recognition of comments received by Evergy from the U.S. Environmental Protection Agency (USEPA) on January 11, 2022. In addition to the information listed in 40 CFR 257.90(e), the USEPA indicated in their comments that the GWMCA Report contain the following:

- Results of laboratory analysis of groundwater or other environmental media samples for 40 CFR 257 Appendix III and Appendix IV constituents or other constituents, such as those supporting characterization of site conditions that may ultimately affect a remedy.
- Required statistical analysis performed on laboratory analysis results; and
- Calculated groundwater flow rate and direction.

This information is not specifically referred to in 40 CFR 257.90(e) for inclusion in the GWMCA Reports; however, it is routinely collected, determined and maintained in Evergy's files and is being provided in the attachments to this addendum.

The attachments to this addendum are as follows:

- Attachment 1 – Laboratory Analytical Reports:

  Includes laboratory data packages with supporting information such as case narrative, sample and method summary, analytical results, quality control, and chain-of-custody documentation. The laboratory data packages for the following sampling events are provided:

  - May 2018 – Spring 2018 semiannual detection monitoring sampling event.
  - July 2018 – First verification sampling for the Spring 2018 detection monitoring sampling event.
  - August 2018 - Second verification sampling for the Spring 2018 detection monitoring sampling event.
  - December 2018 - Fall 2018 semiannual detection monitoring sampling event.

- Attachment 2 - Statistical Analyses:
  Includes summary of statistical results, prediction limit plots, prediction limit background data, detection sample results, first and second verification re-sample results (when applicable), extra sample results for pH (collected as part of the approved sampling procedures), input parameters, and a Prediction Limit summary table. Statistical analyses completed in 2018 included the following:
  - Fall 2017 semiannual detection monitoring statistical analyses.
  - Spring 2018 semiannual detection monitoring statistical analyses.

- Attachment 3 - Revised Groundwater Potentiometric Surface Maps:
  Includes revised groundwater potentiometric surface maps with the measured groundwater elevations at each well and the generalized groundwater flow direction and the calculated groundwater flow rate. Maps for the following sampling events are provided:
  - May 2018 - Spring 2018 semiannual detection monitoring sampling event.
  - December 2018 - Fall 2018 semiannual detection monitoring sampling event.

ATTACHMENT 1

Laboratory Analytical Reports

ATTACHMENT 1-1

May 2018 Sampling Event Laboratory Report

ESC LAB SCIENCES a subsidiary of Pace Analytical

ANALYTICAL REPORT

June 04, 2018

myESC REAL TIME DATA ACCESS a subsidiary of Pace Analytical

SCS Engineers - KS

Sample Delivery Group:	L996949
Samples Received:	05/25/2018
Project Number:	27217233.18
Description:	KCPL - LaCygne Generating Station
Report To:	Jason Franks 7311 West 130th Street, Ste. 100 Overland Park, KS 66213

Entire Report Reviewed By:

Jeff Carr

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

	Collected by	Collected date/time	Received date/time
	Adam Parris	05/23/18 16:05	05/25/18 10:00

MW-6 L996949-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117283	1	05/30/18 15:41	05/30/18 16:06	MMF
Wet Chemistry by Method 9056A	WG1117779	1	05/31/18 06:35	05/31/18 06:35	MAJ
Wet Chemistry by Method 9056A	WG1117779	5	05/31/18 06:50	05/31/18 06:50	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 13:40	TRB

	Collected by	Collected date/time	Received date/time
	Adam Parris	05/23/18 15:10	05/25/18 10:00

MW-7 L996949-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117283	1	05/30/18 15:41	05/30/18 16:06	MMF
Wet Chemistry by Method 9056A	WG1117779	1	05/31/18 07:06	05/31/18 07:06	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 13:43	TRB

	Collected by	Collected date/time	Received date/time
	Adam Parris	05/23/18 12:30	05/25/18 10:00

MW-11 L996949-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117283	1	05/30/18 15:41	05/30/18 16:06	MMF
Wet Chemistry by Method 9056A	WG1117779	1	05/31/18 07:36	05/31/18 07:36	MAJ
Wet Chemistry by Method 9056A	WG1117779	5	05/31/18 07:52	05/31/18 07:52	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 13:45	TRB

	Collected by	Collected date/time	Received date/time
	Adam Parris	05/24/18 10:35	05/25/18 10:00

MW-701 L996949-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117284	1	05/30/18 16:09	05/30/18 16:43	MMF
Wet Chemistry by Method 9056A	WG1117994	1	06/01/18 16:28	06/01/18 16:28	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 13:53	TRB

	Collected by	Collected date/time	Received date/time
	Adam Parris	05/24/18 11:45	05/25/18 10:00

MW-702 L996949-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117284	1	05/30/18 16:09	05/30/18 16:43	MMF
Wet Chemistry by Method 9056A	WG1117994	1	06/01/18 16:43	06/01/18 16:43	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 13:56	TRB

	Collected by	Collected date/time	Received date/time
	Adam Parris	05/24/18 11:15	05/25/18 10:00

MW-703 L996949-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117284	1	05/30/18 16:09	05/30/18 16:43	MMF
Wet Chemistry by Method 9056A	WG1117994	1	06/01/18 16:59	06/01/18 16:59	MAJ
Wet Chemistry by Method 9056A	WG1117994	5	06/01/18 17:14	06/01/18 17:14	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 13:59	TRB

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-704 L996949-07 GW

Collected by	Collected date/time	Received date/time
Adam Parris	05/24/18 09:15	05/25/18 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117284	1	05/30/18 16:09	05/30/18 16:43	MMF
Wet Chemistry by Method 9056A	WG1117780	1	05/31/18 02:03	05/31/18 02:03	MAJ
Wet Chemistry by Method 9056A	WG1118331	5	05/31/18 20:11	05/31/18 20:11	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 13:29	TRB

MW-705 L996949-08 GW

Collected by	Collected date/time	Received date/time
Adam Parris	05/24/18 12:15	05/25/18 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117670	1	05/31/18 17:06	05/31/18 17:30	MMF
Wet Chemistry by Method 9056A	WG1117780	1	05/31/18 03:08	05/31/18 03:08	MAJ
Wet Chemistry by Method 9056A	WG1117780	5	05/31/18 03:25	05/31/18 03:25	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 14:01	TRB

MW-706 L996949-09 GW

Collected by	Collected date/time	Received date/time
Adam Parris	05/24/18 11:30	05/25/18 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117670	1	05/31/18 17:06	05/31/18 17:30	MMF
Wet Chemistry by Method 9056A	WG1117780	1	05/31/18 03:41	05/31/18 03:41	MAJ
Wet Chemistry by Method 9056A	WG1117780	5	05/31/18 04:30	05/31/18 04:30	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 14:04	TRB

MW-707B L996949-10 GW

Collected by	Collected date/time	Received date/time
Adam Parris	05/24/18 10:05	05/25/18 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117670	1	05/31/18 17:06	05/31/18 17:30	MMF
Wet Chemistry by Method 9056A	WG1117780	1	05/31/18 04:47	05/31/18 04:47	MAJ
Wet Chemistry by Method 9056A	WG1117780	5	05/31/18 05:03	05/31/18 05:03	MAJ
Wet Chemistry by Method 9056A	WG1118331	50	05/31/18 20:48	05/31/18 20:48	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 14:07	TRB

MW-708 L996949-11 GW

Collected by	Collected date/time	Received date/time
Adam Parris	05/23/18 15:50	05/25/18 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117283	1	05/30/18 15:41	05/30/18 16:06	MMF
Wet Chemistry by Method 9056A	WG1117780	1	05/31/18 05:20	05/31/18 05:20	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 14:10	TRB

TW-1 L996949-12 GW

Collected by	Collected date/time	Received date/time
Adam Parris	05/24/18 10:45	05/25/18 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117670	1	05/31/18 17:06	05/31/18 17:30	MMF
Wet Chemistry by Method 9056A	WG1117780	1	05/31/18 05:36	05/31/18 05:36	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 14:12	TRB

	Collected by	Collected date/time	Received date/time
DUPLICATE 2 L996949-13 GW	Adam Parris	05/24/18 00:00	05/25/18 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1117670	1	05/31/18 17:06	05/31/18 17:30	MMF
Wet Chemistry by Method 9056A	WG1117780	1	05/31/18 05:53	05/31/18 05:53	MAJ
Wet Chemistry by Method 9056A	WG1118414	1	06/01/18 19:33	06/01/18 19:33	MAJ
Metals (ICP) by Method 6010B	WG1117060	1	05/30/18 17:19	05/31/18 14:15	TRB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Technical Service Representative

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1160000		10000	1	05/30/2018 16:06	WG1117283

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	197000		5000	5	05/31/2018 06:50	WG1117779
Fluoride	595		100	1	05/31/2018 06:35	WG1117779
Sulfate	151000		25000	5	05/31/2018 06:50	WG1117779

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1230		200	1	05/31/2018 13:40	WG1117060
Calcium	85600		1000	1	05/31/2018 13:40	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	868000		10000	1	05/30/2018 16:06	WG1117283

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	96900		1000	1	05/31/2018 07:06	WG1117779
Fluoride	1290		100	1	05/31/2018 07:06	WG1117779
Sulfate	ND		5000	1	05/31/2018 07:06	WG1117779

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1650		200	1	05/31/2018 13:43	WG1117060
Calcium	22600		1000	1	05/31/2018 13:43	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	902000		10000	1	05/30/2018 16:06	WG1117283

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	80200		1000	1	05/31/2018 07:36	WG1117779
Fluoride	637		100	1	05/31/2018 07:36	WG1117779
Sulfate	167000		25000	5	05/31/2018 07:52	WG1117779

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1260		200	1	05/31/2018 13:45	WG1117060
Calcium	53400		1000	1	05/31/2018 13:45	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	599000		10000	1	05/30/2018 16:43	WG1117284

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	53000		1000	1	06/01/2018 16:28	WG1117994
Fluoride	785		100	1	06/01/2018 16:28	WG1117994
Sulfate	78600		5000	1	06/01/2018 16:28	WG1117994

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1060		200	1	05/31/2018 13:53	WG1117060
Calcium	39500		1000	1	05/31/2018 13:53	WG1117060

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	590000		10000	1	05/30/2018 16:43	WG1117284

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	45800		1000	1	06/01/2018 16:43	WG1117994
Fluoride	1500		100	1	06/01/2018 16:43	WG1117994
Sulfate	ND		5000	1	06/01/2018 16:43	WG1117994

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1740		200	1	05/31/2018 13:56	WG1117060
Calcium	7130		1000	1	05/31/2018 13:56	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	918000		10000	1	05/30/2018 16:43	WG1117284

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	108000		5000	5	06/01/2018 17:14	WG1117994
Fluoride	1490		100	1	06/01/2018 16:59	WG1117994
Sulfate	ND		5000	1	06/01/2018 16:59	WG1117994

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1900		200	1	05/31/2018 13:59	WG1117060
Calcium	21800		1000	1	05/31/2018 13:59	WG1117060

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	1230000		10000	1	05/30/2018 16:43	WG1117284

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Chloride	85900		1000	1	05/31/2018 02:03	WG1117780
Fluoride	943		100	1	05/31/2018 02:03	WG1117780
Sulfate	166000		25000	5	05/31/2018 20:11	WG1118331

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Boron	2140		200	1	05/31/2018 13:29	WG1117060
Calcium	22700		1000	1	05/31/2018 13:29	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	912000		10000	1	05/31/2018 17:30	WG1117670

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	135000		5000	5	05/31/2018 03:25	WG1117780
Fluoride	1070		100	1	05/31/2018 03:08	WG1117780
Sulfate	41000		5000	1	05/31/2018 03:08	WG1117780

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	2300		200	1	05/31/2018 14:01	WG1117060
Calcium	28900		1000	1	05/31/2018 14:01	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1170000		10000	1	05/31/2018 17:30	WG1117670

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	252000		5000	5	05/31/2018 04:30	WG1117780
Fluoride	1200		100	1	05/31/2018 03:41	WG1117780
Sulfate	ND		5000	1	05/31/2018 03:41	WG1117780

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	2180		200	1	05/31/2018 14:04	WG1117060
Calcium	23800		1000	1	05/31/2018 14:04	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	7260000		10000	1	05/31/2018 17:30	WG1117670

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	197000		5000	5	05/31/2018 05:03	WG1117780
Fluoride	392		100	1	05/31/2018 04:47	WG1117780
Sulfate	4650000		250000	50	05/31/2018 20:48	WG1118331

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	2040		200	1	05/31/2018 14:07	WG1117060
Calcium	396000		1000	1	05/31/2018 14:07	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	639000		10000	1	05/30/2018 16:06	WG1117283

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	46300		1000	1	05/31/2018 05:20	WG1117780
Fluoride	653		100	1	05/31/2018 05:20	WG1117780
Sulfate	9250		5000	1	05/31/2018 05:20	WG1117780

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1450		200	1	05/31/2018 14:10	WG1117060
Calcium	29200		1000	1	05/31/2018 14:10	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1000000		10000	1	05/31/2018 17:30	WG1117670

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	44500		1000	1	05/31/2018 05:36	WG1117780
Fluoride	463		100	1	05/31/2018 05:36	WG1117780
Sulfate	61100		5000	1	05/31/2018 05:36	WG1117780

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1670		200	1	05/31/2018 14:12	WG1117060
Calcium	25700		1000	1	05/31/2018 14:12	WG1117060

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1220000		10000	1	05/31/2018 17:30	WG1117670

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	85900		1000	1	05/31/2018 05:53	WG1117780
Fluoride	933		100	1	05/31/2018 05:53	WG1117780
Sulfate	33500		5000	1	06/01/2018 19:33	WG1118414

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	2150		200	1	05/31/2018 14:15	WG1117060
Calcium	22900		1000	1	05/31/2018 14:15	WG1117060

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3314627-1 05/30/18 16:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		2820	10000

L996942-01 Original Sample (OS) • Duplicate (DUP)

(OS) L996942-01 05/30/18 16:06 • (DUP) R3314627-4 05/30/18 16:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	520000	522000	1	0.384		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314627-2 05/30/18 16:06 • (LCSD) R3314627-3 05/30/18 16:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800000	8610000	8580000	97.8	97.5	85.0-115			0.349	5

Method Blank (MB)

(MB) R3314621-1 05/30/18 16:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		2820	10000

L997351-08 Original Sample (OS) • Duplicate (DUP)

(OS) L997351-08 05/30/18 16:43 • (DUP) R3314621-4 05/30/18 16:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	226000	223000	1	1.34		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314621-2 05/30/18 16:43 • (LCSD) R3314621-3 05/30/18 16:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800000	8650000	8660000	98.3	98.4	85.0-115			0.116	5

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

QUALITY CONTROL SUMMARY

L996949-08,09,10,12,13

Method Blank (MB)

(MB) R3314854-1 05/31/18 17:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		2820	10000

L996949-08 Original Sample (OS) • Duplicate (DUP)

(OS) L996949-08 05/31/18 17:30 • (DUP) R3314854-4 05/31/18 17:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	912000	920000	1	0.873		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314854-2 05/31/18 17:30 • (LCSD) R3314854-3 05/31/18 17:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800000	8840000	8640000	100	98.2	85.0-115			2.29	5

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3314154-1 05/30/18 22:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	112	J	51.9	1000
Fluoride	U		9.90	100
Sulfate	U		77.4	5000

L996368-01 Original Sample (OS) • Duplicate (DUP)

(OS) L996368-01 05/31/18 01:11 • (DUP) R3314154-4 05/31/18 01:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	45600	45900	1	0.742		15
Fluoride	ND	33.3	1	1.51	J	15
Sulfate	28300	28300	1	0.190		15

L996467-05 Original Sample (OS) • Duplicate (DUP)

(OS) L996467-05 05/31/18 03:46 • (DUP) R3314154-7 05/31/18 04:01

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3220	3360	1	4.23		15
Fluoride	ND	22.7	1	0.000		15
Sulfate	ND	3120	1	0.000		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314154-2 05/30/18 23:09 • (LCSD) R3314154-3 05/30/18 23:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40000	39500	39400	98.7	98.6	80.0-120			0.140	15
Fluoride	8000	7940	7940	99.2	99.3	80.0-120			0.0164	15
Sulfate	40000	39700	39700	99.3	99.1	80.0-120			0.133	15

L996368-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L996368-01 05/31/18 01:11 • (MS) R3314154-5 05/31/18 01:42 • (MSD) R3314154-6 05/31/18 01:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	45600	96000	93000	101	94.9	1	80.0-120			3.16	15
Fluoride	5000	ND	5030	5040	100	100	1	80.0-120			0.141	15
Sulfate	50000	28300	75300	76100	93.9	95.5	1	80.0-120			1.08	15

L996467-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L996467-05 05/31/18 03:46 • (MS) R3314154-8 05/31/18 04:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	3220	59000	112	1	80.0-120	
Fluoride	5000	ND	5360	107	1	80.0-120	
Sulfate	50000	ND	53700	101	1	80.0-120	

Method Blank (MB)

(MB) R3314178-1 05/31/18 00:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		51.9	1000
Fluoride	16.1	J	9.90	100
Sulfate	U		77.4	5000

L996949-07 Original Sample (OS) • Duplicate (DUP)

(OS) L996949-07 05/31/18 02:03 • (DUP) R3314178-4 05/31/18 02:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	85900	86000	1	0.144		15
Fluoride	943	944	1	0.0954		15

L997024-08 Original Sample (OS) • Duplicate (DUP)

(OS) L997024-08 05/31/18 08:04 • (DUP) R3314178-7 05/31/18 08:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	50800	51000	1	0.377		15
Sulfate	40000	40000	1	0.00325		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314178-2 05/31/18 00:40 • (LCSD) R3314178-3 05/31/18 00:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40000	39900	39900	99.8	99.7	80.0-120			0.107	15
Fluoride	8000	7950	7950	99.4	99.3	80.0-120			0.0503	15
Sulfate	40000	40300	40200	101	101	80.0-120			0.0972	15

L996949-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L996949-07 05/31/18 02:03 • (MS) R3314178-5 05/31/18 02:35 • (MSD) R3314178-6 05/31/18 02:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	85900	133000	135000	93.9	97.7	1	80.0-120	E	E	1.42	15
Fluoride	5000	943	5610	6200	93.4	105	1	80.0-120			9.93	15

L997024-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L997024-08 05/31/18 08:04 • (MS) R3314178-8 05/31/18 08:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	50800	101000	101	1	80.0-120	E
Sulfate	50000	40000	85300	90.7	1	80.0-120	

Method Blank (MB)

(MB) R3314810-1 06/01/18 13:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	125	J	51.9	1000
Fluoride	U		9.90	100
Sulfate	108	J	77.4	5000

L997107-02 Original Sample (OS) • Duplicate (DUP)

(OS) L997107-02 06/01/18 19:48 • (DUP) R3314810-4 06/01/18 20:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	ND	893	1	0.000		15
Fluoride	ND	24.5	1	0.000		15
Sulfate	ND	1490	1	0.000		15

L997107-07 Original Sample (OS) • Duplicate (DUP)

(OS) L997107-07 06/01/18 22:22 • (DUP) R3314810-7 06/01/18 22:38

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	ND	618	1	0.000		15
Fluoride	332	325	1	1.92		15
Sulfate	ND	810	1	0.000		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314810-2 06/01/18 13:28 • (LCSD) R3314810-3 06/01/18 13:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40000	39300	39500	98.4	98.7	80.0-120			0.310	15
Fluoride	8000	7920	7950	98.9	99.4	80.0-120			0.449	15
Sulfate	40000	39600	39800	99.0	99.5	80.0-120			0.518	15

L997107-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L997107-02 06/01/18 19:48 • (MS) R3314810-5 06/01/18 20:19 • (MSD) R3314810-6 06/01/18 20:34

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	ND	51300	51500	101	101	1	80.0-120			0.324	15
Fluoride	5000	ND	5120	5130	102	102	1	80.0-120			0.265	15
Sulfate	50000	ND	52100	51900	102	101	1	80.0-120			0.386	15

L997107-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L997107-07 06/01/18 22:22 • (MS) R3314810-8 06/01/18 22:53

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	ug/l	ug/l	ug/l	%		%	
Chloride	50000	ND	50900	100	1	80.0-120	
Fluoride	5000	332	5310	99.6	1	80.0-120	
Sulfate	50000	ND	50600	99.7	1	80.0-120	

Method Blank (MB)

(MB) R3314570-1 05/31/18 11:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		77.4	5000

L996949-07 Original Sample (OS) • Duplicate (DUP)

(OS) L996949-07 05/31/18 20:11 • (DUP) R3314570-6 05/31/18 20:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	166000	167000	5	0.316		15

L997865-01 Original Sample (OS) • Duplicate (DUP)

(OS) L997865-01 05/31/18 22:02 • (DUP) R3314570-7 05/31/18 22:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	59100	59200	1	0.233		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314570-2 05/31/18 12:03 • (LCSD) R3314570-3 05/31/18 12:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Sulfate	40000	39400	37900	98.5	94.8	80.0-120			3.81	15

L997865-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L997865-01 05/31/18 22:02 • (MS) R3314570-8 05/31/18 23:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	59100	106000	94.5	1	80.0-120	E

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3314815-1 06/01/18 12:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		77.4	5000

L997834-03 Original Sample (OS) • Duplicate (DUP)

(OS) L997834-03 06/01/18 22:00 • (DUP) R3314815-4 06/01/18 22:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	16900	17000	1	0.117		15

L997996-02 Original Sample (OS) • Duplicate (DUP)

(OS) L997996-02 06/02/18 01:34 • (DUP) R3314815-7 06/02/18 01:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	25800	25900	1	0.224		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314815-2 06/01/18 12:38 • (LCSD) R3314815-3 06/01/18 12:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Sulfate	40000	40100	40100	100	100	80.0-120			0.106	15

L997834-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L997834-03 06/01/18 22:00 • (MS) R3314815-5 06/01/18 22:33 • (MSD) R3314815-6 06/01/18 22:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	16900	66100	66300	98.4	98.7	1	80.0-120			0.230	15

L997996-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L997996-02 06/02/18 01:34 • (MS) R3314815-8 06/02/18 02:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	25800	74900	98.1	1	80.0-120	

Method Blank (MB)

(MB) R3314435-7 05/31/18 13:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		12.6	200
Calcium	U		46.3	1000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3314435-8 05/31/18 13:24 • (LCSD) R3314435-9 05/31/18 13:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Boron	1000	1040	1040	104	104	80.0-120			0.458	20
Calcium	10000	10200	10300	102	103	80.0-120			0.871	20

L996949-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L996949-07 05/31/18 13:29 • (MS) R3314435-11 05/31/18 13:34 • (MSD) R3314435-12 05/31/18 13:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	2140	3100	3130	96.1	99.2	1	75.0-125			0.984	20
Calcium	10000	22700	32200	32100	95.2	94.2	1	75.0-125			0.312	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1,6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1,4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

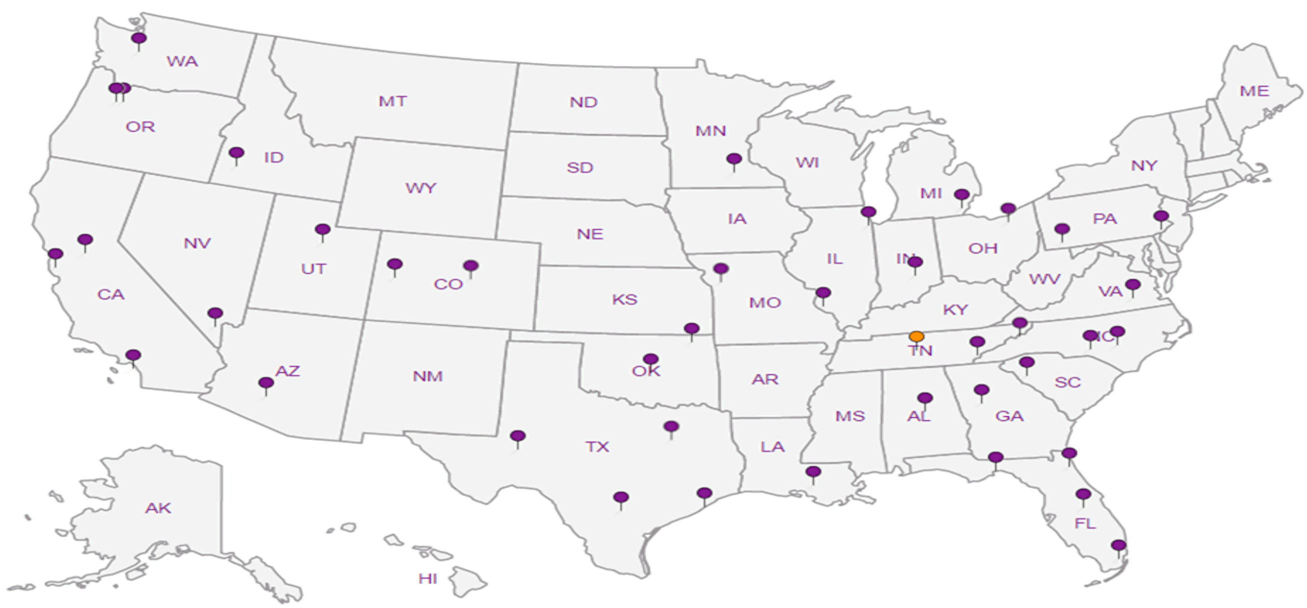
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



SCS Engineers - KS
7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Billing Information:
Accounts Payable
7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Pres Chk

Report to: Jason Franks

Email To: jfranks@scsengineers.com; jay.martin@kcpl.com;

Project Description: KCPL - LaCygne Generating Station

City/State Collected: La Cygne, KS

Phone: 913-681-0030
Fax: 913-681-0012

Client Project # 27217233.18

Lab Project # AQUAOPKS-LACYGNE

Collected by (print): Adam Parris

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: Standard

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

ESC
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 956949
M220

Acctnum: AQUAOPKS
Template: T136290
Prelogin: P653936
TSR: 206 - Jeff Carr
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-6	Grab	GW	-	5/23/2018	1605	3	X	X	X		01
MW-7		GW	-	5/23/2018	1510	3	X	X	X		02
MW-11		GW	-	5/23/2018	1230	3	X	X	X		03
MW-701		GW	-	5/24/2018	1035	3	X	X	X		04
MW-702		GW	-	5/24/2018	1145	3	X	X	X		05
MW-703		GW	-	5/24/2018	1115	3	X	X	X		06
MW-704		GW	-	5/24/2018	0915	3	X	X	X		07
MW-705		GW	-	5/24/2018	1215	3	X	X	X		08
MW-706		GW	-	5/24/2018	1130	3	X	X	X		09
MW-707B		GW	-	5/24/2018	1005	3	X	X	X		10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier __ ______

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: ✓NP _Y _N
COC Signed/Accurate: ✓Y _N
Bottles arrive intact: ✓Y _N
Correct bottles used: ✓Y _N
Sufficient volume sent: ✓Y _N
If Applicable
VOA Zero Headspace: _Y _N
Preservation Correct/Checked: ✓Y _N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	
	5-24/18	1415		Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.6 °C Bottles Received: 45
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/24/18 Time: 1600

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 2 of 2

ESC LAB SCIENCES

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SCS Engineers - KS
7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Billing Information:
Accounts Payable
7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Pres Chk

Report to: Jason Franks

Email To: jfranks@scsengineers.com; jay.martin@kcpl.com;

Project Description: KCPL - LaCygne Generating Station

City/State Collected: La Cygne, KS

Phone: 913-681-0030
Fax: 913-681-0012

Client Project # 27217233.18

Lab Project # AQUAOPKS-LACYGNE

Collected by (print): Whit Martin

Site/Facility ID #

P.O. #

Collected by (signature): Whit Martin

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: Std

Immediately Packed on Ice N ___ Y X

L# 956544

Table #

Acctnum: AQUAOPKS
Template: T136290
Prelogin: P653936
TSR: 206 - Jeff Carr
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-708	Grab	GW		5/23/18	1550	3	X	X	X		11
TW-1		GW		5/24/18	1045	3	X	X	X		12
MW704 MS #2		GW		5/24/18	0925	3	X	X	X		07
MW704 MSD#2		GW		5/24/18	0930	3	X	X	X		07
DUPLICATE 2		GW		5/24/18	—	3	X	X	X		13

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks:

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP _Y _N
COC Signed/Accurate: Y _N
Bottles arrive intact: Y _N
Correct bottles used: Y _N
Sufficient volume sent: Y _N
If Applicable
VOA Zero Headspace: _Y _N
Preservation Correct/Checked: Y _N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Whit Martin	5/24/18	1425		

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C	Bottles Received: 45	If preservation required by Login: Date/Time

Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/25/18	Time: 1400	Hold:	Condition: NCF / OK

ATTACHMENT 1-2

July 2018 Sampling Event Laboratory Report

ANALYTICAL REPORT

July 19, 2018

SCS Engineers - KS

Sample Delivery Group:	L1008819
Samples Received:	07/12/2018
Project Number:	27217233.18
Description:	KCPL - LaCygne Generating Station
Report To:	Jason Franks 7311 West 130th Street, Ste. 100 Overland Park, KS 66213

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

MW-11 L1008819-01 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 10:40	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1138084	1	07/16/18 23:15	07/16/18 23:15	MCG
Metals (ICP) by Method 6010B	WG1137343	1	07/13/18 09:49	07/14/18 17:40	WBD

MW-13 L1008819-02 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 13:05	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1138084	1	07/17/18 00:17	07/17/18 00:17	MCG
Metals (ICP) by Method 6010B	WG1137343	1	07/13/18 09:49	07/14/18 18:21	WBD

MW-804 L1008819-03 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 12:35	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1138084	1	07/17/18 01:05	07/17/18 01:05	MCG
Metals (ICP) by Method 6010B	WG1137343	1	07/13/18 09:49	07/14/18 18:24	WBD

DUPLICATE 1 L1008819-04 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 10:40	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1138084	1	07/17/18 01:20	07/17/18 01:20	MCG
Metals (ICP) by Method 6010B	WG1137343	1	07/13/18 09:49	07/14/18 18:26	WBD

MW-902 L1008819-05 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 11:15	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1137343	1	07/13/18 09:49	07/14/18 18:29	WBD

MW-903 L1008819-06 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 10:25	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1137343	1	07/13/18 09:49	07/14/18 17:51	WBD

DUPLICATE 2 L1008819-07 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 10:20	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1137343	1	07/13/18 09:49	07/14/18 18:37	WBD

MW-704 L1008819-08 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflok	07/11/18 11:30	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1137760	1	07/14/18 01:05	07/14/18 01:05	MAJ

DUPLICATE 3 L1008819-09 GW			Collected by	Collected date/time	Received date/time
			Gabby Penaflok	07/11/18 11:30	07/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1137214	5	07/14/18 21:49	07/14/18 21:49	MCG

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Fluoride	532		100	1	07/16/2018 23:15	WG1138084

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1170		200	1	07/14/2018 17:40	WG1137343

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Fluoride	181		100	1	07/17/2018 00:17	WG1138084

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	533		200	1	07/14/2018 18:21	WG1137343

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Fluoride	449		100	1	07/17/2018 01:05	WG1138084

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1670		200	1	07/14/2018 18:24	WG1137343

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Fluoride	530		100	1	07/17/2018 01:20	WG1138084

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1170		200	1	07/14/2018 18:26	WG1137343

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	69100		1000	1	07/14/2018 18:29	WG1137343

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	371000	V	1000	1	07/14/2018 17:51	WG1137343

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	373000		1000	1	07/14/2018 18:37	WG1137343

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	87100		1000	1	07/14/2018 01:05	WG1137760

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	82800		5000	5	07/14/2018 21:49	WG1137214

Method Blank (MB)

(MB) R3325628-1 07/14/18 12:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000

L1008561-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1008561-01 07/14/18 17:42 • (DUP) R3325628-4 07/14/18 17:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	8250	8260	1	0.176		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3325628-2 07/14/18 13:03 • (LCSD) R3325628-3 07/14/18 13:18

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Chloride	40000	38100	38100	95.1	95.2	80.0-120			0.0993	15

L1008561-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1008561-01 07/14/18 17:42 • (MS) R3325628-5 07/14/18 18:13

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Chloride	50000	8250	57900	99.3	1	80.0-120	

Method Blank (MB)

(MB) R3325510-1 07/13/18 20:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000

L1008471-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1008471-01 07/13/18 23:00 • (DUP) R3325510-4 07/13/18 23:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	4400	4400	1	0.116		15

L1008819-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1008819-08 07/14/18 01:05 • (DUP) R3325510-6 07/14/18 01:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	87100	87000	1	0.148		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3325510-2 07/13/18 20:54 • (LCSD) R3325510-3 07/13/18 21:08

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Chloride	40000	39100	39100	97.8	97.8	80.0-120			0.00256	15

L1008471-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1008471-01 07/13/18 23:00 • (MS) R3325510-5 07/13/18 23:56

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Chloride	50000	4400	55800	103	1	80.0-120	

L1008819-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1008819-08 07/14/18 01:05 • (MS) R3325510-7 07/14/18 01:33 • (MSD) R3325510-8 07/14/18 01:47

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	87100	134000	134000	92.9	93.4	1	80.0-120	E	E	0.202	15

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3326123-1 07/16/18 16:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Fluoride	U		9.90	100

L1008819-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1008819-01 07/16/18 23:15 • (DUP) R3326123-4 07/16/18 23:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	532	600	1	11.9		15

L1009414-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1009414-07 07/17/18 04:40 • (DUP) R3326123-7 07/17/18 04:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	ND	0.000	1	0.000		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3326123-2 07/16/18 16:53 • (LCSD) R3326123-3 07/16/18 17:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluoride	8000	8180	8170	102	102	80.0-120			0.0807	15

L1008819-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1008819-01 07/16/18 23:15 • (MS) R3326123-5 07/16/18 23:46 • (MSD) R3326123-6 07/17/18 00:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5000	532	5450	5610	98.4	101	1	80.0-120			2.77	15

L1009414-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1009414-07 07/17/18 04:40 • (MS) R3326123-8 07/17/18 05:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	5000	ND	5110	102	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3325573-1 07/14/18 17:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		12.6	200
Calcium	U		46.3	1000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3325573-2 07/14/18 17:35 • (LCSD) R3325573-3 07/14/18 17:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Boron	1000	971	969	97.1	96.9	80.0-120			0.228	20
Calcium	10000	10000	10000	100	100	80.0-120			0.195	20

L1008819-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1008819-01 07/14/18 17:40 • (MS) R3325573-5 07/14/18 17:46 • (MSD) R3325573-6 07/14/18 17:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	1170	2110	2110	93.9	94.3	1	75.0-125			0.164	20
Calcium	10000	56200	65600	65800	94.1	96.6	1	75.0-125			0.378	20

L1008819-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1008819-06 07/14/18 17:51 • (MS) R3325573-7 07/14/18 17:54 • (MSD) R3325573-8 07/14/18 17:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	489	1480	1460	98.9	97.5	1	75.0-125			0.974	20
Calcium	10000	371000	376000	377000	53.6	63.5	1	75.0-125	V	V	0.262	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1,6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1,4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

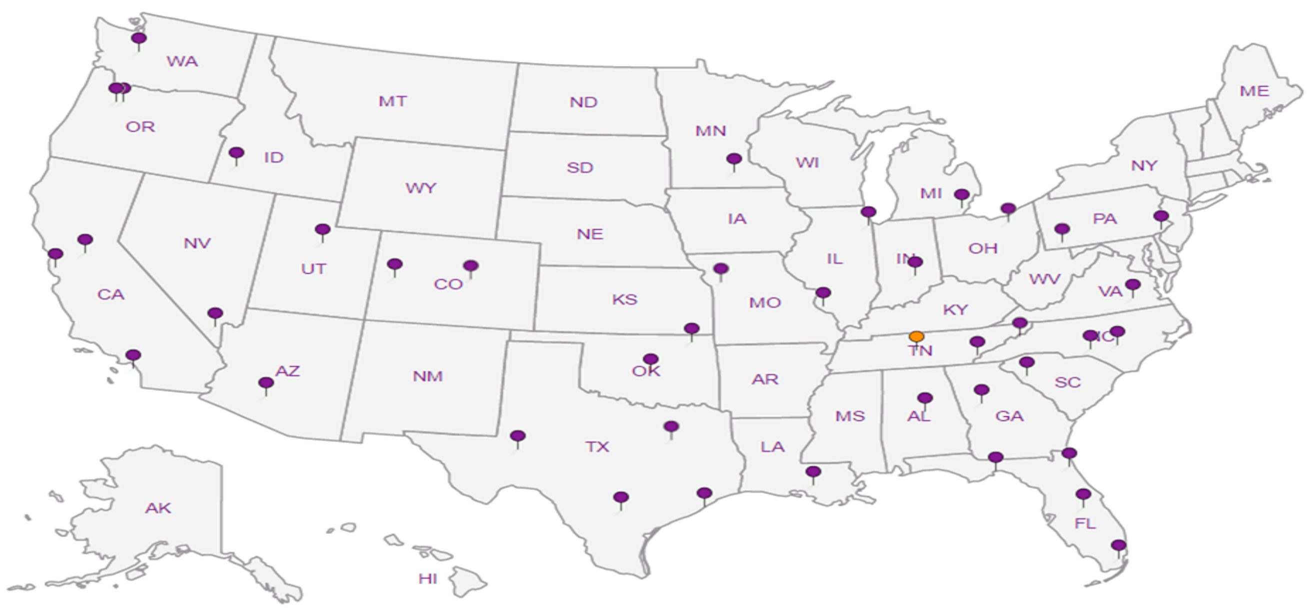
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



SCS Engineers - KS

7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Billing Information:
Accounts Payable
7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Jason Franks

Email To: jfranks@scsengineers.com; jay.martin@kcpl.com;

Project Description: KCPL - LaCygne Generating Station

City/State Collected: LA CYGNE, KS

Phone: 913-681-0030
Fax: 913-681-0012

Client Project # 27217233.18

Lab Project # AQUAOPKS-LACYGNE

L# 1008819
A003

Collected by (print): Gabby Penaflor

Site/Facility ID #

P.O. #

Acctnum: AQUAOPKS
Template: T136292
Prelogin: P659524
TSR: 206 - Jeff Carr
PB:
Shipped Via:

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Boron - 6010 250mlHDPE-HNO3 (<2)	Calcium - 6010 250mlHDPE-HNO3 (<2)	Chloride 125mlHDPE-NoPres	Fluoride 125mlHDPE-NoPres							Remarks	Sample # (lab only)
MW-11	GRAB	GW		7/11/18	1040	2	X			X								-01
MW-13		GW			1305	2	X			X								-02
MW-804		GW			1235	2	X			X								-03
DUPLICATE 1		GW			1040	2	X			X								-04
MS/MSD		GW			1040	2	X			X								
MW-902		GW			1115	1		X										-05
MW-903		GW			1025	1		X										-06
DUPLICATE 2		GW			1020	1		X										-07
MS/MSD		GW			1020	1		X										
MW-704		GW			1130	1			X									-08

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Sample Receipt Checklist
COC Seal Present/Intact: _NP _Y _N
COC Signed/Accurate: ✓Y _N
Bottles arrive intact: ✓Y _N
Correct bottles used: ✓Y _N
Sufficient volume sent: ✓Y _N
If Applicable
VOA Zero Headspace: _Y _N
Preservation Correct/Checked: ✓Y _N

Samples returned via: __ UPS __ FedEx __ Courier ______

Tracking # 4361 6933 8720

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
[signature]	7-11-18	1502	[signature]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4°C Bottles Received: 17
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 7/12/18 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 2 of 2

SCS Engineers - KS

7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Billing Information:
Accounts Payable
7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Pres Chk

Analysis / Container / Preservative

ESC
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to:
Jason Franks

Email To: jfranks@scsengineers.com; jay.martin@kcpl.com;

Project Description: KCPL - LaCygne Generating Station

City/State Collected: LA CYGNE, KS

Phone: 913-681-0030
Fax: 913-681-0012

Client Project # 27217233.18

Lab Project # AQUAOPKS-LACYGNE

Collected by (print): Gabby Penaflor

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STD

L# 1008810
Table #
Acctnum: AQUAOPKS
Template: T136292
Prelogin: P659524
TSR: 206 - Jeff Carr
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Boron - 6010 250mlHDPE-HNO3 (<2)	Calcium - 6010 250mlHDPE-HNO3 (<2)	Chloride 125mlHDPE-NoPres	Fluoride 125mlHDPE-NoPres	Remarks	Sample # (lab only)
DUPLICATE 3	GRAB	GW	|	7/11/18	1130	1			X			-09
MS/MSD	GRAB	GW	|	7/11/18	1130	1			X			

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH ____ Temp ____
Flow ____ Other ____

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Samples returned via:
__ UPS __ FedEx __ Courier __ ____

Tracking # 4361 6933 8720

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
[signature]	7-11-18	1502	[signature]		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4 °C Bottles Received: 17	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 7/12/18 Time: 8:45	Hold: Condition: NCF / OK

ATTACHMENT 1-3

August 2018 Sampling Event Laboratory Report

ANALYTICAL REPORT

August 27, 2018

SCS Engineers - KS

Sample Delivery Group:	L1019102
Samples Received:	08/18/2018
Project Number:	27217233.18
Description:	KCPL - LaCygne Generating Station
Report To:	Jason Franks 7311 West 130th Street, Ste. 100 Overland Park, KS 66213

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

MW-13 L1019102-01 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflor	08/16/18 10:50	08/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1155538	1	08/23/18 12:53	08/24/18 00:34	TRB

MW-804 L1019102-02 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflor	08/16/18 12:22	08/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1155538	1	08/23/18 12:53	08/23/18 23:34	TRB

DUPLICATE 1 L1019102-03 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflor	08/16/18 12:27	08/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1155538	1	08/23/18 12:53	08/24/18 00:37	TRB

MW-704 L1019102-04 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflor	08/16/18 13:26	08/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1154936	1	08/21/18 01:40	08/21/18 01:40	ELN

DUPLICATE 2 L1019102-05 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflor	08/16/18 13:31	08/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1154936	5	08/21/18 02:58	08/21/18 02:58	ELN

MW-903 L1019102-06 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflor	08/16/18 14:03	08/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1155538	1	08/23/18 12:53	08/23/18 23:44	TRB

DUPLICATE 3 L1019102-07 GW

Collected by	Collected date/time	Received date/time
Gabby Penaflor	08/16/18 14:08	08/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG1155538	1	08/23/18 12:53	08/24/18 00:39	TRB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Project Manager

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	513		200	1	08/24/2018 00:34	WG1155538

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1760		200	1	08/23/2018 23:34	WG1155538

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1770		200	1	08/24/2018 00:37	WG1155538

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	83300		1000	1	08/21/2018 01:40	WG1154936

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	83200		5000	5	08/21/2018 02:58	WG1154936

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	382000	V	1000	1	08/23/2018 23:44	WG1155538

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	381000		1000	1	08/24/2018 00:39	WG1155538

Method Blank (MB)

(MB) R3335357-1 08/20/18 19:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	128	J	51.9	1000

L1019087-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1019087-09 08/20/18 23:06 • (DUP) R3335357-4 08/20/18 23:22

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1680	1630	1	2.96		15

L1019138-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1019138-01 08/21/18 05:16 • (DUP) R3335357-7 08/21/18 05:32

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	42900	43000	1	0.284		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3335357-2 08/20/18 20:07 • (LCSD) R3335357-3 08/20/18 20:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40000	38300	38300	95.7	95.7	80.0-120			0.0136	15

L1019102-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1019102-04 08/21/18 01:40 • (MS) R3335357-5 08/21/18 01:56 • (MSD) R3335357-6 08/21/18 02:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	83300	129000	129000	91.2	91.5	1	80.0-120	E	E	0.118	15

L1019136-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1019136-01 08/21/18 06:18 • (MS) R3335357-8 08/21/18 06:34 • (MSD) R3335357-9 08/21/18 06:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	46300	92000	93000	91.4	93.4	1	80.0-120			1.10	15

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3336323-1 08/23/18 23:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		12.6	200
Calcium	U		46.3	1000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3336323-2 08/23/18 23:28 • (LCSD) R3336323-3 08/23/18 23:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Boron	1000	991	963	99.1	96.3	80.0-120			2.87	20
Calcium	10000	10200	10100	102	101	80.0-120			0.623	20

L1019102-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1019102-02 08/23/18 23:34 • (MS) R3336323-5 08/23/18 23:39 • (MSD) R3336323-6 08/23/18 23:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	1760	2700	2730	93.5	97.0	1	75.0-125			1.27	20
Calcium	10000	68600	78500	78200	98.9	95.3	1	75.0-125			0.461	20

L1019102-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1019102-06 08/23/18 23:44 • (MS) R3336323-7 08/23/18 23:47 • (MSD) R3336323-8 08/23/18 23:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	469	1480	1490	101	102	1	75.0-125			0.802	20
Calcium	10000	382000	386000	384000	31.2	15.3	1	75.0-125	V	V	0.414	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

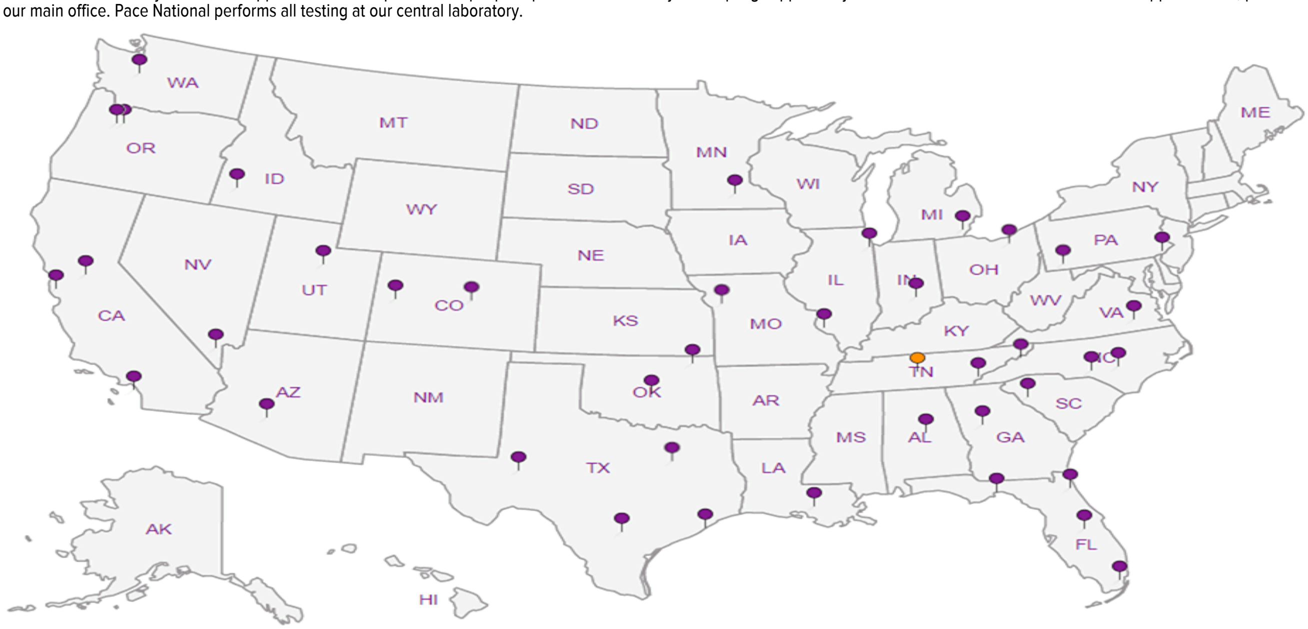
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



SCS Engineers - KS

7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Billing Information:
Accounts Payable
7311 West 130th Street, Ste. 100
Overland Park, KS 66213

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Jason Franks

Email To: jfranks@scsengineers.com; jay.martin@kcpl.com;

Project Description: KCPL - LaCygne Generating Station

City/State Collected:

Phone: 913-681-0030
Fax: 913-681-0012

Client Project # 27217233.18

Lab Project # AQUAOPKS-LACYGNE

L# 1019102

C052

Collected by (print):

Site/Facility ID #

P.O. #

Acctnum: AQUAOPKS

Collected by (signature): Gabby Penaflor

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: Standard

Template: T136292
Prelogin: P667527
TSR: 206 - Jeff Carr
PB:
Shipped Via:

Immediately Packed on Ice N ___ Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Boron - 6010 250mlHDPE-HNO3	Calcium - 6010 250mlHDPE-HNO3	Chloride 125mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-13	GRAB	GW		8/16/18	1050	1	X				01
MW-804		GW			1222	1	X				02
DUPLICATE 1		GW			1227	1	X				03
MS/MSD		GW			1232	1	X				02
MW-704		GW			1326	1			X		04
DUPLICATE 2		GW			1331	1			X		05
MS/MSD		GW			1336	1			X		04
MW-903		GW			1403	1		X			06
DUPLICATE 3		GW			1408	1		X			07
MS/MSD		GW			1413	1		X			06

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS ✓ FedEx ___ Courier ___

Tracking # 4361 6937 8856

Sample Receipt Checklist
COC Seal Present/Intact: NP ___ Y ___ N
COC Signed/Accurate: ✓ Y ___ N
Bottles arrive intact: ✓ Y ___ N
Correct bottles used: ✓ Y ___ N
Sufficient volume sent: ✓ Y ___ N
If Applicable
VOA Zero Headspace: ___ Y ___ N
Preservation Correct/Checked: ✓ Y ___ N
<.5 mR/HR

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)		
[signature]	8/17/18	1327	[signature] 8-17-18 1330	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.6 °C	Bottles Received: 10
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 8/18/18	Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ATTACHMENT 1-4

December 2018 Sampling Event Laboratory Report

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

December 13, 2018

SCS Engineers - KS

Sample Delivery Group:	L1050501
Samples Received:	12/06/2018
Project Number:	27217233.18
Description:	KCPL - LaCygne Generating Station
Report To:	Jason Franks
	8575 West 110th Street
	Suite 100
	Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd   Mount Juliet, TN 37122   615-758-5858   800-767-5859   www.pacenational.com

TABLE OF CONTENTS

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/04/18 14:05	12/06/18 08:00

MW-6 L1050501-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 01:42	12/11/18 01:42	ELN
Wet Chemistry by Method 9056A	WG1207008	5	12/11/18 02:00	12/11/18 02:00	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 08:46	TRB

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/04/18 13:45	12/06/18 08:00

MW-7 L1050501-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 02:18	12/11/18 02:18	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 08:32	TRB

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/03/18 17:00	12/06/18 08:00

MW-11 L1050501-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207326	1	12/08/18 12:11	12/08/18 12:31	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 04:07	12/11/18 04:07	ELN
Wet Chemistry by Method 9056A	WG1207008	5	12/11/18 13:30	12/11/18 13:30	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 08:48	TRB

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/03/18 16:10	12/06/18 08:00

MW-701 L1050501-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207326	1	12/08/18 12:11	12/08/18 12:31	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 04:25	12/11/18 04:25	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 08:56	TRB

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/03/18 14:45	12/06/18 08:00

MW-702 L1050501-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207326	1	12/08/18 12:11	12/08/18 12:31	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 05:02	12/11/18 05:02	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 08:59	TRB

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/03/18 14:10	12/06/18 08:00

MW-703 L1050501-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207326	1	12/08/18 12:11	12/08/18 12:31	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 05:20	12/11/18 05:20	ELN
Wet Chemistry by Method 9056A	WG1207008	5	12/11/18 05:38	12/11/18 05:38	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:02	TRB

MW-704 L1050501-07 GW

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/03/18 15:35	12/06/18 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207326	1	12/08/18 12:11	12/08/18 12:31	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 05:56	12/11/18 05:56	ELN
Wet Chemistry by Method 9056A	WG1207008	5	12/11/18 06:14	12/11/18 06:14	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:05	TRB

MW-705 L1050501-08 GW

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/04/18 14:50	12/06/18 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 06:32	12/11/18 06:32	ELN
Wet Chemistry by Method 9056A	WG1207008	5	12/11/18 06:51	12/11/18 06:51	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:08	TRB

MW-706 L1050501-09 GW

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/04/18 14:40	12/06/18 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 07:45	12/11/18 07:45	ELN
Wet Chemistry by Method 9056A	WG1207008	5	12/11/18 08:03	12/11/18 08:03	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:11	TRB

MW-707B L1050501-10 GW

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/04/18 15:25	12/06/18 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 08:21	12/11/18 08:21	ELN
Wet Chemistry by Method 9056A	WG1207008	100	12/11/18 13:49	12/11/18 13:49	ELN
Wet Chemistry by Method 9056A	WG1207008	20	12/11/18 08:40	12/11/18 08:40	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:14	TRB

MW-708 L1050501-11 GW

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/04/18 15:55	12/06/18 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 08:58	12/11/18 08:58	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:17	TRB

DUPLICATE 2 L1050501-12 GW

Collected by	Collected date/time	Received date/time
Jason R. Franks	12/04/18 13:45	12/06/18 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 09:16	12/11/18 09:16	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:20	TRB

	Collected by	Collected date/time	Received date/time
TW-1 L1050501-13 GW	Jason R. Franks	12/04/18 15:35	12/06/18 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1207340	1	12/08/18 11:37	12/08/18 12:09	AJS
Wet Chemistry by Method 9056A	WG1207008	1	12/11/18 09:52	12/11/18 09:52	ELN
Metals (ICP) by Method 6010B	WG1206955	1	12/07/18 11:33	12/08/18 09:23	TRB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Project Manager

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1150000		20000	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	193000		5000	5	12/11/2018 02:00	WG1207008
Fluoride	612		100	1	12/11/2018 01:42	WG1207008
Sulfate	142000		25000	5	12/11/2018 02:00	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1180		200	1	12/08/2018 08:46	WG1206955
Calcium	86300		1000	1	12/08/2018 08:46	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	890000		20000	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	94600		1000	1	12/11/2018 02:18	WG1207008
Fluoride	1320		100	1	12/11/2018 02:18	WG1207008
Sulfate	ND		5000	1	12/11/2018 02:18	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1620	O1	200	1	12/08/2018 08:32	WG1206955
Calcium	20500	O1	1000	1	12/08/2018 08:32	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1030000		20000	1	12/08/2018 12:31	WG1207326

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	72600		1000	1	12/11/2018 04:07	WG1207008
Fluoride	529		100	1	12/11/2018 04:07	WG1207008
Sulfate	215000		25000	5	12/11/2018 13:30	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1130		200	1	12/08/2018 08:48	WG1206955
Calcium	60400		1000	1	12/08/2018 08:48	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	569000		10000	1	12/08/2018 12:31	WG1207326

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	49400		1000	1	12/11/2018 04:25	WG1207008
Fluoride	642		100	1	12/11/2018 04:25	WG1207008
Sulfate	79100		5000	1	12/11/2018 04:25	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	979		200	1	12/08/2018 08:56	WG1206955
Calcium	44800		1000	1	12/08/2018 08:56	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	423000		10000	1	12/08/2018 12:31	WG1207326

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	40900		1000	1	12/11/2018 05:02	WG1207008
Fluoride	1630		100	1	12/11/2018 05:02	WG1207008
Sulfate	ND		5000	1	12/11/2018 05:02	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1470		200	1	12/08/2018 08:59	WG1206955
Calcium	3240		1000	1	12/08/2018 08:59	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	892000		20000	1	12/08/2018 12:31	WG1207326

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	106000		5000	5	12/11/2018 05:38	WG1207008
Fluoride	1520		100	1	12/11/2018 05:20	WG1207008
Sulfate	ND		5000	1	12/11/2018 05:20	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1870		200	1	12/08/2018 09:02	WG1206955
Calcium	17700		1000	1	12/08/2018 09:02	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1130000		25000	1	12/08/2018 12:31	WG1207326

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	82200		1000	1	12/11/2018 05:56	WG1207008
Fluoride	918		100	1	12/11/2018 05:56	WG1207008
Sulfate	168000		25000	5	12/11/2018 06:14	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	2020		200	1	12/08/2018 09:05	WG1206955
Calcium	24000		1000	1	12/08/2018 09:05	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	994000		20000	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	132000		5000	5	12/11/2018 06:51	WG1207008
Fluoride	1070		100	1	12/11/2018 06:32	WG1207008
Sulfate	38900		5000	1	12/11/2018 06:32	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	2190		200	1	12/08/2018 09:08	WG1206955
Calcium	30300		1000	1	12/08/2018 09:08	WG1206955

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	1200000		25000	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Chloride	241000		5000	5	12/11/2018 08:03	WG1207008
Fluoride	1150		100	1	12/11/2018 07:45	WG1207008
Sulfate	7690		5000	1	12/11/2018 07:45	WG1207008

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Boron	2090		200	1	12/08/2018 09:11	WG1206955
Calcium	24700		1000	1	12/08/2018 09:11	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	8080000		100000	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	205000		20000	20	12/11/2018 08:40	WG1207008
Fluoride	328		100	1	12/11/2018 08:21	WG1207008
Sulfate	4490000		500000	100	12/11/2018 13:49	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1950		200	1	12/08/2018 09:14	WG1206955
Calcium	381000		1000	1	12/08/2018 09:14	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	633000		13300	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	46000		1000	1	12/11/2018 08:58	WG1207008
Fluoride	618		100	1	12/11/2018 08:58	WG1207008
Sulfate	9240		5000	1	12/11/2018 08:58	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1410		200	1	12/08/2018 09:17	WG1206955
Calcium	30100		1000	1	12/08/2018 09:17	WG1206955

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	896000		20000	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Chloride	95200		1000	1	12/11/2018 09:16	WG1207008
Fluoride	1340		100	1	12/11/2018 09:16	WG1207008
Sulfate	ND		5000	1	12/11/2018 09:16	WG1207008

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Boron	1610		200	1	12/08/2018 09:20	WG1206955
Calcium	20500		1000	1	12/08/2018 09:20	WG1206955

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	962000		20000	1	12/08/2018 12:09	WG1207340

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	41400		1000	1	12/11/2018 09:52	WG1207008
Fluoride	390		100	1	12/11/2018 09:52	WG1207008
Sulfate	66400		5000	1	12/11/2018 09:52	WG1207008

Metals (ICP) by Method 6010B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	1480		200	1	12/08/2018 09:23	WG1206955
Calcium	26800		1000	1	12/08/2018 09:23	WG1206955

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3366644-1 12/08/18 12:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Dissolved Solids	U		2820	10000

L1050501-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1050501-07 12/08/18 12:31 • (DUP) R3366644-3 12/08/18 12:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	1130000	1130000	1	0.222		5

Laboratory Control Sample (LCS)

(LCS) R3366644-2 12/08/18 12:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8600000	97.7	85.0-115	

Method Blank (MB)

(MB) R3366639-1 12/08/18 12:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		2820	10000

L1050501-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1050501-13 12/08/18 12:09 • (DUP) R3366639-3 12/08/18 12:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	962000	956000	1	0.626		5

Laboratory Control Sample (LCS)

(LCS) R3366639-2 12/08/18 12:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8750000	99.4	85.0-115	

Method Blank (MB)

(MB) R3367203-1 12/10/18 18:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		51.9	1000
Fluoride	U		9.90	100
Sulfate	U		77.4	5000

L1050501-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1050501-04 12/11/18 04:25 • (DUP) R3367203-5 12/11/18 04:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	49400	49400	1	0.0458		15
Fluoride	642	704	1	9.18		15
Sulfate	79100	79400	1	0.332		15

L1050501-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1050501-13 12/11/18 09:52 • (DUP) R3367203-6 12/11/18 10:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	41400	41400	1	0.0271		15
Fluoride	390	441	1	12.1		15
Sulfate	66400	66300	1	0.136		15

Laboratory Control Sample (LCS)

(LCS) R3367203-2 12/10/18 19:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	38600	96.5	80.0-120	
Fluoride	8000	7850	98.1	80.0-120	
Sulfate	40000	39300	98.2	80.0-120	

L1050501-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1050501-02 12/11/18 02:18 • (MS) R3367203-3 12/11/18 02:36 • (MSD) R3367203-4 12/11/18 02:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	94600	139000	139000	88.4	89.8	1	80.0-120	E	E	0.504	15
Fluoride	5000	1320	6070	6160	95.1	96.9	1	80.0-120			1.50	15
Sulfate	50000	ND	47300	47900	94.6	95.7	1	80.0-120			1.12	15

L1050501-13 Original Sample (OS) • Matrix Spike (MS)

(OS) L1050501-13 12/11/18 09:52 • (MS) R3367203-7 12/11/18 10:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	41400	89300	95.8	1	80.0-120	
Fluoride	5000	390	5400	100	1	80.0-120	
Sulfate	50000	66400	113000	92.2	1	80.0-120	E

Method Blank (MB)

(MB) R3366407-1 12/08/18 08:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		12.6	200
Calcium	U		46.3	1000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3366407-2 12/08/18 08:26 • (LCSD) R3366407-3 12/08/18 08:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Boron	1000	969	982	96.9	98.2	80.0-120			1.33	20
Calcium	10000	9720	9980	97.2	99.8	80.0-120			2.65	20

L1050501-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1050501-02 12/08/18 08:32 • (MS) R3366407-5 12/08/18 08:37 • (MSD) R3366407-6 12/08/18 08:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	1620	2580	2570	96.5	95.8	1	75.0-125			0.282	20
Calcium	10000	20500	32200	32000	117	115	1	75.0-125			0.670	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T 104704245-17-14
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

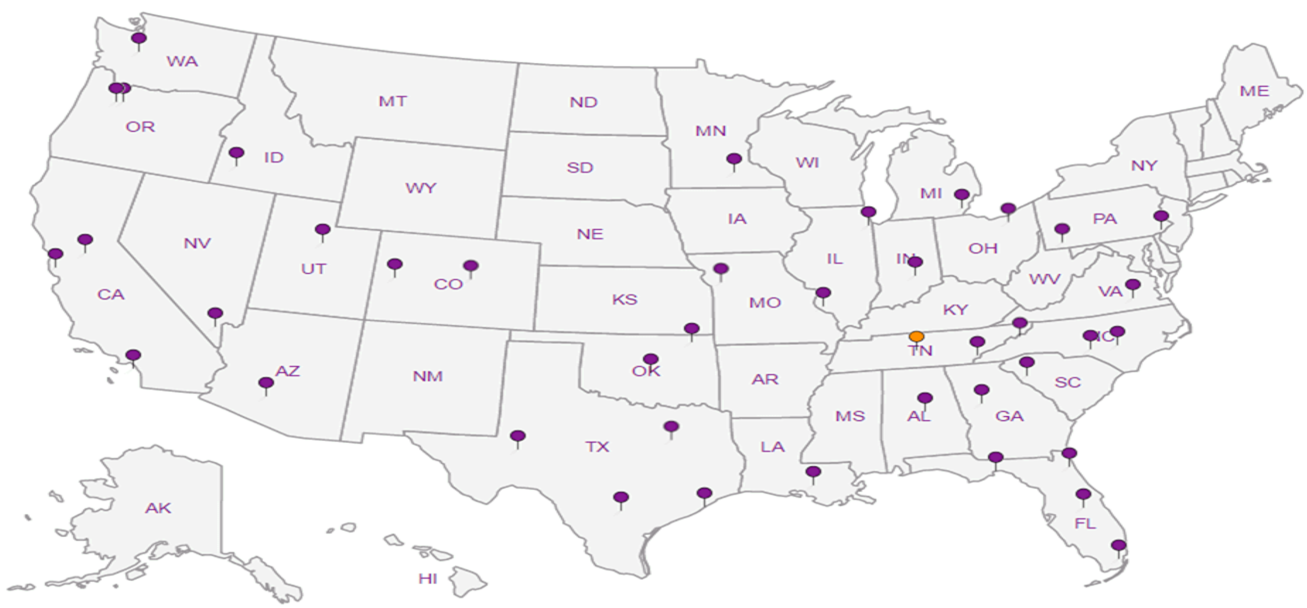
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



SCS Engineers - KS

8575 West 110th Street
Suite 100
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 West 110th Street
Suite 100
Overland Park, KS 66210

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Jason Franks

Email To: jfranks@scsengineers.com; jay.martin@kcpl.com;

Project Description: KCPL - LaCygne Generating Station

City/State Collected: LaCygne, KS

Phone: 913-681-0030
Fax: 913-681-0012

Client Project # 27217233.18

Lab Project # AQUAOPKS-LACYGNE

L# L1050501

G086

Collected by (print): Jason R. Franks

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ✓

Acctnum: AQUAOPKS
Template: T136276
Prelogin: P679782
TSR: 206 - Jeff Carr
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-6	GRAB	GW		12/4/18	1405	3	X	X	X		-01
MW-7		GW		12/4/18	1345	3	X	X	X		-02
MW-11		GW		12/3/18	1700	3	X	X	X		-03
MW-701		GW		12/3/18	1610	3	X	X	X		-04
MW-702		GW		12/3/18	1445	3	X	X	X		-05
MW-703		GW		12/3/18	1410	3	X	X	X		-06
MW-704		GW		12/3/18	1535	3	X	X	X		-07
MW-705		GW		12/4/18	1450	3	X	X	X		-08
MW-706		GW		12/4/18	1440	3	X	X	X		-09
MW-707B		GW		12/4/18	1525	3	X	X	X		-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier __ ______

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP _Y _N
COC Signed/Accurate: ✓Y _N
Bottles arrive intact: ✓Y _N
Correct bottles used: ✓Y _N
Sufficient volume sent: ✓Y _N
If Applicable
VOA Zero Headspace: _Y _N
Preservation Correct/Checked: ✓Y _N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature) [signature]	Date: 12/5/18	Time: 1324	Received by: (Signature) [signature]	Trip Blank Received: Yes / No HCL / MeOH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.1+0.2=0.3 °C Bottles Received: 45
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 12/6/18 Time: 800

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

SCS Engineers - KS

8575 West 110th Street
Suite 100
Overland Park, KS 66210

Report to:
Jason Franks

Billing information:
Accounts Payable
8575 West 110th Street
Suite 100
Overland Park, KS 66210

Email To: jfranks@scsengineers.com; jay.martin@kcpl.com;

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Project Description: KCPL - LaCygne Generating Station

City/State Collected: LaCygne, KS

Phone: 913-681-0030
Fax: 913-681-0012

Client Project # 27217233.18

Lab Project # AQUAOPKS-LACYGNE

L# L1050501

Collected by (print): JASON R. FRANKS

Site/Facility ID #

P.O. #

Table #

Collected by (signature): Jason R Franks

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ✓

Acctnum: AQUAOPKS
Template: T136276
Prelogin: P679782
TSR: 206 - Jeff Carr
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres								Remarks	Sample # (lab only)
MW-708	GRAB	GW		12/4/18	1555	3	X	X	X									-11
MW-7 MS		GW			1345	3	X	X	X									-02
MW-7 MSD		GW			1345	3	X	X	X									-02
DUPLICATE 2		GW			1345	3	X	X	X									-02
TW-1		GW			1535	3	X	X	X									-12
																		-13

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier __ ______

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: ✓NP _Y _N
COC Signed/Accurate: ✓Y _N
Bottles arrive intact: ✓Y _N
Correct bottles used: ✓Y _N
Sufficient volume sent: ✓Y _N
If Applicable
VOA Zero Headspace: _Y _N
Preservation Correct/Checked: ✓Y _N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR
Jason R Franks	12/5/18	1326	[signature]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.1+0.2=0.3 °C Bottles Received: 45
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) K [signature]	Date: 12/6/18 Time: 800

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

Login #: L1050501	Client: AQUAOPKS	Date: 12/6/18	Evaluated by: Troy Dunlap

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.	X	Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received DUPLICATE 1. COC says DUPLICATE 2. Time matches. Logged per COC.

Client informed by:		Call		Email		Voice Mail		Date: 12/7/18	Time: 0910
TSR Initials: JC	Client Contact:								

Login Instructions: Log per COC

ATTACHMENT 2

Statistical Analyses

ATTACHMENT 2-1

Fall 2017 Semiannual Detection Monitoring Statistical Analyses

MEMORANDUM

January 22, 2018

JOHN R. ROCKHOLD
LICENSED
29
1-22-18
KANSAS
PROFESSIONAL GEOLOGIST

To: **La Cygne Generating Station**
25166 East 2200 Road
La Cygne, Kansas 66040
Kansas City Power & Light Company

From: SCS Engineers

RE: **Revision to January 15, 2018 Memorandum**
Determination of Statistically Significant Increases
Upper AQC Impoundment

Statistical analysis of monitoring data from the groundwater monitoring system for the Upper AQC Impoundment at the La Cygne Generating Station has been completed in substantial compliance with the "Statistical Method Certification By A Qualified Professional Engineer" dated October 12, 2017. Groundwater samples were collected and analyzed by October 17, 2017. A statistical analysis was conducted to determine whether there is a statistically significant increase over background values for each constituent listed in Appendix III to Part 257-Constituents for Detection Monitoring.

The completed statistical evaluation identified an Appendix III constituent, pH, below its lower prediction limit in monitoring well MW-706. The lower prediction limit for pH in monitoring well MW-706 is 7.14 standard units (S.U.). The detection monitoring sample was reported at 7.05 S.U. The first verification re-sample was collected on January 9, 2018 with a result of 7.14 S.U., which is equal to the lower prediction limit. However the, Sanitas™ Output identified the 7.14 S.U. pH value in MW-706 as a confirmed statistically significant decrease below background, due to numerical rounding, and will remain a statistically significant decrease below background; unless, a second verification re-sample is collected and is above the lower prediction limit.

Attached to this memorandum are the following backup information:

Attachment 1: Sanitas™ Output:

Statistical evaluation output from Sanitas™ for the prediction limit analysis. This includes prediction limit plots, prediction limit background data, detection sample result, 1st verification re-sample result (when applicable), 2nd verification re-sample result (when applicable), extra sample result for quality control (if applicable), and a Prediction Limit summary table. Output documentation includes the analytical data used for the statistical analyses.

Attachment 2: Sanitas™ Configuration Settings:

Screen shots of the applicable Sanitas™ configuration settings for the statistical prediction limit analysis. This includes data configuration, output configuration, prediction limit configuration and other tests configuration.

Revision Number	Revision Date	Attachment Revised	Summary of Revisions
1	1/22/2018	Cover letter	Revision table added. No changes to text regarding statistical analyses. Attachment 1 description was revised to better match the attachment.

ATTACHMENT 1

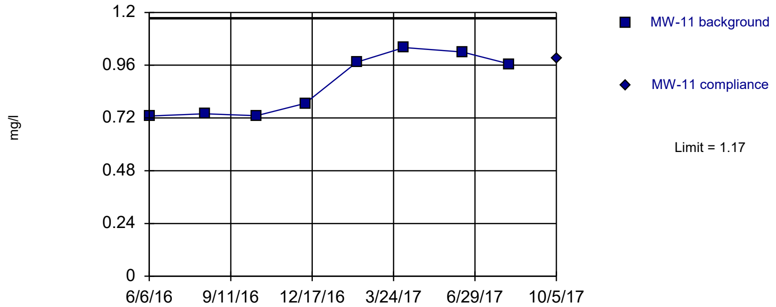
Sanitas™ Output

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.873, Std. Dev.=0.139, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.812, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

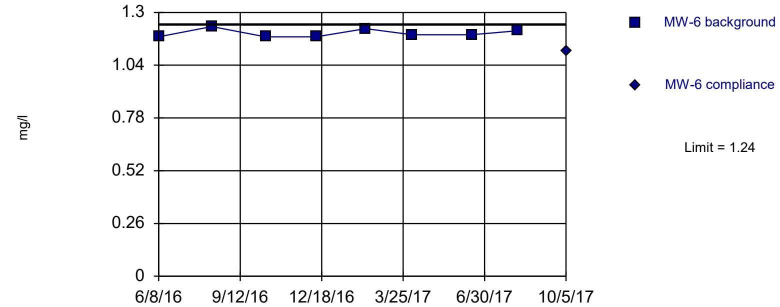
Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.2, Std. Dev.=0.0198, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.843, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

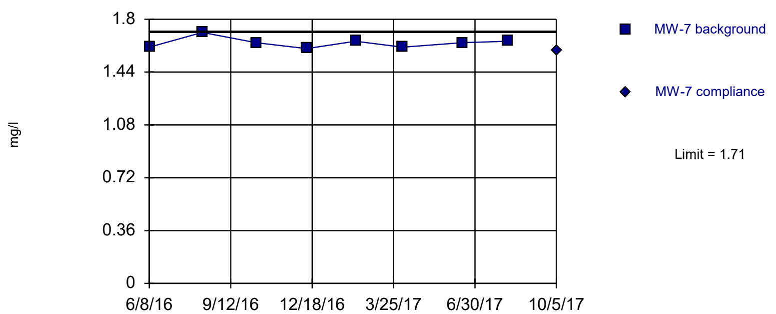
Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.64, Std. Dev.=0.0348, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.875, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

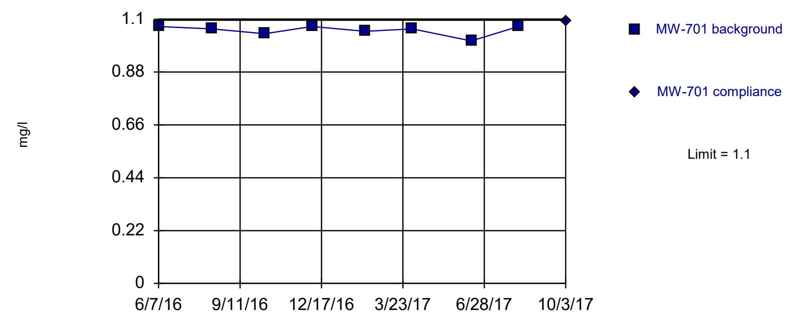
Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.05, Std. Dev.=0.0207, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.813, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11
6/6/2016	0.729	
8/11/2016	0.739	
10/12/2016	0.73	
12/9/2016	0.786	
2/9/2017	0.974	
4/6/2017	1.04	
6/15/2017	1.02	
8/10/2017	0.965	
10/5/2017		0.988

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	1.18	
8/10/2016	1.23	
10/13/2016	1.18	
12/12/2016	1.18	
2/9/2017	1.22	
4/5/2017	1.19	
6/15/2017	1.19	
8/9/2017	1.21	
10/5/2017		1.11

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	1.61	
8/10/2016	1.71	
10/13/2016	1.64	
12/12/2016	1.6	
2/8/2017	1.65	
4/5/2017	1.61	
6/15/2017	1.64	
8/9/2017	1.65	
10/5/2017		1.59

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

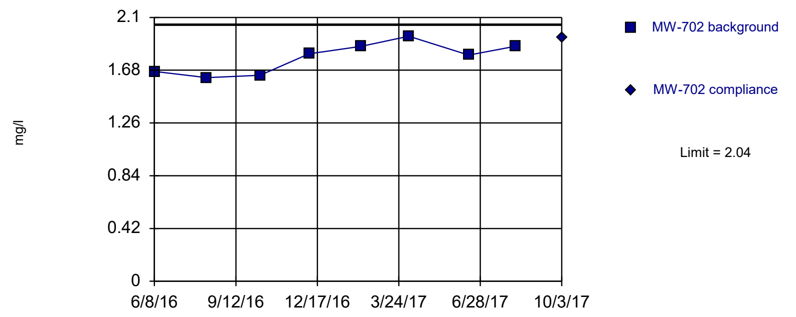
LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-701	MW-701
6/7/2016	1.07	
8/9/2016	1.06	
10/11/2016	1.04	
12/6/2016	1.07	
2/7/2017	1.05	
4/4/2017	1.06	
6/13/2017	1.01	
8/8/2017	1.07	
10/3/2017		1.09

Within Limit

Prediction Limit

Intrawell Parametric



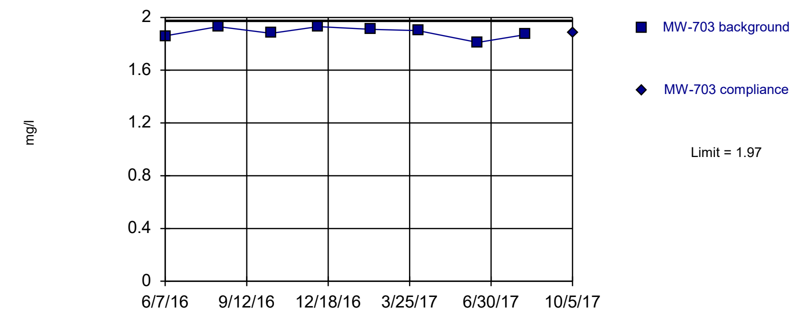
Background Data Summary: Mean=1.78, Std. Dev.=0.122, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.914, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limit

Prediction Limit

Intrawell Parametric



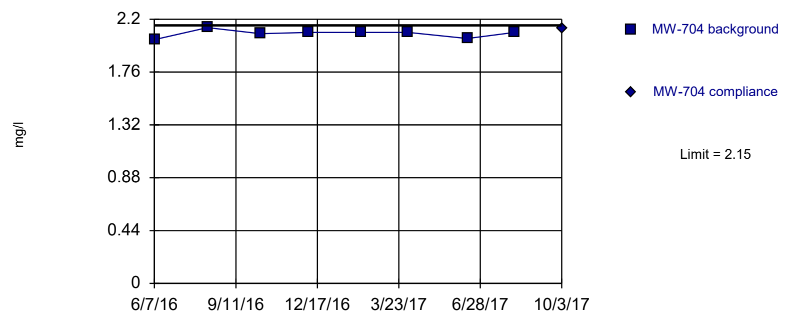
Background Data Summary: Mean=1.89, Std. Dev.=0.0403, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.929, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limit

Prediction Limit

Intrawell Parametric



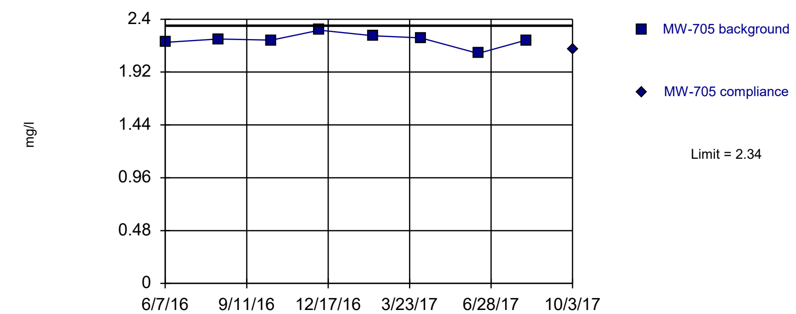
Background Data Summary: Mean=2.08, Std. Dev.=0.0316, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.871, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.21, Std. Dev.=0.0597, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.903, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	1.67	
8/9/2016	1.62	
10/11/2016	1.64	
12/8/2016	1.81	
2/8/2017	1.87	
4/5/2017	1.95	
6/15/2017	1.8	
8/9/2017	1.87	
10/3/2017		1.94

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-703	MW-703
6/7/2016	1.86	
8/9/2016	1.93	
10/11/2016	1.88	
12/6/2016	1.93	
2/7/2017	1.91	
4/4/2017	1.9	
6/14/2017	1.81	
8/10/2017	1.87	
10/5/2017		1.88

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	2.03	
8/9/2016	2.13	
10/11/2016	2.08	
12/6/2016	2.09	
2/7/2017	2.09	
4/4/2017	2.09	
6/13/2017	2.04	
8/8/2017	2.09	
10/3/2017		2.12

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

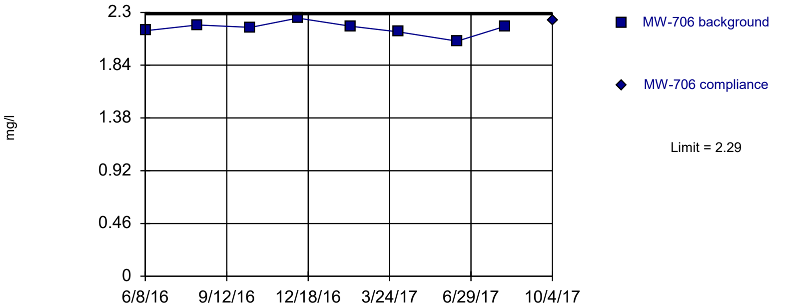
	MW-705	MW-705
6/7/2016	2.19	
8/9/2016	2.22	
10/11/2016	2.21	
12/7/2016	2.3	
2/9/2017	2.25	
4/6/2017	2.23	
6/13/2017	2.09	
8/9/2017	2.21	
10/3/2017		2.13

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.16, Std. Dev.=0.0577, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

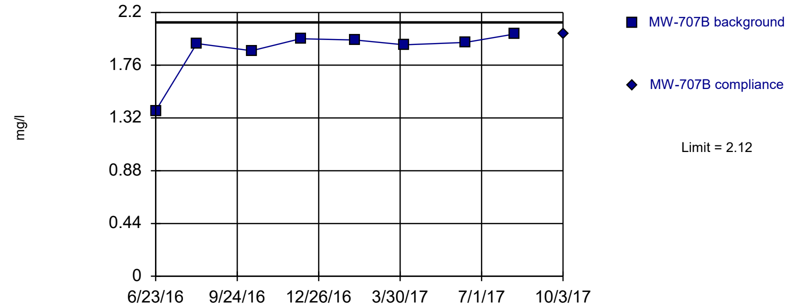
Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^6 transformation): Mean=49.7, Std. Dev.=18.6, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.773, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

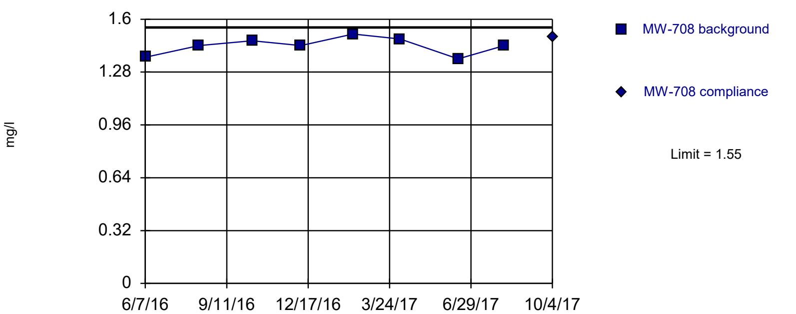
Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.44, Std. Dev.=0.0517, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.916, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

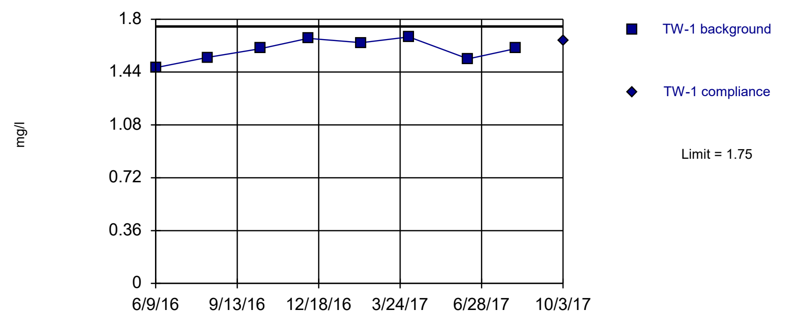
Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.59, Std. Dev.=0.0734, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.946, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 1/14/2018 6:37 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-706	MW-706
6/8/2016	2.14	
8/9/2016	2.19	
10/11/2016	2.17	
12/6/2016	2.25	
2/7/2017	2.18	
4/4/2017	2.13	
6/13/2017	2.05	
8/9/2017	2.18	
10/4/2017		2.23

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	1.38	
8/9/2016	1.94	
10/11/2016	1.88	
12/6/2016	1.98	
2/7/2017	1.97	
4/4/2017	1.93	
6/13/2017	1.95	
8/8/2017	2.02	
10/3/2017		2.02

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-708	MW-708
6/7/2016	1.37	
8/10/2016	1.44	
10/12/2016	1.47	
12/9/2016	1.44	
2/9/2017	1.51	
4/6/2017	1.48	
6/14/2017	1.36	
8/8/2017	1.44	
10/4/2017		1.49

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

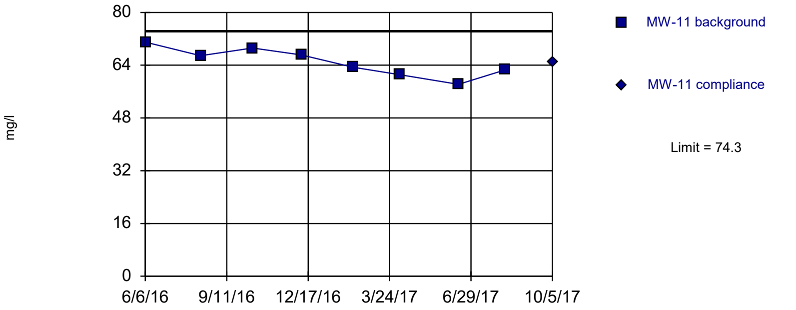
	TW-1	TW-1
6/9/2016	1.47	
8/9/2016	1.54	
10/11/2016	1.6	
12/6/2016	1.67	
2/7/2017	1.64	
4/4/2017	1.68	
6/13/2017	1.53	
8/8/2017	1.6	
10/3/2017		1.65

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=64.9, Std. Dev.=4.33, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.97, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

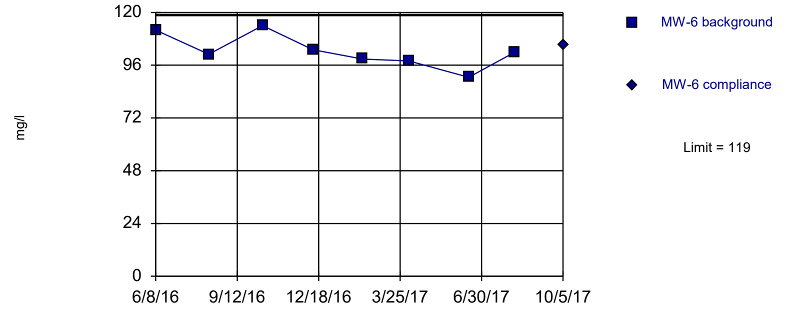
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=102, Std. Dev.=7.6, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

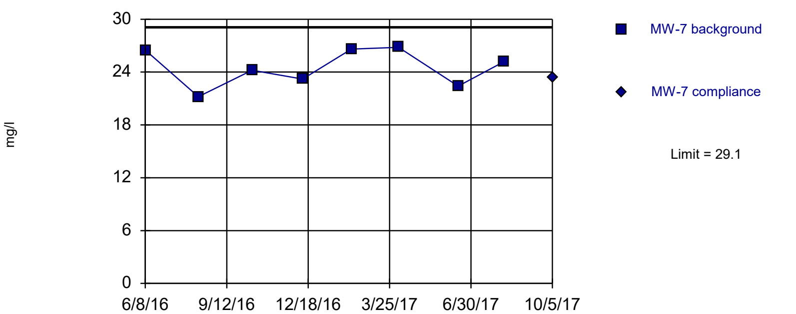
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=24.5, Std. Dev.=2.11, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.915, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

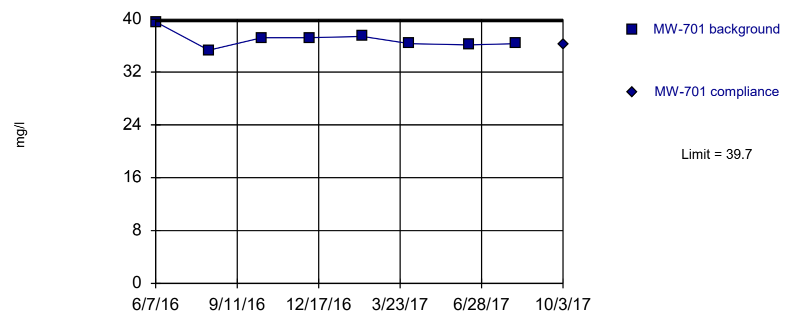
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=36.9, Std. Dev.=1.29, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.892, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11
6/6/2016	71	
8/11/2016	66.9	
10/12/2016	69.2	
12/9/2016	67.1	
2/9/2017	63.4	
4/6/2017	61.1	
6/15/2017	58.2	
8/10/2017	62.6	
10/5/2017		65.1

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-6	MW-6
6/8/2016	112	
8/10/2016	101	
10/13/2016	114	
12/12/2016	103	
2/9/2017	98.8	
4/5/2017	97.9	
6/15/2017	90.5	
8/9/2017	102	
10/5/2017		105

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	26.5	
8/10/2016	21.2	
10/13/2016	24.2	
12/12/2016	23.2	
2/8/2017	26.6	
4/5/2017	26.8	
6/15/2017	22.4	
8/9/2017	25.2	
10/5/2017		23.4

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

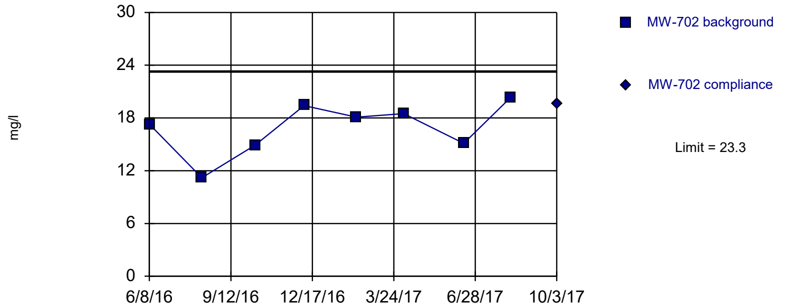
	MW-701	MW-701
6/7/2016	39.6	
8/9/2016	35.3	
10/11/2016	37.2	
12/6/2016	37.2	
2/7/2017	37.4	
4/4/2017	36.3	
6/13/2017	36.1	
8/8/2017	36.3	
10/3/2017		36.1

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=16.9, Std. Dev.=2.97, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.929, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

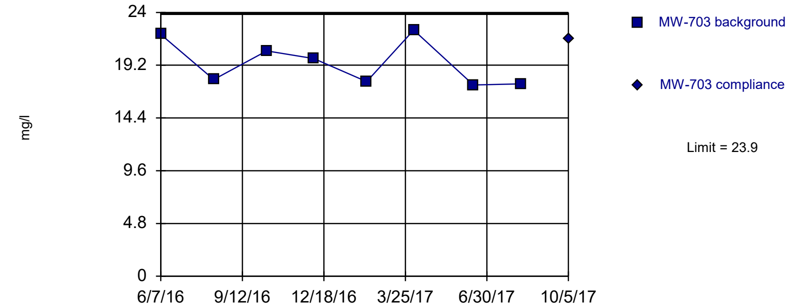
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=19.4, Std. Dev.=2.07, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.852, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

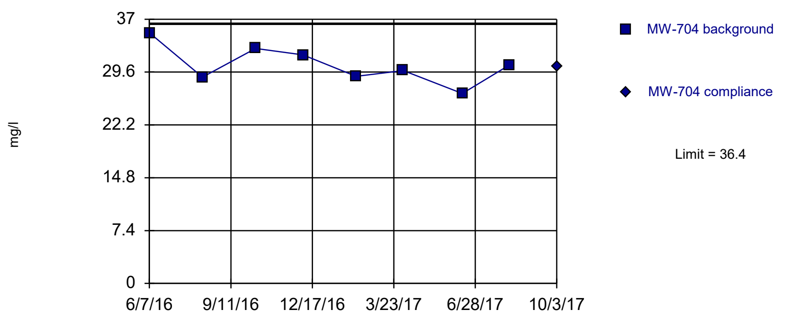
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=30.6, Std. Dev.=2.66, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.982, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

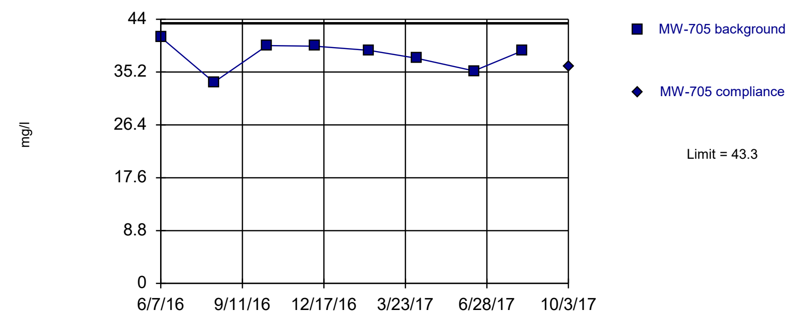
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=38, Std. Dev.=2.46, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.917, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-702	MW-702
6/8/2016	17.3	
8/9/2016	11.2	
10/11/2016	14.9	
12/8/2016	19.4	
2/8/2017	18.1	
4/5/2017	18.5	
6/15/2017	15.1	
8/9/2017	20.3	
10/3/2017		19.6

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	22	
8/9/2016	17.9	
10/11/2016	20.5	
12/6/2016	19.8	
2/7/2017	17.7	
4/4/2017	22.4	
6/14/2017	17.4	
8/10/2017	17.5	
10/5/2017		21.6

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	35.1	
8/9/2016	28.9	
10/11/2016	32.9	
12/6/2016	32	
2/7/2017	29	
4/4/2017	29.8	
6/13/2017	26.6	
8/8/2017	30.6	
10/3/2017		30.3

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

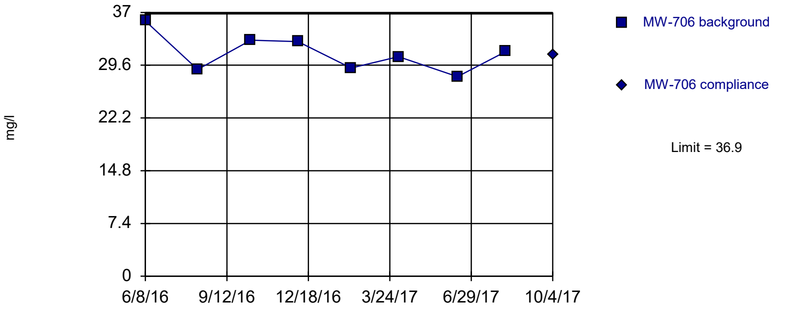
	MW-705	MW-705
6/7/2016	41	
8/9/2016	33.5	
10/11/2016	39.6	
12/7/2016	39.5	
2/9/2017	38.8	
4/6/2017	37.5	
6/13/2017	35.4	
8/9/2017	38.7	
10/3/2017		36.1

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=31.3, Std. Dev.=2.59, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

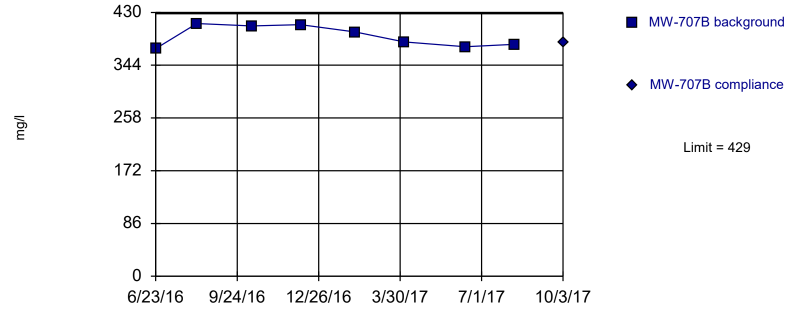
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=392, Std. Dev.=17.2, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.863, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

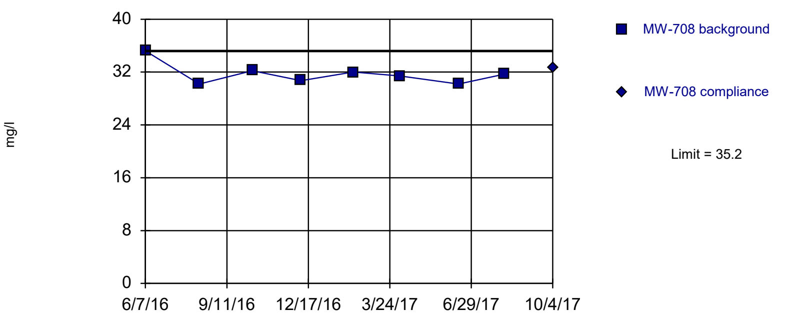
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=31.7, Std. Dev.=1.61, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.838, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

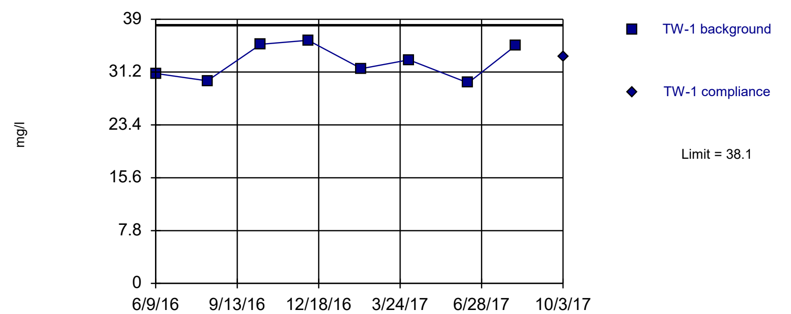
Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=32.7, Std. Dev.=2.51, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.901, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CALCIUM Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-706	MW-706
6/8/2016	35.8	
8/9/2016	29	
10/11/2016	33.1	
12/6/2016	32.9	
2/7/2017	29.2	
4/4/2017	30.8	
6/13/2017	28	
8/9/2017	31.5	
10/4/2017		31.1

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	371	
8/9/2016	412	
10/11/2016	408	
12/6/2016	410	
2/7/2017	398	
4/4/2017	382	
6/13/2017	374	
8/8/2017	378	
10/3/2017		382

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	35.2	
8/10/2016	30.2	
10/12/2016	32.2	
12/9/2016	30.7	
2/9/2017	32	
4/6/2017	31.4	
6/14/2017	30.2	
8/8/2017	31.7	
10/4/2017		32.7

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

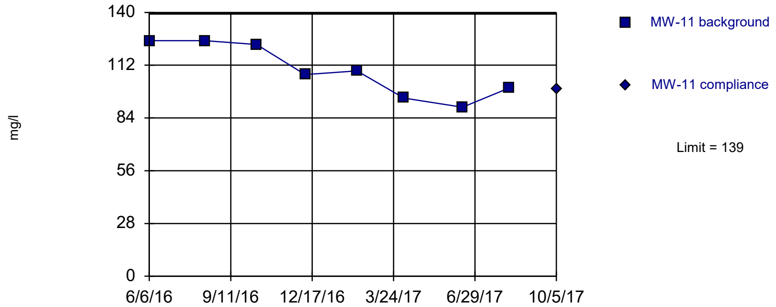
	TW-1	TW-1
6/9/2016	31	
8/9/2016	29.9	
10/11/2016	35.3	
12/6/2016	35.9	
2/7/2017	31.7	
4/4/2017	33	
6/13/2017	29.6	
8/8/2017	35.1	
10/3/2017		33.4

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=109, Std. Dev.=14, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.897, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

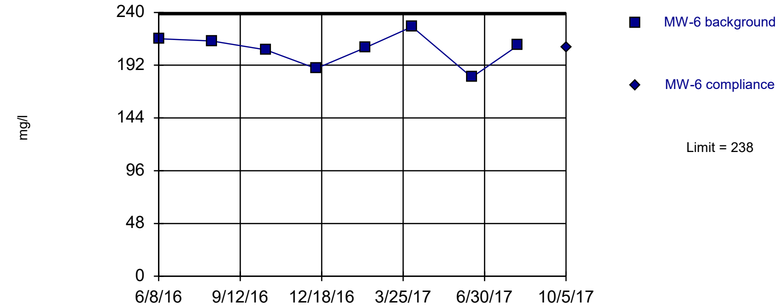
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=206, Std. Dev.=14.8, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

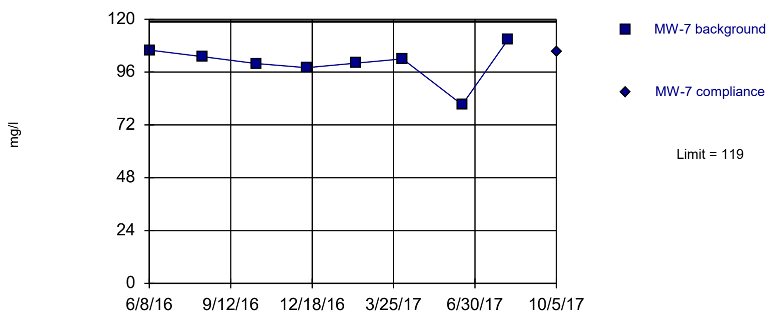
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=100, Std. Dev.=8.68, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.854, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

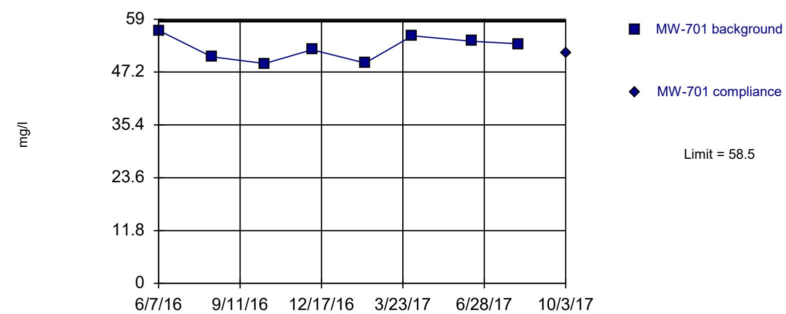
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=52.6, Std. Dev.=2.77, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.94, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11
6/6/2016	125	
8/11/2016	125	
10/12/2016	123	
12/9/2016	107	
2/9/2017	109	
4/6/2017	94.5	
6/15/2017	89.7	
8/10/2017	100	
10/5/2017		99.2

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	216	
8/10/2016	214	
10/13/2016	206	
12/12/2016	189	
2/9/2017	208	
4/5/2017	227	
6/15/2017	181	
8/9/2017	210	
10/5/2017		208

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	106	
8/10/2016	103	
10/13/2016	99.9	
12/12/2016	98	
2/8/2017	100	
4/5/2017	102	
6/15/2017	81.2	
8/9/2017	111	
10/5/2017		105

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

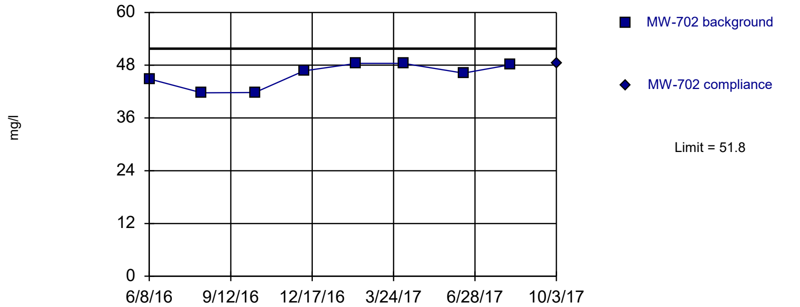
	MW-701	MW-701
6/7/2016	56.5	
8/9/2016	50.6	
10/11/2016	49.1	
12/6/2016	52.2	
2/7/2017	49.2	
4/4/2017	55.3	
6/13/2017	54.1	
8/8/2017	53.5	
10/3/2017		51.5

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=45.8, Std. Dev.=2.76, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.848, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

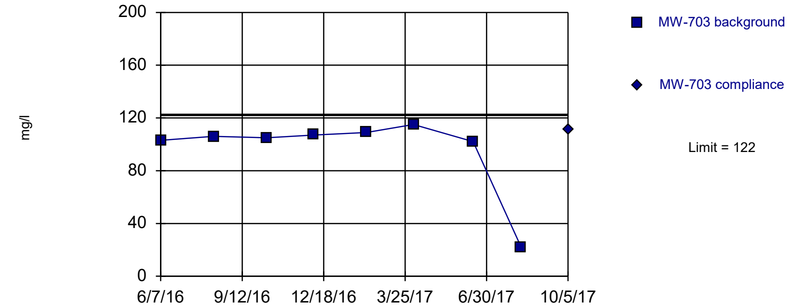
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^4 transformation): Mean=1.1e8, Std. Dev.=5.1e7, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.798, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

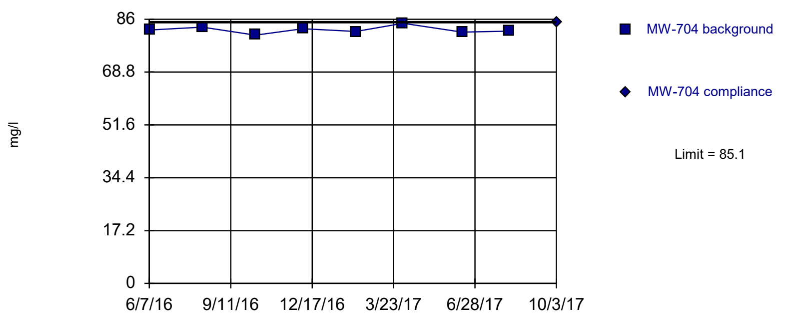
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=82.5, Std. Dev.=1.17, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.967, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

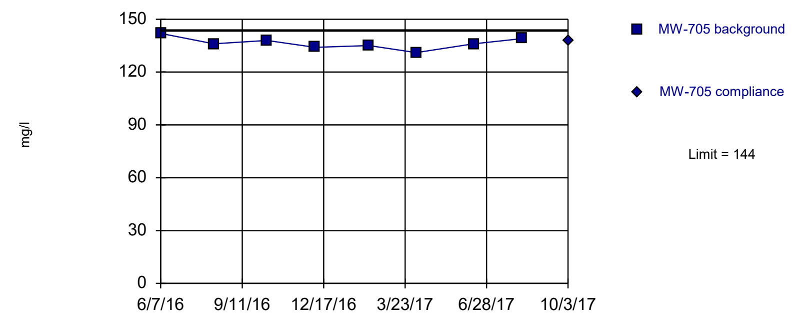
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=136, Std. Dev.=3.34, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.986, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	44.9	
8/9/2016	41.7	
10/11/2016	41.8	
12/8/2016	46.7	
2/8/2017	48.4	
4/5/2017	48.4	
6/15/2017	46.2	
8/9/2017	48.1	
10/3/2017		48.5

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	103	
8/9/2016	106	
10/11/2016	105	
12/6/2016	107	
2/7/2017	109	
4/4/2017	115	
6/14/2017	102	
8/10/2017	22.3	
10/5/2017		111

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	82.5	
8/9/2016	83.4	
10/11/2016	80.8	
12/6/2016	82.9	
2/7/2017	82	
4/4/2017	84.7	
6/13/2017	81.8	
8/8/2017	82.1	
10/3/2017		85

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

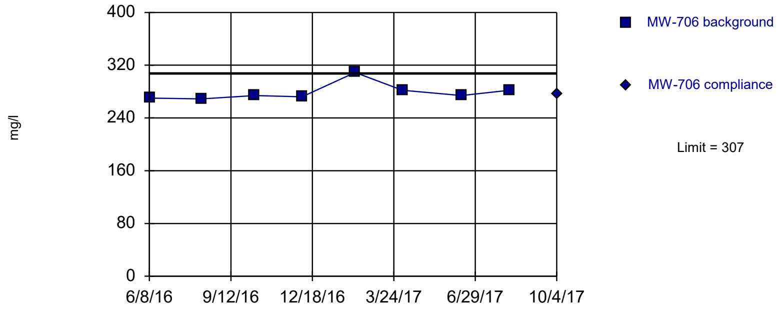
	MW-705	MW-705
6/7/2016	142	
8/9/2016	136	
10/11/2016	138	
12/7/2016	134	
2/9/2017	135	
4/6/2017	131	
6/13/2017	136	
8/9/2017	139	
10/3/2017		138

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=5.63, Std. Dev.=0.0453, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.753, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

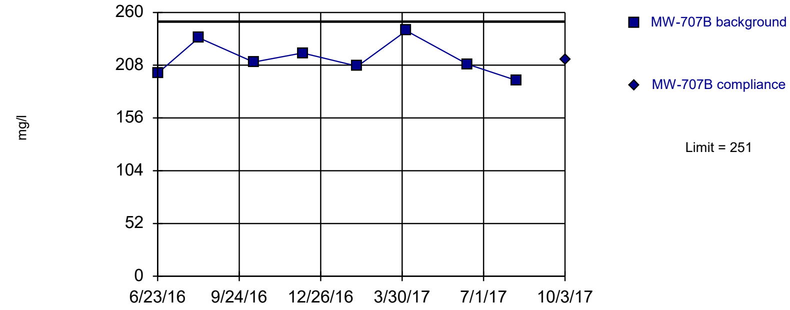
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=215, Std. Dev.=16.8, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.939, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

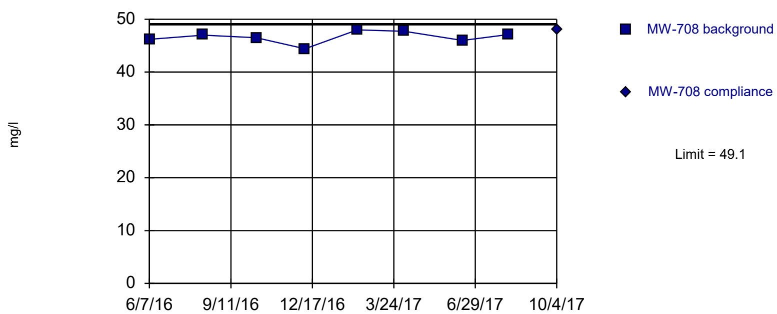
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=46.6, Std. Dev.=1.13, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.941, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

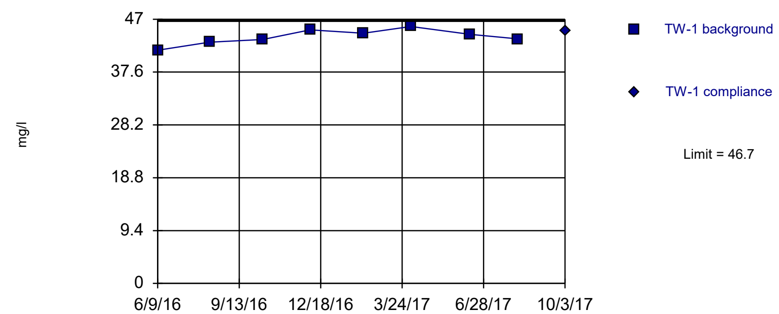
Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=43.9, Std. Dev.=1.33, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.977, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-706	MW-706
6/8/2016	270	
8/9/2016	269	
10/11/2016	274	
12/6/2016	272	
2/7/2017	309	
4/4/2017	282	
6/13/2017	274	
8/9/2017	282	
10/4/2017		276

Prediction Limit

Constituent: CHLORIDE (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	200	
8/9/2016	235	
10/11/2016	211	
12/6/2016	220	
2/7/2017	207	
4/4/2017	242	
6/13/2017	209	
8/8/2017	193	
10/3/2017		214

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	46.2	
8/10/2016	47	
10/12/2016	46.5	
12/9/2016	44.4	
2/9/2017	48	
4/6/2017	47.7	
6/14/2017	46	
8/8/2017	47.1	
10/4/2017		48

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

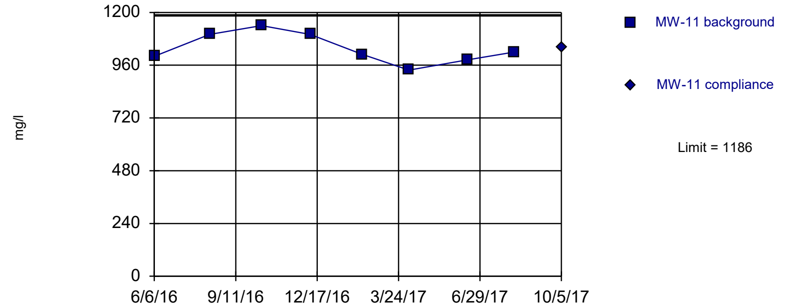
LaCygne   Client: SCS Engineers   Data: LaC GW Data

	TW-1	TW-1
6/9/2016	41.5	
8/9/2016	42.9	
10/11/2016	43.4	
12/6/2016	45.1	
2/7/2017	44.5	
4/4/2017	45.7	
6/13/2017	44.3	
8/8/2017	43.5	
10/3/2017		44.9

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1037, Std. Dev.=69.2, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

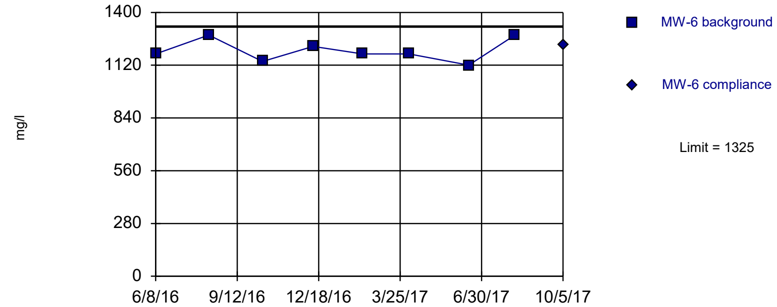
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1198, Std. Dev.=59, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.901, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

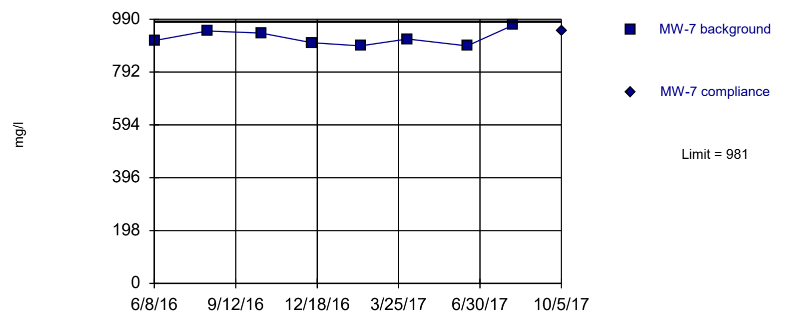
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=920, Std. Dev.=28.1, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.923, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

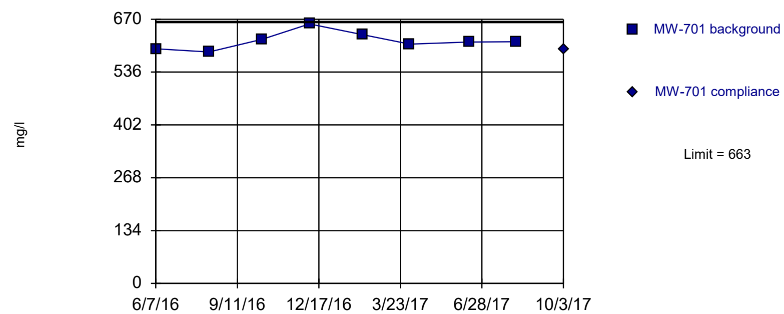
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=615, Std. Dev.=22, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.944, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11
6/6/2016	1000	
8/11/2016	1100	
10/12/2016	1140	
12/9/2016	1100	
2/9/2017	1010	
4/6/2017	938	
6/15/2017	984	
8/10/2017	1020	
10/5/2017		1040

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	1180	
8/10/2016	1280	
10/13/2016	1140	
12/12/2016	1220	
2/9/2017	1180	
4/5/2017	1180	
6/15/2017	1120	
8/9/2017	1280	
10/5/2017		1230

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-7	MW-7
6/8/2016	910	
8/10/2016	946	
10/13/2016	938	
12/12/2016	902	
2/8/2017	890	
4/5/2017	916	
6/15/2017	890	
8/9/2017	968	
10/5/2017		944

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

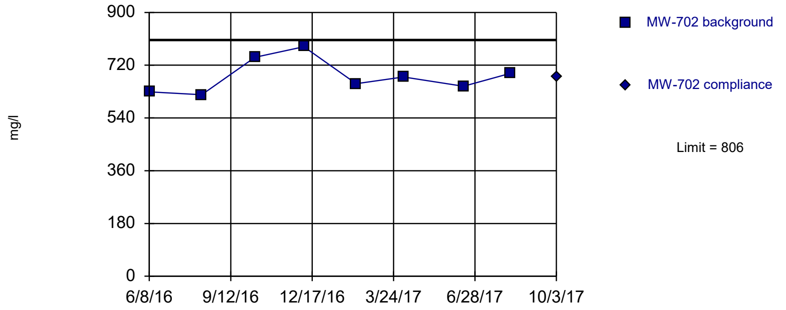
	MW-701	MW-701
6/7/2016	595	
8/9/2016	587	
10/11/2016	619	
12/6/2016	658	
2/7/2017	631	
4/4/2017	607	
6/13/2017	612	
8/8/2017	613	
10/3/2017		595

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=682, Std. Dev.=57.4, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.918, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

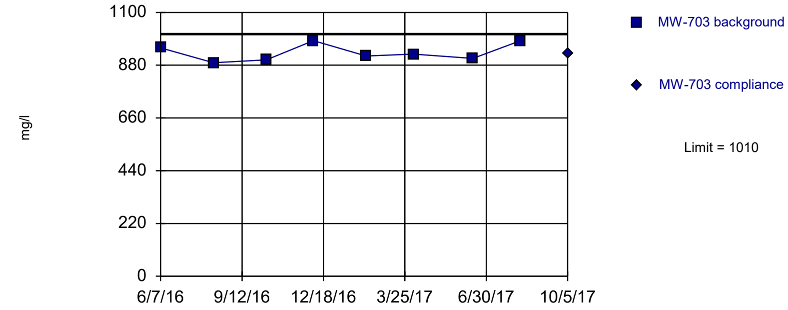
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=933, Std. Dev.=35.6, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.895, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

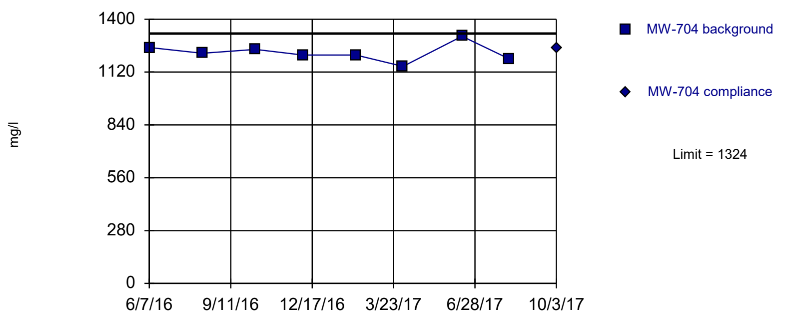
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1223, Std. Dev.=46.8, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.963, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

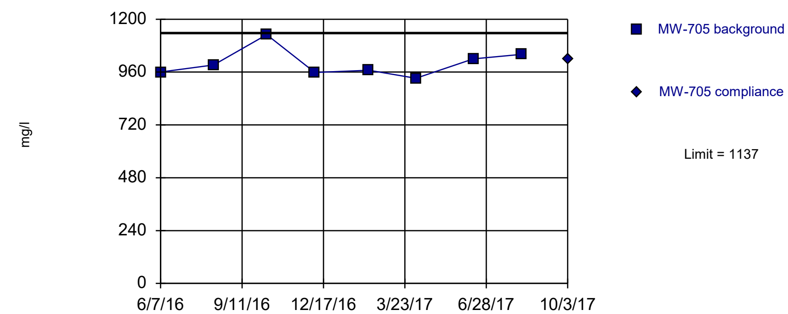
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1000, Std. Dev.=63.2, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.888, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-702	MW-702
6/8/2016	629	
8/9/2016	619	
10/11/2016	747	
12/8/2016	783	
2/8/2017	657	
4/5/2017	680	
6/15/2017	648	
8/9/2017	692	
10/3/2017		680

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	952	
8/9/2016	890	
10/11/2016	902	
12/6/2016	982	
2/7/2017	918	
4/4/2017	926	
6/14/2017	908	
8/10/2017	982	
10/5/2017		930

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	1250	
8/9/2016	1220	
10/11/2016	1240	
12/6/2016	1210	
2/7/2017	1210	
4/4/2017	1150	
6/13/2017	1310	
8/8/2017	1190	
10/3/2017		1250

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

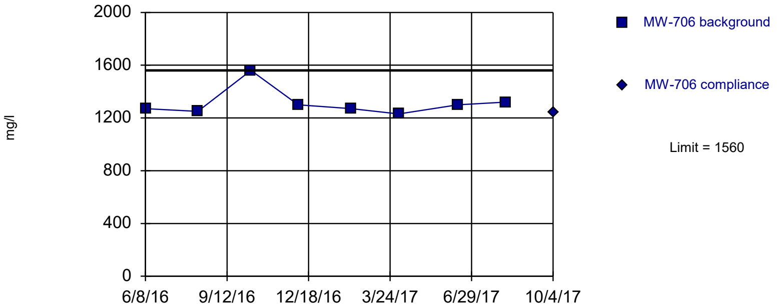
	MW-705	MW-705
6/7/2016	960	
8/9/2016	992	
10/11/2016	1130	
12/7/2016	958	
2/9/2017	968	
4/6/2017	932	
6/13/2017	1020	
8/9/2017	1040	
10/3/2017		1020

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. 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 8 background values. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

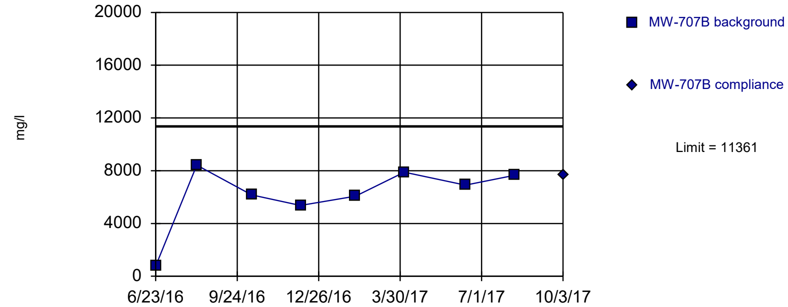
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6154, Std. Dev.=2406, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.814, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

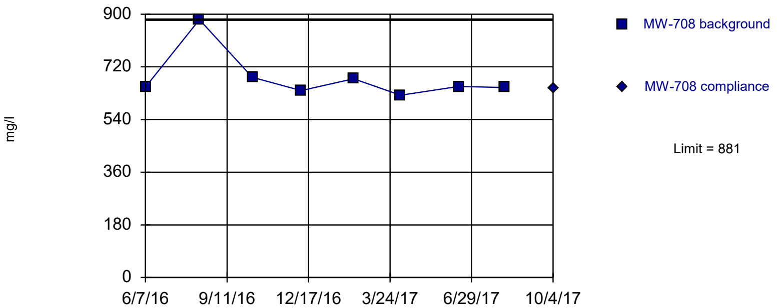
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. 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 8 background values. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

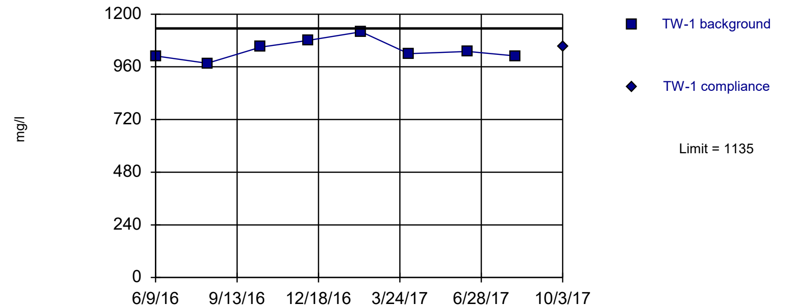
Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1037, Std. Dev.=45.4, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.946, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: DISSOLVED SOLIDS Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-706	MW-706
6/8/2016	1270	
8/9/2016	1250	
10/11/2016	1560	
12/6/2016	1300	
2/7/2017	1270	
4/4/2017	1230	
6/13/2017	1300	
8/9/2017	1320	
10/4/2017		1240

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	770	
8/9/2016	8420	
10/11/2016	6160	
12/6/2016	5370	
2/7/2017	6070	
4/4/2017	7890	
6/13/2017	6910	
8/8/2017	7640	
10/3/2017		7690

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-708	MW-708
6/7/2016	651	
8/10/2016	881	
10/12/2016	684	
12/9/2016	639	
2/9/2017	679	
4/6/2017	623	
6/14/2017	653	
8/8/2017	649	
10/4/2017		645

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

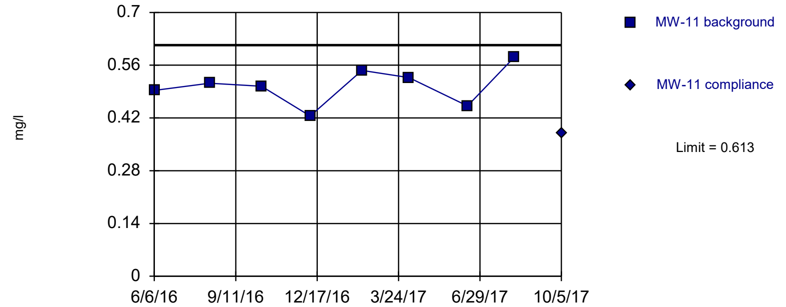
	TW-1	TW-1
6/9/2016	1010	
8/9/2016	976	
10/11/2016	1050	
12/6/2016	1080	
2/7/2017	1120	
4/4/2017	1020	
6/13/2017	1030	
8/8/2017	1010	
10/3/2017		1050

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.505, Std. Dev.=0.05, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.983, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

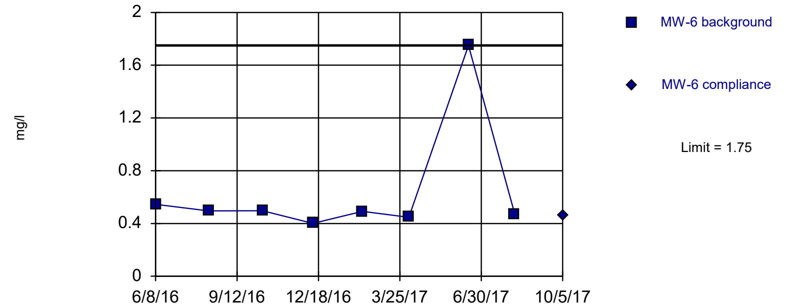
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. 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 8 background values. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

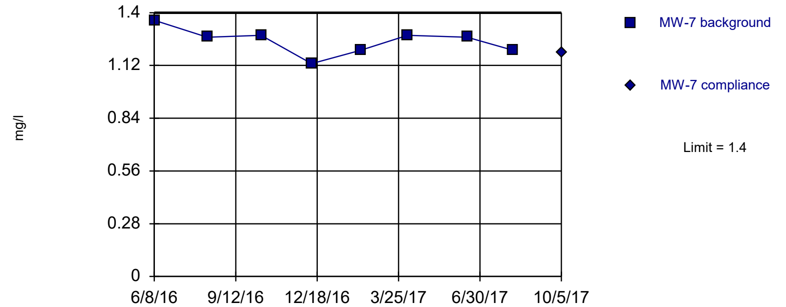
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.25, Std. Dev.=0.0698, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.934, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

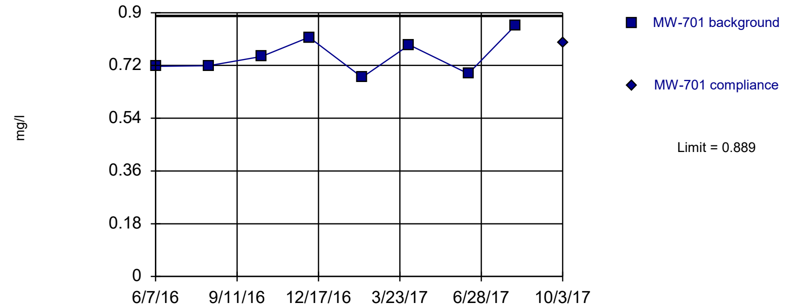
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.753, Std. Dev.=0.063, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11
6/6/2016	0.493	
8/11/2016	0.512	
10/12/2016	0.504	
12/9/2016	0.425	
2/9/2017	0.546	
4/6/2017	0.527	
6/15/2017	0.452	
8/10/2017	0.582	
10/5/2017		0.379

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	0.545	
8/10/2016	0.495	
10/13/2016	0.497	
12/12/2016	0.401	
2/9/2017	0.492	
4/5/2017	0.447	
6/15/2017	1.75	
8/9/2017	0.473	
10/5/2017		0.464

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	1.36	
8/10/2016	1.27	
10/13/2016	1.28	
12/12/2016	1.13	
2/8/2017	1.2	
4/5/2017	1.28	
6/15/2017	1.27	
8/9/2017	1.2	
10/5/2017		1.19

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

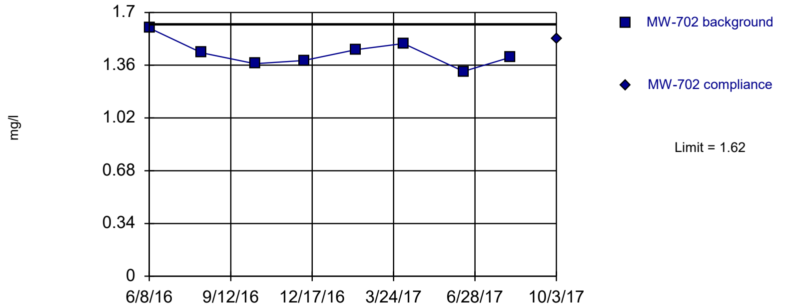
	MW-701	MW-701
6/7/2016	0.717	
8/9/2016	0.719	
10/11/2016	0.751	
12/6/2016	0.816	
2/7/2017	0.679	
4/4/2017	0.79	
6/13/2017	0.692	
8/8/2017	0.857	
10/3/2017		0.798

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.44, Std. Dev.=0.0863, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.966, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

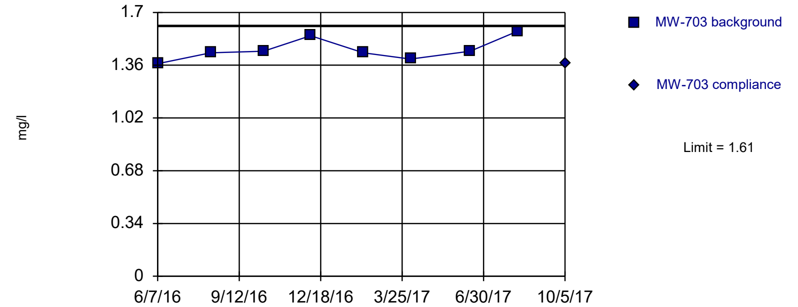
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.46, Std. Dev.=0.0709, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.889, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

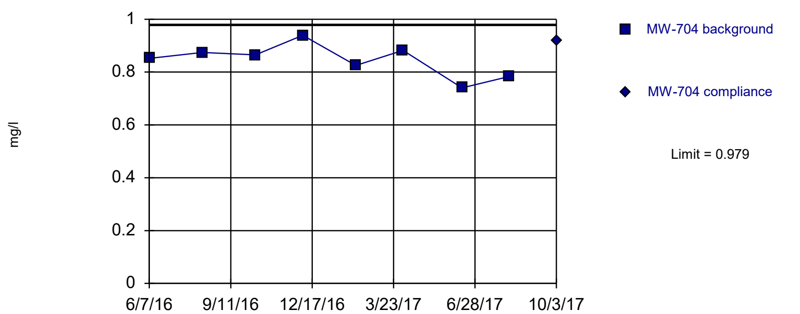
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.845, Std. Dev.=0.0618, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.969, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

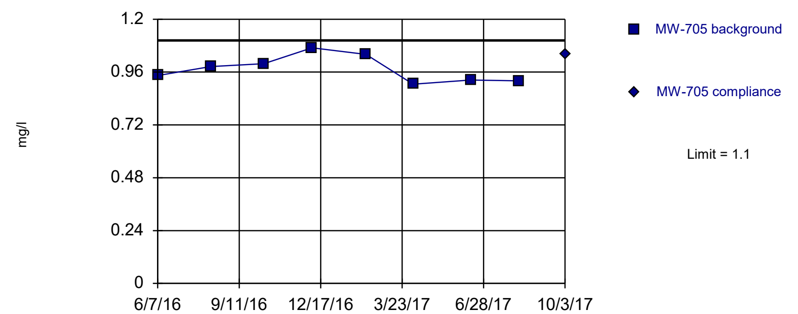
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.973, Std. Dev.=0.0602, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.924, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	1.6	
8/9/2016	1.44	
10/11/2016	1.37	
12/8/2016	1.39	
2/8/2017	1.46	
4/5/2017	1.5	
6/15/2017	1.32	
8/9/2017	1.41	
10/3/2017		1.53

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	1.37	
8/9/2016	1.44	
10/11/2016	1.45	
12/6/2016	1.55	
2/7/2017	1.44	
4/4/2017	1.4	
6/14/2017	1.45	
8/10/2017	1.58	
10/5/2017		1.37

Prediction Limit

Constituent: FLUORIDE (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-704	MW-704
6/7/2016	0.852	
8/9/2016	0.874	
10/11/2016	0.865	
12/6/2016	0.939	
2/7/2017	0.825	
4/4/2017	0.882	
6/13/2017	0.74	
8/8/2017	0.783	
10/3/2017		0.917

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

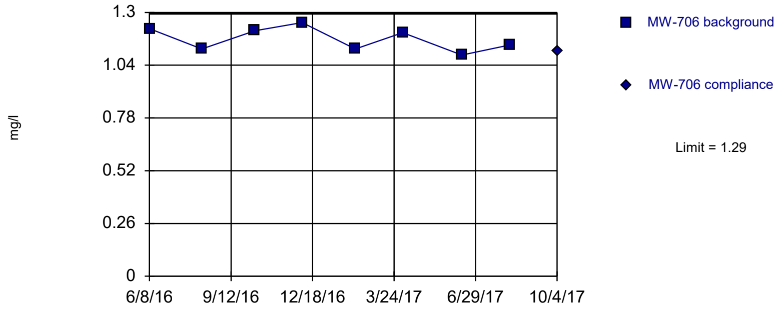
LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-705	MW-705
6/7/2016	0.944	
8/9/2016	0.985	
10/11/2016	0.998	
12/7/2016	1.07	
2/9/2017	1.04	
4/6/2017	0.905	
6/13/2017	0.924	
8/9/2017	0.92	
10/3/2017		1.04

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.17, Std. Dev.=0.0582, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.919, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

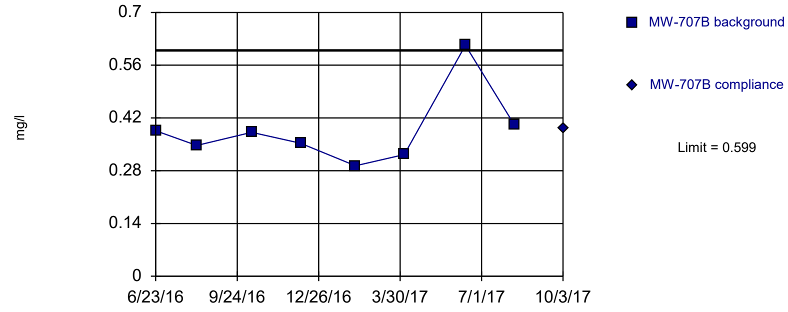
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.387, Std. Dev.=0.0978, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.77, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

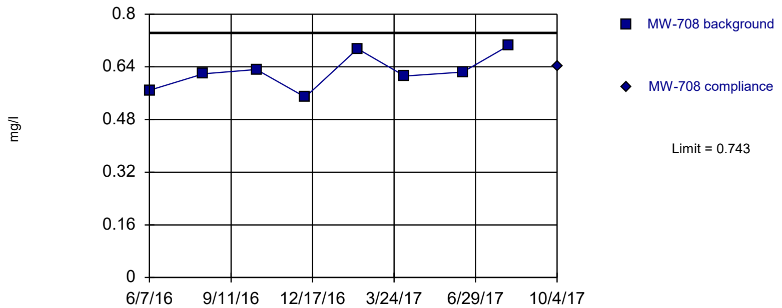
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.626, Std. Dev.=0.0543, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.932, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

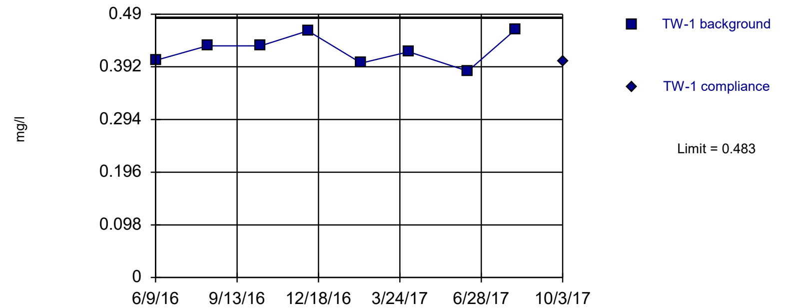
Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.424, Std. Dev.=0.0276, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.943, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: FLUORIDE Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-706	MW-706
6/8/2016	1.22	
8/9/2016	1.12	
10/11/2016	1.21	
12/6/2016	1.25	
2/7/2017	1.12	
4/4/2017	1.2	
6/13/2017	1.09	
8/9/2017	1.14	
10/4/2017		1.11

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	0.386	
8/9/2016	0.347	
10/11/2016	0.382	
12/6/2016	0.353	
2/7/2017	0.293	
4/4/2017	0.323	
6/13/2017	0.613	
8/8/2017	0.402	
10/3/2017		0.391

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	0.569	
8/10/2016	0.619	
10/12/2016	0.632	
12/9/2016	0.548	
2/9/2017	0.695	
4/6/2017	0.612	
6/14/2017	0.624	
8/8/2017	0.705	
10/4/2017		0.642

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

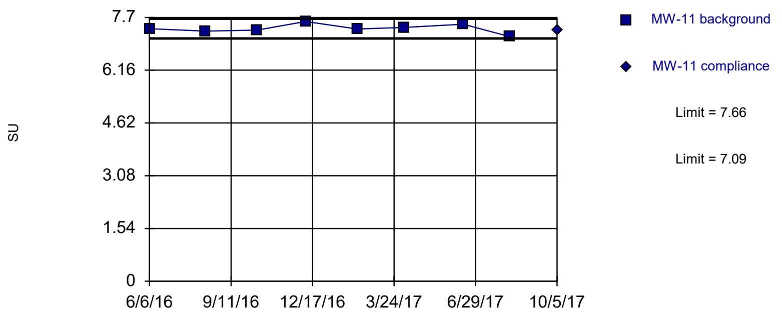
LaCygne   Client: SCS Engineers   Data: LaC GW Data

	TW-1	TW-1
6/9/2016	0.404	
8/9/2016	0.431	
10/11/2016	0.431	
12/6/2016	0.459	
2/7/2017	0.399	
4/4/2017	0.42	
6/13/2017	0.384	
8/8/2017	0.461	
10/3/2017		0.403

Within Limits

Prediction Limit

Intrawell Parametric



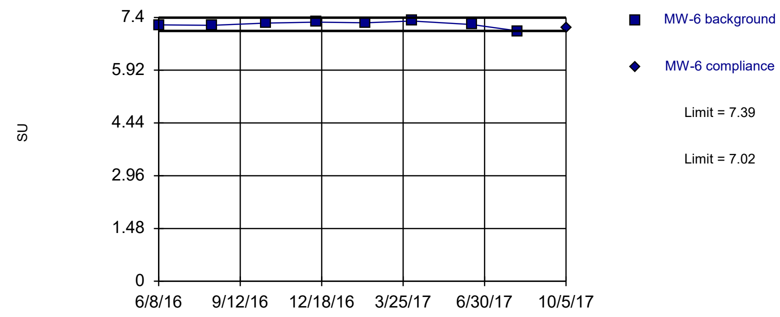
Background Data Summary: Mean=7.37, Std. Dev.=0.132, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.97, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limits

Prediction Limit

Intrawell Parametric



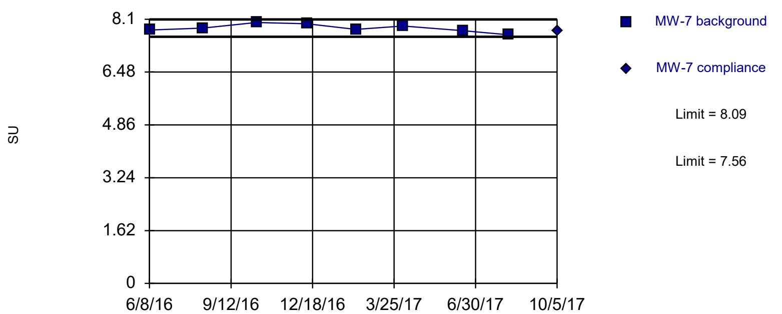
Background Data Summary: Mean=7.21, Std. Dev.=0.0858, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.86, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limits

Prediction Limit

Intrawell Parametric



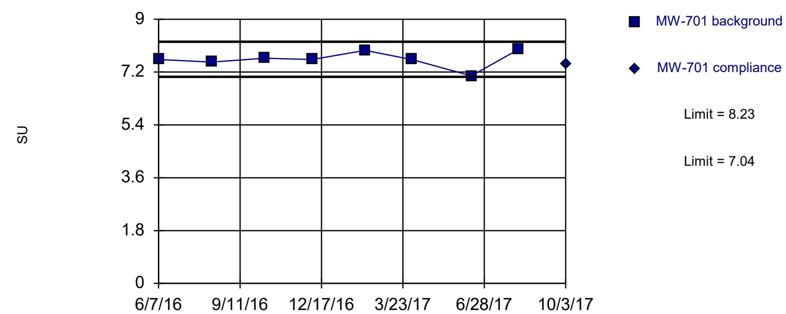
Background Data Summary: Mean=7.83, Std. Dev.=0.122, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.973, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.63, Std. Dev.=0.276, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.864, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:38 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11
6/6/2016	7.37	
8/11/2016	7.3	
10/12/2016	7.33	
12/9/2016	7.58	
2/9/2017	7.36	
4/6/2017	7.41	
6/15/2017	7.5	
8/10/2017	7.14	
10/5/2017		7.33

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	7.19	
8/10/2016	7.18	
10/13/2016	7.24	
12/12/2016	7.27	
2/9/2017	7.25	
4/5/2017	7.3	
6/15/2017	7.2	
8/9/2017	7.02	
10/5/2017		7.11

Prediction Limit

Constituent: pH (SU) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-7	MW-7
6/8/2016	7.77	
8/10/2016	7.83	
10/13/2016	8	
12/12/2016	7.96	
2/8/2017	7.79	
4/5/2017	7.89	
6/15/2017	7.75	
8/9/2017	7.62	
10/5/2017		7.74

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

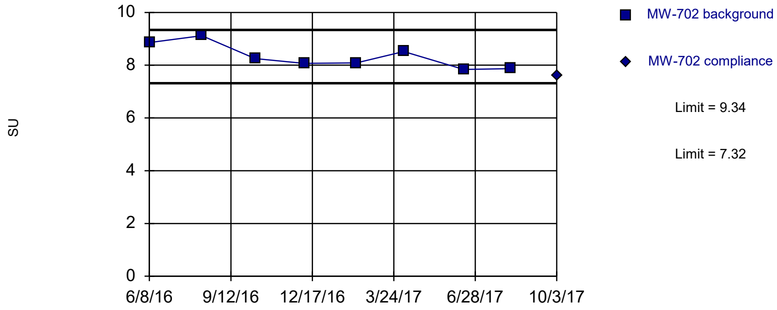
	MW-701	MW-701
6/7/2016	7.63	
8/9/2016	7.54	
10/11/2016	7.67	
12/6/2016	7.63	
2/7/2017	7.94	
4/4/2017	7.62	
6/13/2017	7.07	
8/8/2017	7.97	
10/3/2017		7.49

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.33, Std. Dev.=0.467, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.906, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III

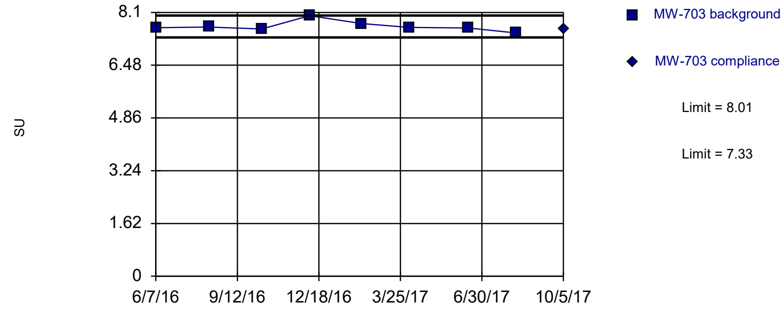
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.67, Std. Dev.=0.155, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.857, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III

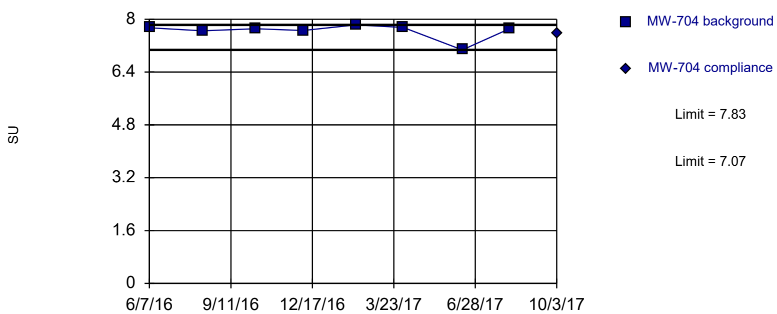
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.0236. Individual comparison alpha = 0.0118 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III

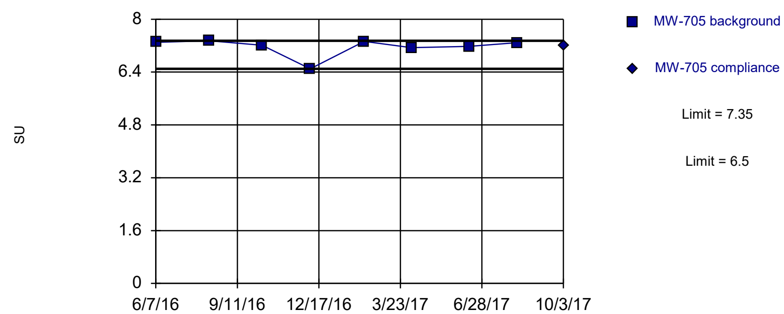
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.0236. Individual comparison alpha = 0.0118 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	8.86	
8/9/2016	9.12	
10/11/2016	8.25	
12/8/2016	8.07	
2/8/2017	8.09	
4/5/2017	8.52	
6/15/2017	7.84	
8/9/2017	7.87	
10/3/2017		7.6

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	7.63	
8/9/2016	7.65	
10/11/2016	7.59	
12/7/2016	8	
2/7/2017	7.76	
4/4/2017	7.64	
6/14/2017	7.62	
8/10/2017	7.47	
10/5/2017		7.58

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	7.74	
8/9/2016	7.65	
10/11/2016	7.71	
12/6/2016	7.66	
2/7/2017	7.83	
4/4/2017	7.75	
6/13/2017	7.07	
8/8/2017	7.71	
10/3/2017		7.58

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

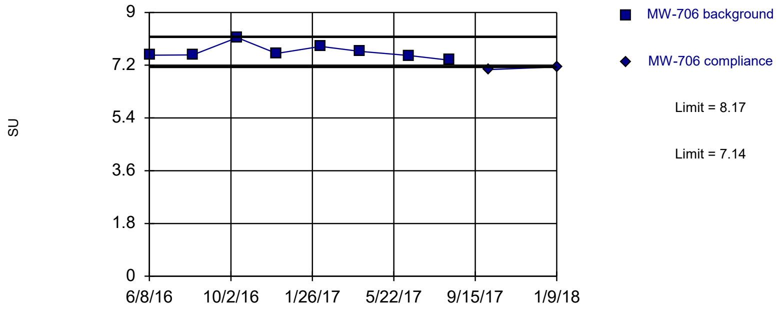
LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-705	MW-705
6/7/2016	7.3	
8/9/2016	7.35	
10/11/2016	7.21	
12/7/2016	6.5	
2/9/2017	7.33	
4/6/2017	7.14	
6/13/2017	7.18	
8/9/2017	7.29	
10/3/2017		7.21

Exceeds Limits

Prediction Limit

Intrawell Parametric



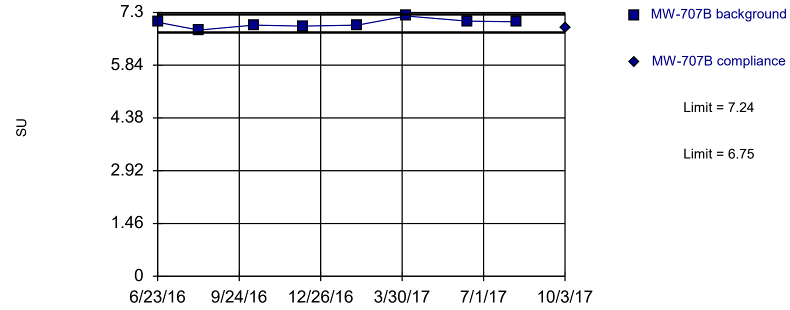
Background Data Summary: Mean=7.66, Std. Dev.=0.237, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.883, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limits

Prediction Limit

Intrawell Parametric



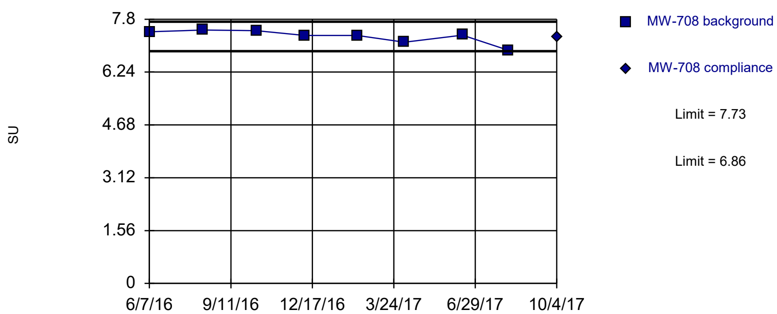
Background Data Summary: Mean=7, Std. Dev.=0.116, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.967, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limits

Prediction Limit

Intrawell Parametric



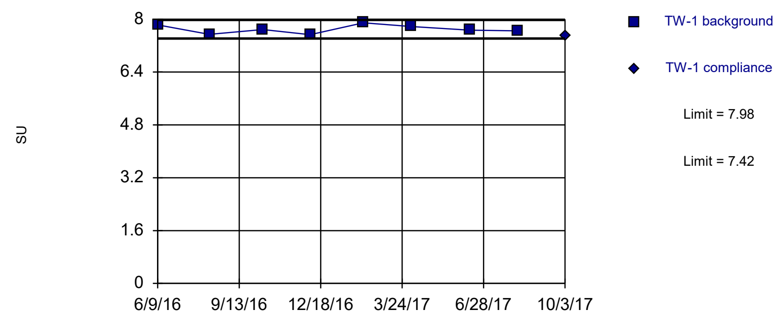
Background Data Summary: Mean=7.29, Std. Dev.=0.202, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.844, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.7, Std. Dev.=0.129, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.947, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: pH (SU) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-706	MW-706
6/8/2016	7.54	
8/9/2016	7.55	
10/11/2016	8.14	
12/6/2016	7.6	
2/7/2017	7.84	
4/4/2017	7.67	
6/13/2017	7.53	
8/9/2017	7.37	
10/4/2017		7.05
1/9/2018		7.14 1st verification re-sample

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	7.03	
8/9/2016	6.81	
10/11/2016	6.95	
12/6/2016	6.92	
2/7/2017	6.95	
4/4/2017	7.2	
6/13/2017	7.06	
8/8/2017	7.04	
10/3/2017		6.88

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	7.43	
8/10/2016	7.48	
10/12/2016	7.46	
12/9/2016	7.32	
2/9/2017	7.32	
4/6/2017	7.12	
6/14/2017	7.33	
8/8/2017	6.88	
10/4/2017		7.27

Prediction Limit

Constituent: pH (SU)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

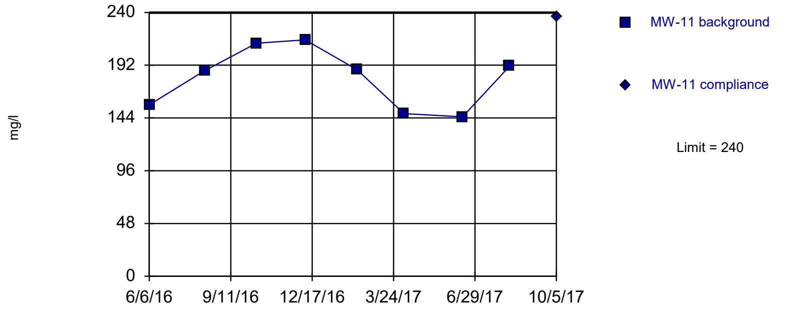
	TW-1	TW-1
6/9/2016	7.83	
8/9/2016	7.54	
10/11/2016	7.69	
12/6/2016	7.53	
2/7/2017	7.89	
4/4/2017	7.78	
6/13/2017	7.67	
8/8/2017	7.65	
10/3/2017		7.48

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=180, Std. Dev.=27.5, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.891, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

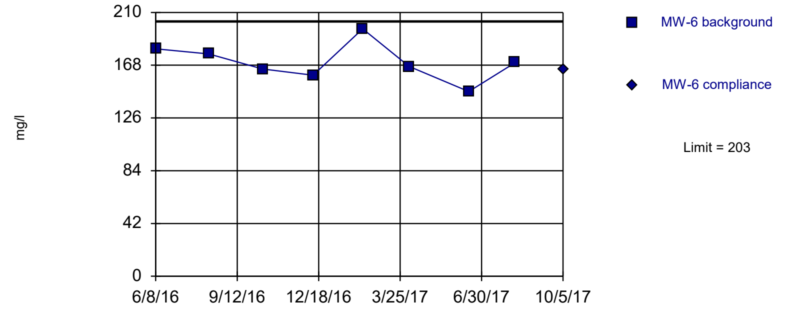
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=171, Std. Dev.=14.9, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.983, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

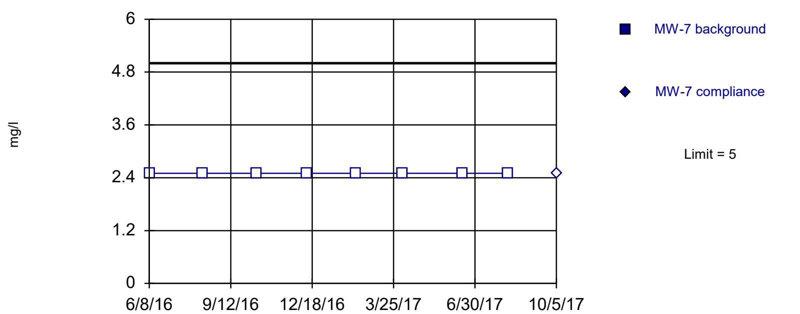
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate 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 = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

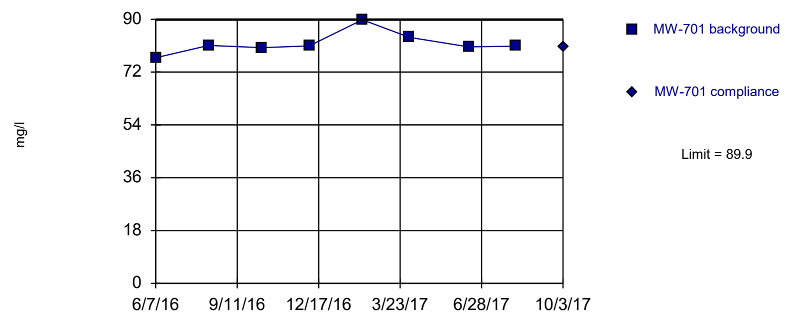
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=81.8, Std. Dev.=3.74, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.828, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: SULFATE (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-11	MW-11
6/6/2016	156	
8/11/2016	187	
10/12/2016	212	
12/9/2016	215	
2/9/2017	188	
4/6/2017	148	
6/15/2017	145	
8/10/2017	191	
10/5/2017		236

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	181	
8/10/2016	177	
10/13/2016	165	
12/12/2016	160	
2/9/2017	197	
4/5/2017	167	
6/15/2017	147	
8/9/2017	170	
10/5/2017		165

Prediction Limit

Constituent: SULFATE (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-7	MW-7
6/8/2016	<5	
8/10/2016	<5	
10/13/2016	<5	
12/12/2016	<5	
2/8/2017	<5	
4/5/2017	<5	
6/15/2017	<5	
8/9/2017	<5	
10/5/2017		<5

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

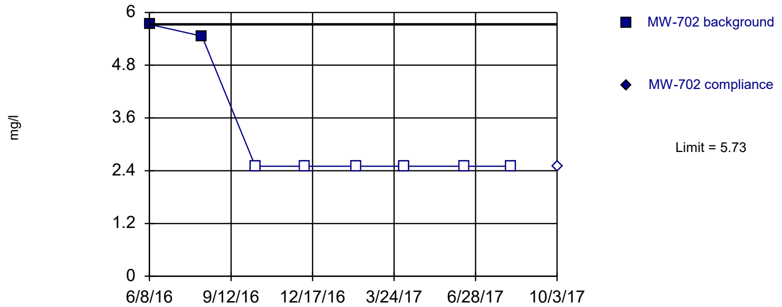
	MW-701	MW-701
6/7/2016	76.9	
8/9/2016	81.1	
10/11/2016	80.3	
12/6/2016	80.9	
2/7/2017	89.8	
4/4/2017	83.8	
6/13/2017	80.6	
8/8/2017	80.8	
10/3/2017		80.6

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

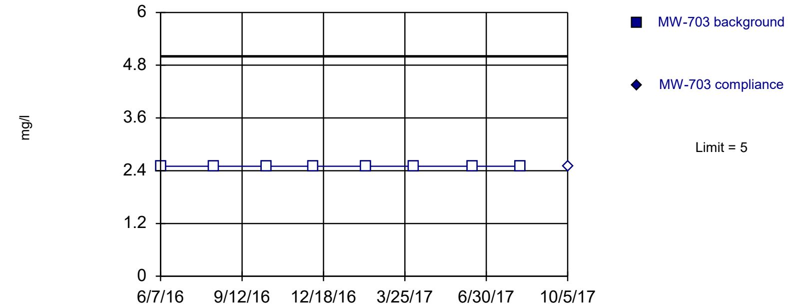
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate 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 = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

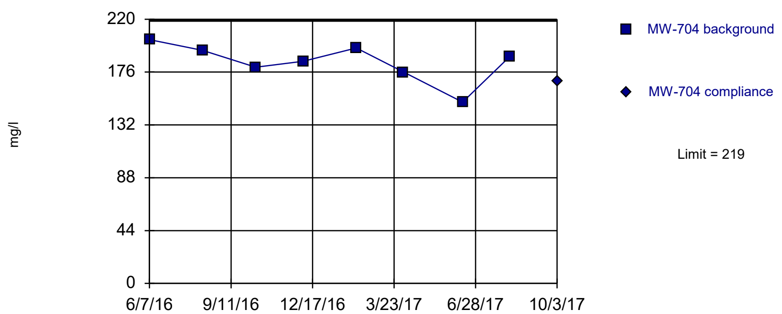
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=184, Std. Dev.=16, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.91, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

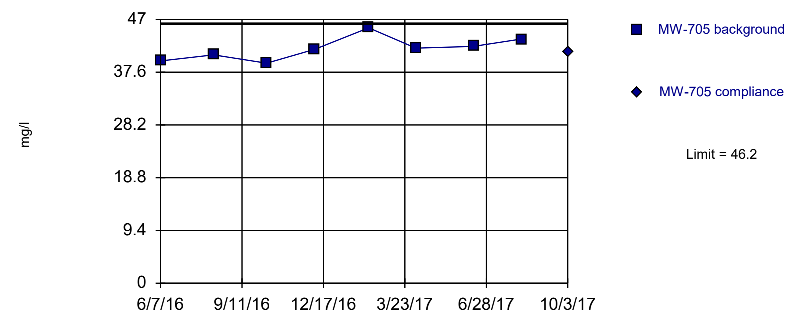
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=41.8, Std. Dev.=2.06, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: SULFATE (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-702	MW-702
6/8/2016	5.73	
8/9/2016	5.46	
10/11/2016	<5	
12/8/2016	<5	
2/8/2017	<5	
4/5/2017	<5	
6/15/2017	<5	
8/9/2017	<5	
10/3/2017		<5

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	<5	
8/9/2016	<5	
10/11/2016	<5	
12/6/2016	<5	
2/7/2017	<5	
4/4/2017	<5	
6/14/2017	<5	
8/10/2017	<5	
10/5/2017		<5

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	203	
8/9/2016	194	
10/11/2016	180	
12/6/2016	185	
2/7/2017	196	
4/4/2017	176	
6/13/2017	151	
8/8/2017	189	
10/3/2017		168

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

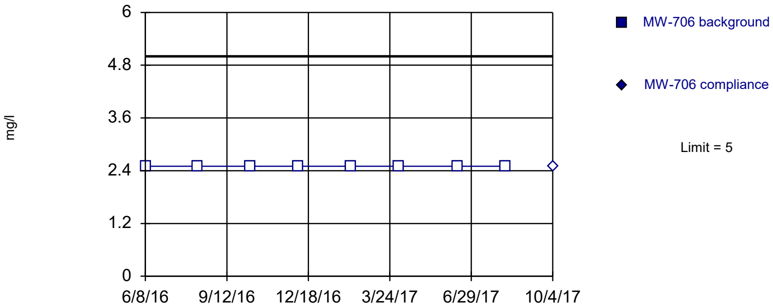
	MW-705	MW-705
6/7/2016	39.6	
8/9/2016	40.7	
10/11/2016	39.2	
12/7/2016	41.7	
2/9/2017	45.5	
4/6/2017	41.9	
6/13/2017	42.2	
8/9/2017	43.5	
10/3/2017		41.3

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate 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 = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

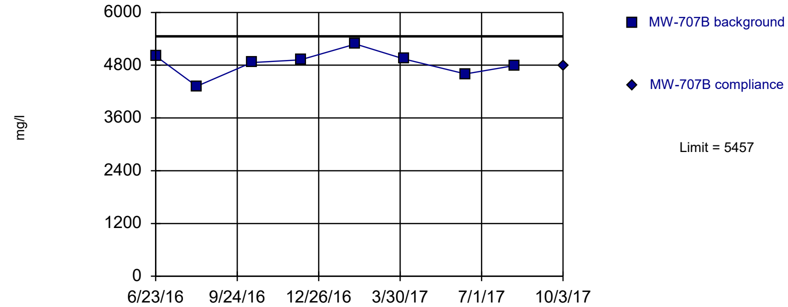
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4840, Std. Dev.=285, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.962, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

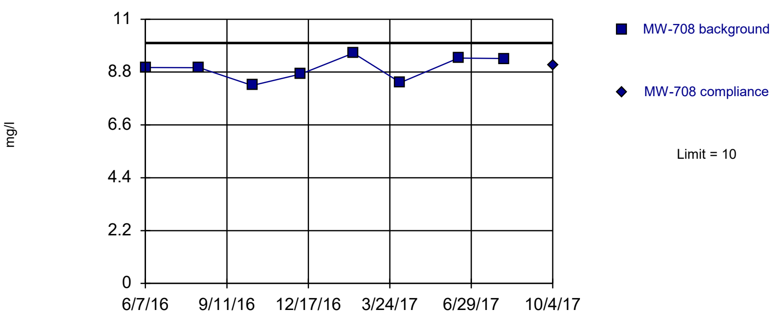
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.95, Std. Dev.=0.488, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

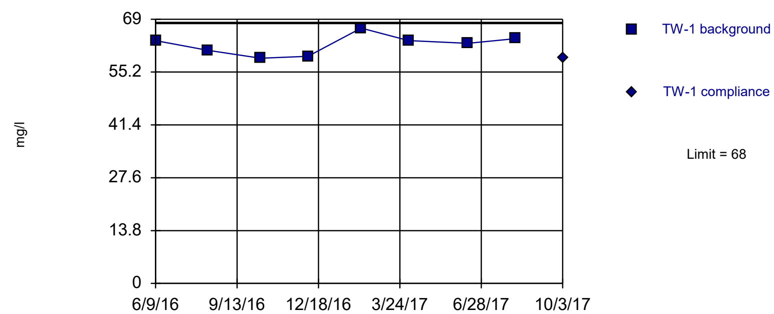
Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.5.32 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=62.4, Std. Dev.=2.61, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.945, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: SULFATE Analysis Run 1/14/2018 6:39 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: SULFATE (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-706	MW-706
6/8/2016	<5	
8/9/2016	<5	
10/11/2016	<5	
12/6/2016	<5	
2/7/2017	<5	
4/4/2017	<5	
6/13/2017	<5	
8/9/2017	<5	
10/4/2017		<5

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	5010	
8/9/2016	4320	
10/11/2016	4860	
12/6/2016	4920	
2/7/2017	5280	
4/4/2017	4940	
6/13/2017	4600	
8/8/2017	4790	
10/3/2017		4800

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 1/14/2018 6:40 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	8.99	
8/10/2016	8.98	
10/12/2016	8.24	
12/9/2016	8.72	
2/9/2017	9.59	
4/6/2017	8.36	
6/14/2017	9.38	
8/8/2017	9.36	
10/4/2017		9.09

Prediction Limit

Constituent: SULFATE (mg/l) Analysis Run 1/14/2018 6:40 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	TW-1	TW-1
6/9/2016	63.4	
8/9/2016	60.9	
10/11/2016	58.8	
12/6/2016	59.3	
2/7/2017	66.7	
4/4/2017	63.4	
6/13/2017	62.7	
8/8/2017	63.9	
10/3/2017		59

Prediction Limit

LaCygne   Client: SCS Engineers   Data: LaC GW Data   Printed 1/14/2018, 6:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
BORON (mg/l)	MW-11	1.17	n/a	10/5/2017	0.988	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-6	1.24	n/a	10/5/2017	1.11	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-7	1.71	n/a	10/5/2017	1.59	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-701	1.1	n/a	10/3/2017	1.09	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-702	2.04	n/a	10/3/2017	1.94	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-703	1.97	n/a	10/5/2017	1.88	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-704	2.15	n/a	10/3/2017	2.12	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-705	2.34	n/a	10/3/2017	2.13	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-706	2.29	n/a	10/4/2017	2.23	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-707B	2.12	n/a	10/3/2017	2.02	No	8	0	x^6	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-708	1.55	n/a	10/4/2017	1.49	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	TW-1	1.75	n/a	10/3/2017	1.65	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-11	74.3	n/a	10/5/2017	65.1	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-6	119	n/a	10/5/2017	105	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-7	29.1	n/a	10/5/2017	23.4	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-701	39.7	n/a	10/3/2017	36.1	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-702	23.3	n/a	10/3/2017	19.6	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-703	23.9	n/a	10/5/2017	21.6	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-704	36.4	n/a	10/3/2017	30.3	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-705	43.3	n/a	10/3/2017	36.1	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-706	36.9	n/a	10/4/2017	31.1	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-707B	429	n/a	10/3/2017	382	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-708	35.2	n/a	10/4/2017	32.7	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	TW-1	38.1	n/a	10/3/2017	33.4	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-11	139	n/a	10/5/2017	99.2	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-6	238	n/a	10/5/2017	208	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-7	119	n/a	10/5/2017	105	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-701	58.5	n/a	10/3/2017	51.5	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-702	51.8	n/a	10/3/2017	48.5	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-703	122	n/a	10/5/2017	111	No	8	0	x^4	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-704	85.1	n/a	10/3/2017	85	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-705	144	n/a	10/3/2017	138	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-706	307	n/a	10/4/2017	276	No	8	0	ln(x)	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-707B	251	n/a	10/3/2017	214	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-708	49.1	n/a	10/4/2017	48	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	TW-1	46.7	n/a	10/3/2017	44.9	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-11	1186	n/a	10/5/2017	1040	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-6	1325	n/a	10/5/2017	1230	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-7	981	n/a	10/5/2017	944	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-701	663	n/a	10/3/2017	595	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-702	806	n/a	10/3/2017	680	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-703	1010	n/a	10/5/2017	930	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-704	1324	n/a	10/3/2017	1250	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-705	1137	n/a	10/3/2017	1020	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-706	1560	n/a	10/4/2017	1240	No	8	0	n/a	0.00591	NP Intra (normality) ...
DISSOLVED SOLIDS (mg/l)	MW-707B	11361	n/a	10/3/2017	7690	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-708	881	n/a	10/4/2017	645	No	8	0	n/a	0.00591	NP Intra (normality) ...
DISSOLVED SOLIDS (mg/l)	TW-1	1135	n/a	10/3/2017	1050	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-11	0.613	n/a	10/5/2017	0.379	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-6	1.75	n/a	10/5/2017	0.464	No	8	0	n/a	0.00591	NP Intra (normality) ...

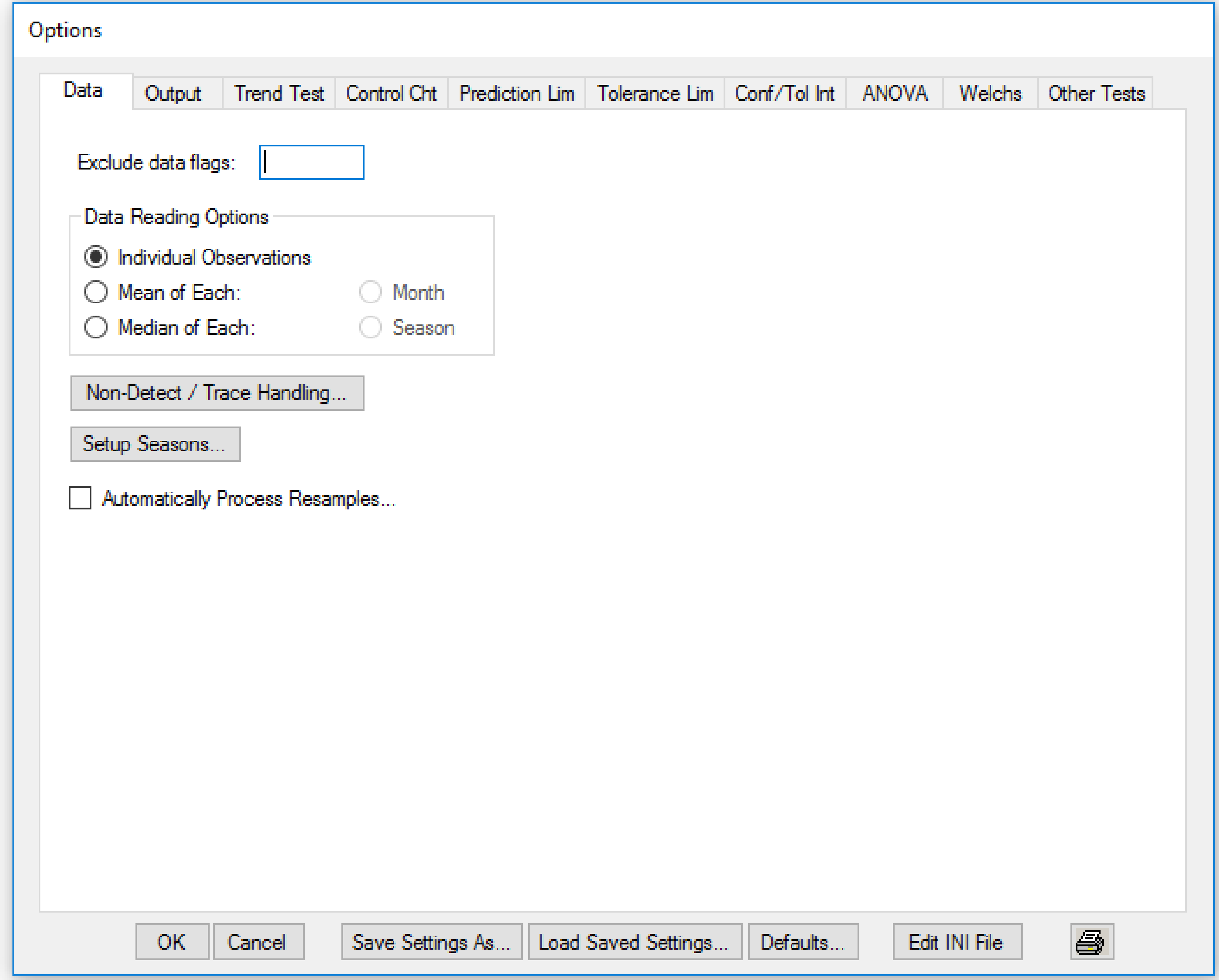
Prediction Limit

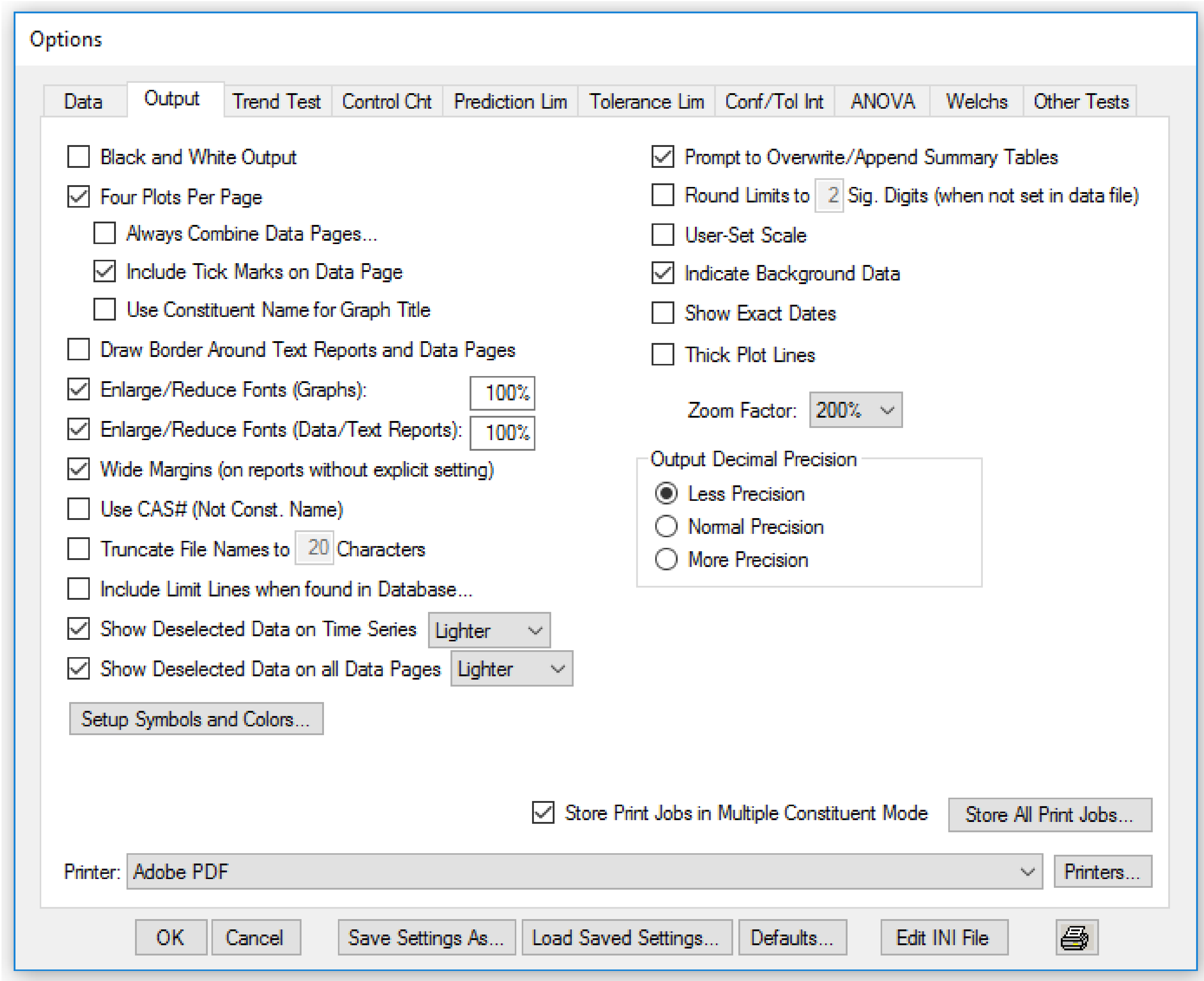
LaCygne Client: SCS Engineers Data: LaC GW Data Printed 1/14/2018, 6:40 PM

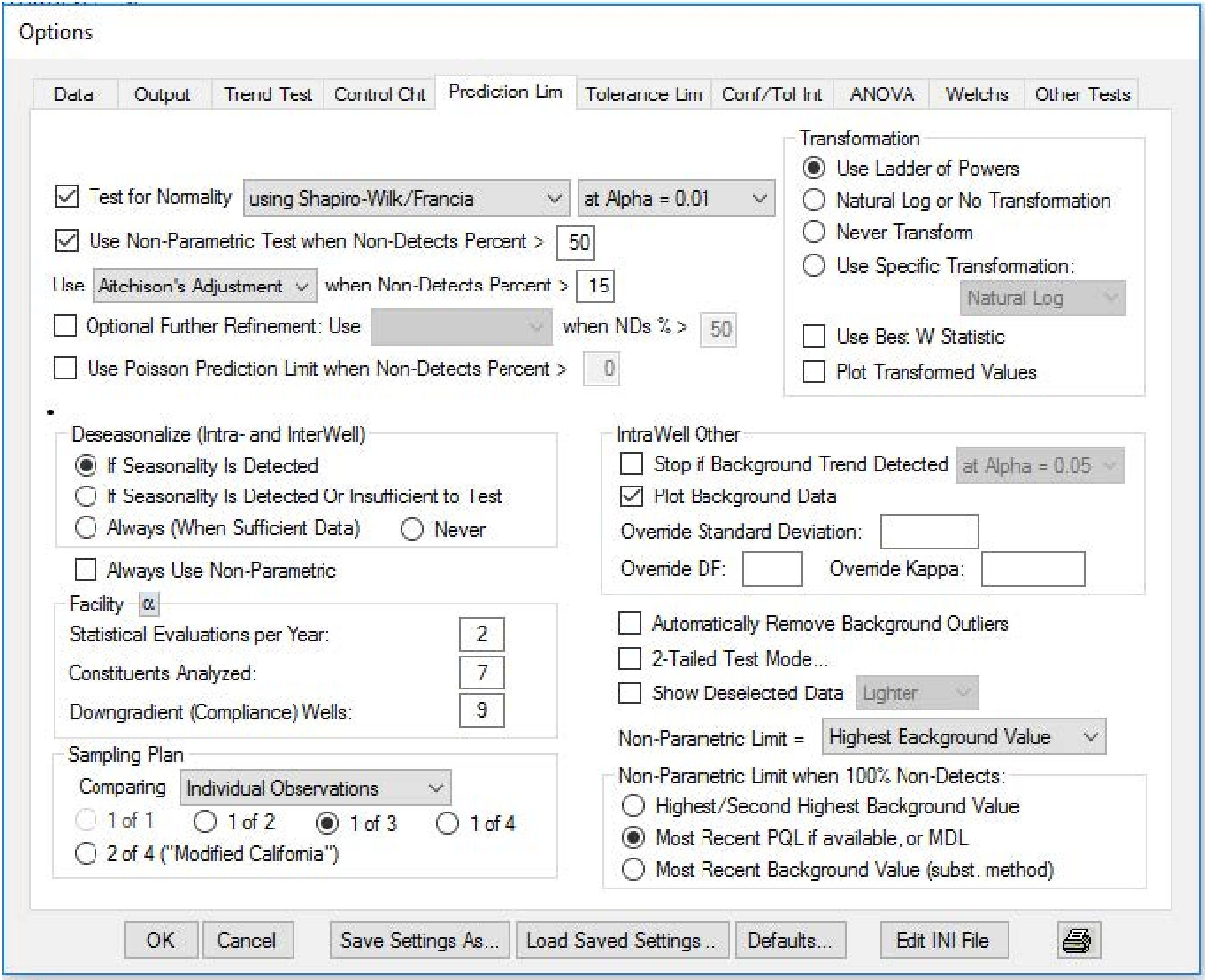
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
FLUORIDE (mg/l)	MW-7	1.4	n/a	10/5/2017	1.19	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-701	0.889	n/a	10/3/2017	0.798	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-702	1.62	n/a	10/3/2017	1.53	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-703	1.61	n/a	10/5/2017	1.37	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-704	0.979	n/a	10/3/2017	0.917	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-705	1.1	n/a	10/3/2017	1.04	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-706	1.29	n/a	10/4/2017	1.11	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-707B	0.599	n/a	10/3/2017	0.391	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-708	0.743	n/a	10/4/2017	0.642	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	TW-1	0.483	n/a	10/3/2017	0.403	No	8	0	No	0.000836	Param Intra 1 of 3
pH (SU)	MW-11	7.66	7.09	10/5/2017	7.33	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	MW-6	7.39	7.02	10/5/2017	7.11	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	MW-7	8.09	7.56	10/5/2017	7.74	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	MW-701	8.23	7.04	10/3/2017	7.49	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	MW-702	9.34	7.32	10/3/2017	7.6	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	MW-703	8.01	7.33	10/5/2017	7.58	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	MW-704	7.83	7.07	10/3/2017	7.58	No	8	0	n/a	0.0118	NP Intra (normality) ...
pH (SU)	MW-705	7.35	6.5	10/3/2017	7.21	No	8	0	n/a	0.0118	NP Intra (normality) ...
pH (SU)	**MW-706**	**8.17**	**7.14**	**1/9/2018**	**7.14**	**Yes**	**8**	**0**	**No**	**0.000418**	**Param Intra 1 of 3**
pH (SU)	MW-707B	7.24	6.75	10/3/2017	6.88	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	MW-708	7.73	6.86	10/4/2017	7.27	No	8	0	No	0.000418	Param Intra 1 of 3
pH (SU)	TW-1	7.98	7.42	10/3/2017	7.48	No	8	0	No	0.000418	Param Intra 1 of 3
SULFATE (mg/l)	MW-11	240	n/a	10/5/2017	236	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-6	203	n/a	10/5/2017	165	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-7	5	n/a	10/5/2017	2.5ND	No	8	100	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-701	89.9	n/a	10/3/2017	80.6	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-702	5.73	n/a	10/3/2017	2.5ND	No	8	75	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-703	5	n/a	10/5/2017	2.5ND	No	8	100	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-704	219	n/a	10/3/2017	168	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-705	46.2	n/a	10/3/2017	41.3	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-706	5	n/a	10/4/2017	2.5ND	No	8	100	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-707B	5457	n/a	10/3/2017	4800	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-708	10	n/a	10/4/2017	9.09	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	TW-1	68	n/a	10/3/2017	59	No	8	0	No	0.000836	Param Intra 1 of 3

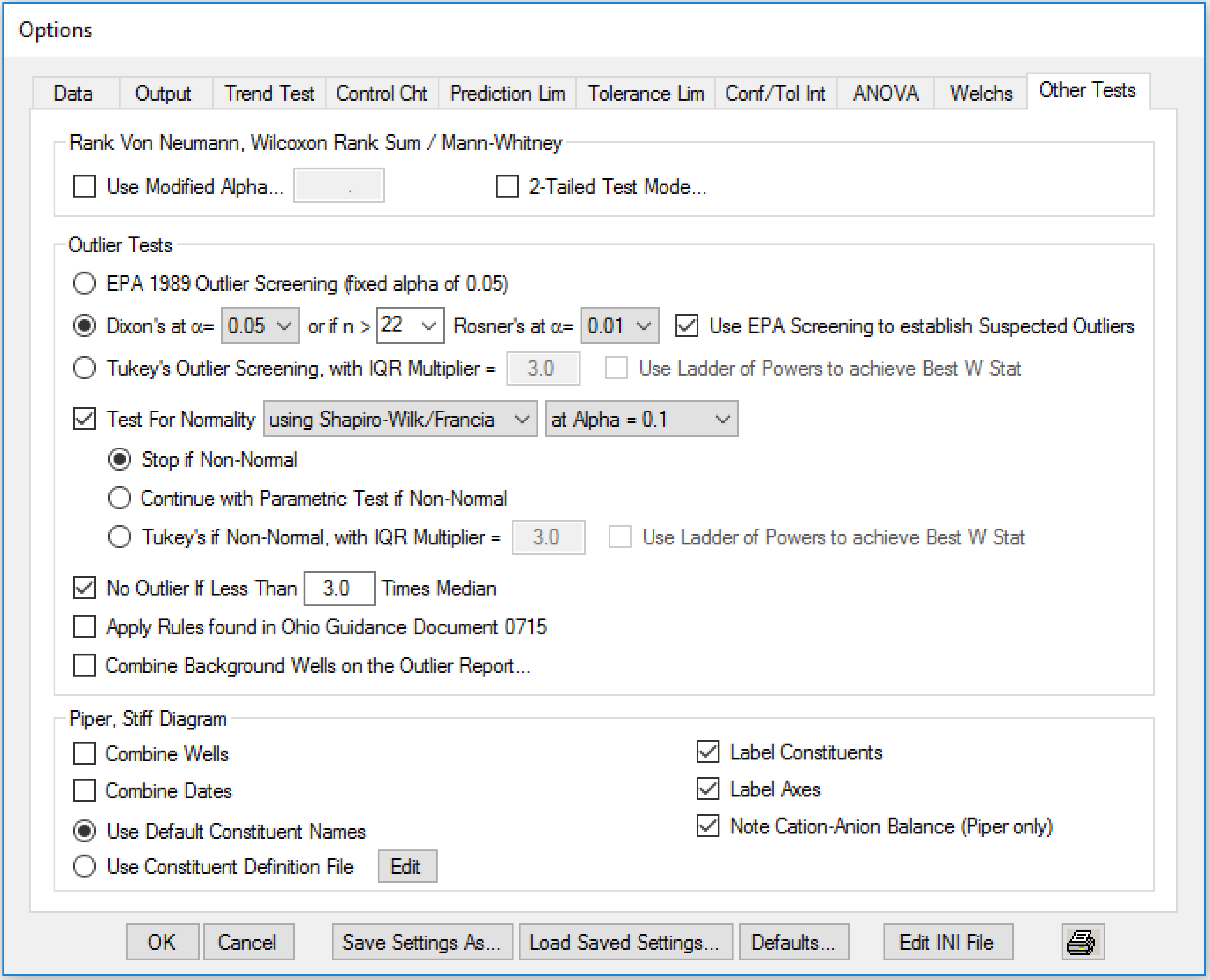
ATTACHMENT 2

Sanitas™ Configuration Settings


Options
Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Exclude data flags:
Data Reading Options
Individual Observations
Mean of Each:
Month
Median of Each:
Season
Non-Detect / Trace Handling...
Setup Seasons...
Automatically Process Resamples...
OK
Cancel
Save Settings As...
Load Saved Settings...
Defaults...
Edit INI File


Options
Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Black and White Output
Four Plots Per Page
Always Combine Data Pages...
Include Tick Marks on Data Page
Use Constituent Name for Graph Title
Draw Border Around Text Reports and Data Pages
Enlarge/Reduce Fonts (Graphs): 100%
Enlarge/Reduce Fonts (Data/Text Reports): 100%
Wide Margins (on reports without explicit setting)
Use CAS# (Not Const. Name)
Truncate File Names to 20 Characters
Include Limit Lines when found in Database...
Show Deselected Data on Time Series Lighter
Show Deselected Data on all Data Pages Lighter
Setup Symbols and Colors...
Prompt to Overwrite/Append Summary Tables
Round Limits to 2 Sig. Digits (when not set in data file)
User-Set Scale
Indicate Background Data
Show Exact Dates
Thick Plot Lines
Zoom Factor: 200%
Output Decimal Precision
Less Precision
Normal Precision
More Precision
Store Print Jobs in Multiple Constituent Mode
Store All Print Jobs...
Printer: Adobe PDF
Printers...
OK
Cancel
Save Settings As...
Load Saved Settings...
Defaults...
Edit INI File


Options
Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Transformation
Use Ladder of Powers
Natural Log or No Transformation
Never Transform
Use Specific Transformation:
Natural Log
Use Best W Statistic
Plot Transformed Values
Test for Normality
using Shapiro-Wilk/Francia
at Alpha = 0.01
Use Non-Parametric Test when Non-Detects Percent >
50
Use
Aitchison's Adjustment
when Non-Detects Percent >
15
Optional Further Refinement: Use
when NDs % >
50
Use Poisson Prediction Limit when Non-Detects Percent >
0
Deseasonalize (Intra- and InterWell)
If Seasonality Is Detected
If Seasonality Is Detected Or Insufficient to Test
Always (When Sufficient Data)
Never
Always Use Non-Parametric
Facility
α
Statistical Evaluations per Year:
2
Constituents Analyzed:
7
Downgradient (Compliance) Wells:
9
Sampling Plan
Comparing
Individual Observations
1 of 1
1 of 2
1 of 3
1 of 4
2 of 4 ("Modified California")
IntraWell Other
Stop if Background Trend Detected
at Alpha = 0.05
Plot Background Data
Override Standard Deviation:
Override DF:
Override Kappa:
Automatically Remove Background Outliers
2-Tailed Test Mode...
Show Deselected Data
Lighter
Non-Parametric Limit =
Highest Background Value
Non-Parametric Limit when 100% Non-Detects:
Highest/Second Highest Background Value
Most Recent PQL if available, or MDL
Most Recent Background Value (subst. method)
OK
Cancel
Save Settings As...
Load Saved Settings...
Defaults...
Edit INI File


Options
Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Rank Von Neumann, Wilcoxon Rank Sum / Mann-Whitney
Use Modified Alpha...
2-Tailed Test Mode...
Outlier Tests
EPA 1989 Outlier Screening (fixed alpha of 0.05)
Dixon's at α= 0.05 or if n > 22 Rosner's at α= 0.01
Use EPA Screening to establish Suspected Outliers
Tukey's Outlier Screening, with IQR Multiplier = 3.0
Use Ladder of Powers to achieve Best W Stat
Test For Normality using Shapiro-Wilk/Francia at Alpha = 0.1
Stop if Non-Normal
Continue with Parametric Test if Non-Normal
Tukey's if Non-Normal, with IQR Multiplier = 3.0
Use Ladder of Powers to achieve Best W Stat
No Outlier If Less Than 3.0 Times Median
Apply Rules found in Ohio Guidance Document 0715
Combine Background Wells on the Outlier Report...
Piper, Stiff Diagram
Combine Wells
Combine Dates
Use Default Constituent Names
Use Constituent Definition File
Edit
Label Constituents
Label Axes
Note Cation-Anion Balance (Piper only)
OK
Cancel
Save Settings As...
Load Saved Settings...
Defaults...
Edit INI File

ATTACHMENT 2-2

Spring 2018 Semiannual Detection Monitoring Statistical Analyses

MEMORANDUM

September 11, 2018

JOHN R. ROCKHOLD
LICENSED
29
9-11-18
KANSAS
PROFESSIONAL GEOLOGIST

To: **La Cygne Generating Station**
25166 East 2200 Road
La Cygne, Kansas 66040
Kansas City Power & Light Company

From: SCS Engineers

RE: Determination of Statistically Significant Increases –
Upper AQC Impoundment
Spring 2018 Semiannual Detection Monitoring 40 CFR 257.94

Statistical analysis of monitoring data from the groundwater monitoring system for the CCR Upper AQC Impoundment at the La Cygne Generating Station has been completed in substantial compliance with the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. Detection monitoring groundwater samples were collected on May 23 or 24, 2018. Review and validation of the results from the May 2018 Detection Monitoring Event was completed on June 15, 2018, which constitutes completion and finalization of detection monitoring laboratory analyses. A statistical analysis was then conducted to determine whether there was a statistically significant increase (SSI) over background values for each constituent listed in Appendix III to Part 257-Constituents for Detection Monitoring. Two rounds of verification sampling were conducted for certain constituents on July 11, 2018 and August 16, 2018.

Determination: A statistical evaluation was completed for all Appendix III detection monitoring constituents in accordance with the certified statistical method. The statistical evaluation did not identify any SSIs above background.

Attached to this memorandum are the following backup information:

Attachment 1: Sanitas™ Output:

Statistical evaluation output from Sanitas™ for the prediction limit analysis. This includes prediction limit plots, prediction limit background data, detection sample result, 1st verification re-sample result (when applicable), 2nd verification re-sample result (when applicable), extra sample results for pH because pH is collected as part of the sampling procedure, and a Prediction Limit summary table. Output documentation includes the analytical data used for the statistical analyses.

Attachment 2: Sanitas™ Configuration Settings:

Screen shots of the applicable Sanitas™ configuration settings for the statistical prediction limit analysis. This includes data configuration, output configuration, prediction limit configuration and other tests configuration.

Revision Number	**Revision Date**	**Attachment Revised**	**Summary of Revisions**

ATTACHMENT 1

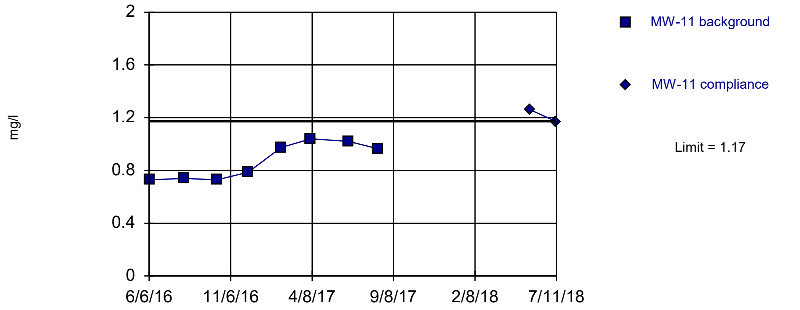
Sanitas^{TM} Output

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.873, Std. Dev.=0.139, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.812, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

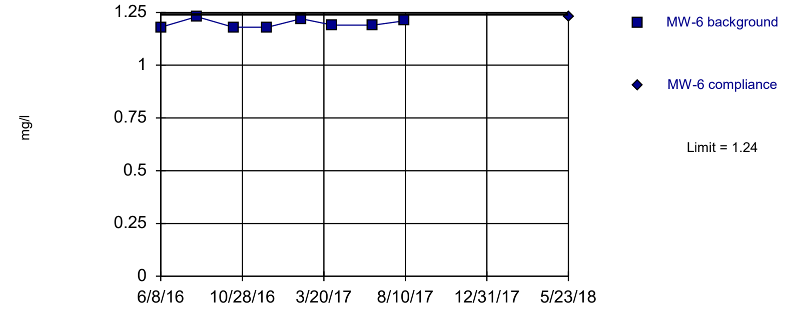
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.2, Std. Dev.=0.0198, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.843, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

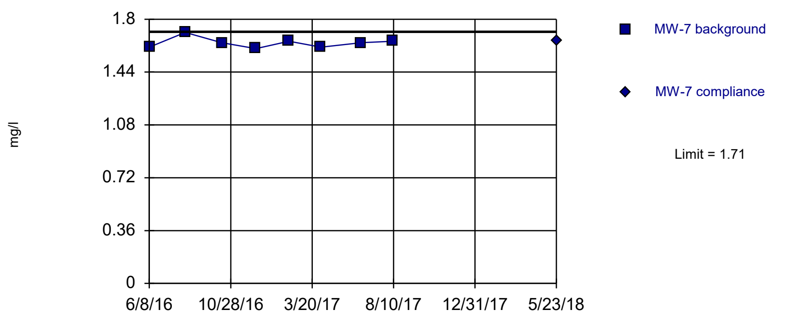
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.64, Std. Dev.=0.0348, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.875, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

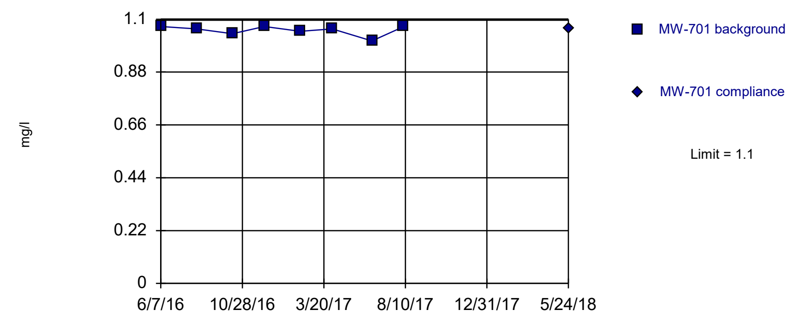
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.05, Std. Dev.=0.0207, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.813, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11	
6/6/2016	0.729		
8/11/2016	0.739		
10/12/2016	0.73		
12/9/2016	0.786		
2/9/2017	0.974		
4/6/2017	1.04		
6/15/2017	1.02		
8/10/2017	0.965		
5/23/2018		1.26	
7/11/2018		1.17	1st verification re-sample

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 8/27/2018 3:31 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-6	MW-6
6/8/2016	1.18	
8/10/2016	1.23	
10/13/2016	1.18	
12/12/2016	1.18	
2/9/2017	1.22	
4/5/2017	1.19	
6/15/2017	1.19	
8/9/2017	1.21	
5/23/2018		1.23

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	1.61	
8/10/2016	1.71	
10/13/2016	1.64	
12/12/2016	1.6	
2/8/2017	1.65	
4/5/2017	1.61	
6/15/2017	1.64	
8/9/2017	1.65	
5/23/2018		1.65

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

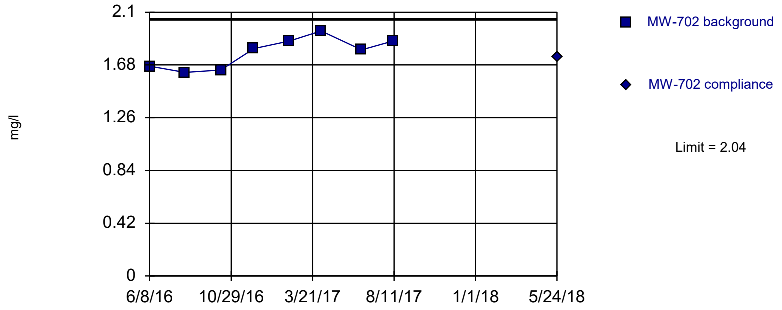
	MW-701	MW-701
6/7/2016	1.07	
8/9/2016	1.06	
10/11/2016	1.04	
12/6/2016	1.07	
2/7/2017	1.05	
4/4/2017	1.06	
6/13/2017	1.01	
8/8/2017	1.07	
5/24/2018		1.06

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.78, Std. Dev.=0.122, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.914, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

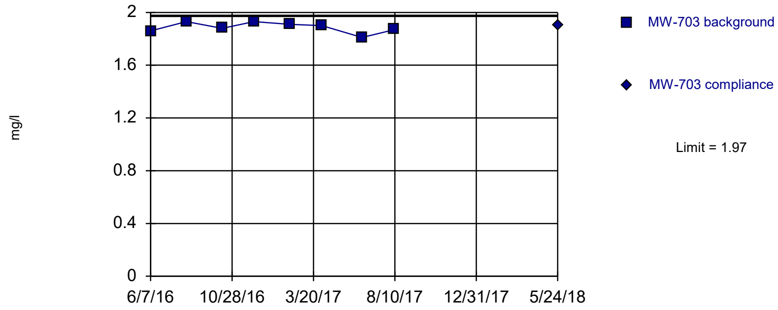
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.89, Std. Dev.=0.0403, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.929, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

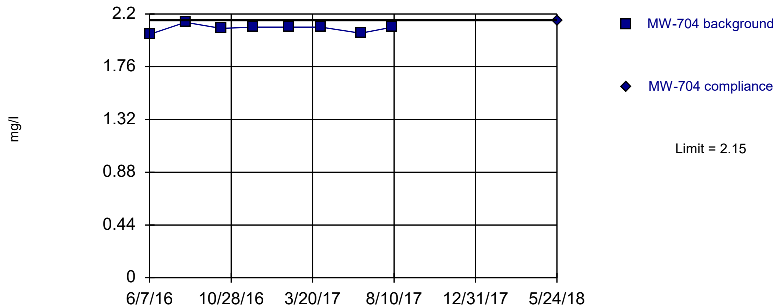
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.08, Std. Dev.=0.0316, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.871, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

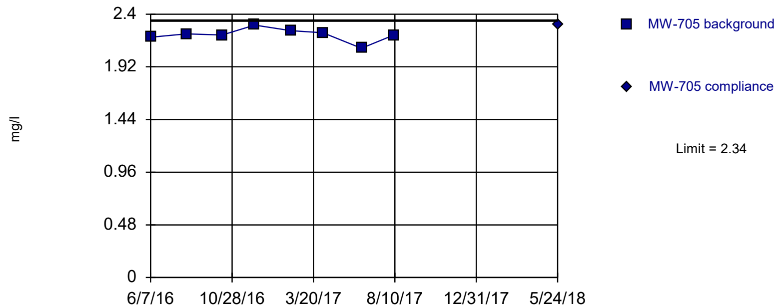
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.21, Std. Dev.=0.0597, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.903, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 8/27/2018 3:31 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-702	MW-702
6/8/2016	1.67	
8/9/2016	1.62	
10/11/2016	1.64	
12/8/2016	1.81	
2/8/2017	1.87	
4/5/2017	1.95	
6/15/2017	1.8	
8/9/2017	1.87	
5/24/2018		1.74

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 8/27/2018 3:31 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-703	MW-703
6/7/2016	1.86	
8/9/2016	1.93	
10/11/2016	1.88	
12/6/2016	1.93	
2/7/2017	1.91	
4/4/2017	1.9	
6/14/2017	1.81	
8/10/2017	1.87	
5/24/2018		1.9

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	2.03	
8/9/2016	2.13	
10/11/2016	2.08	
12/6/2016	2.09	
2/7/2017	2.09	
4/4/2017	2.09	
6/13/2017	2.04	
8/8/2017	2.09	
5/24/2018		2.14

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

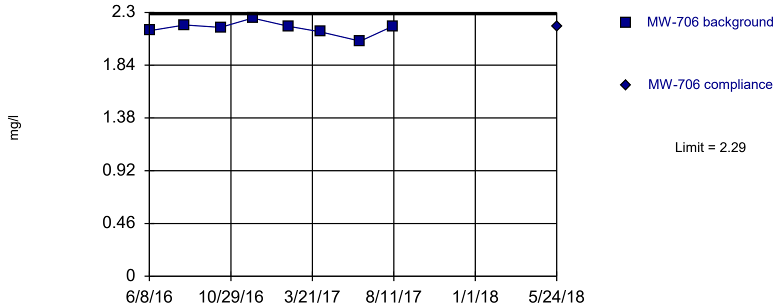
	MW-705	MW-705
6/7/2016	2.19	
8/9/2016	2.22	
10/11/2016	2.21	
12/7/2016	2.3	
2/9/2017	2.25	
4/6/2017	2.23	
6/13/2017	2.09	
8/9/2017	2.21	
5/24/2018		2.3

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.16, Std. Dev.=0.0577, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

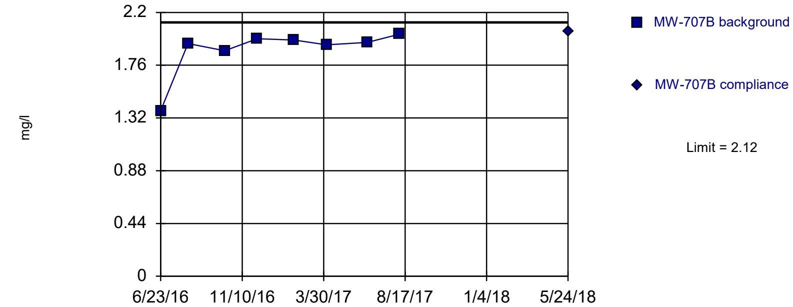
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^6 transformation): Mean=49.7, Std. Dev.=18.6, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.773, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

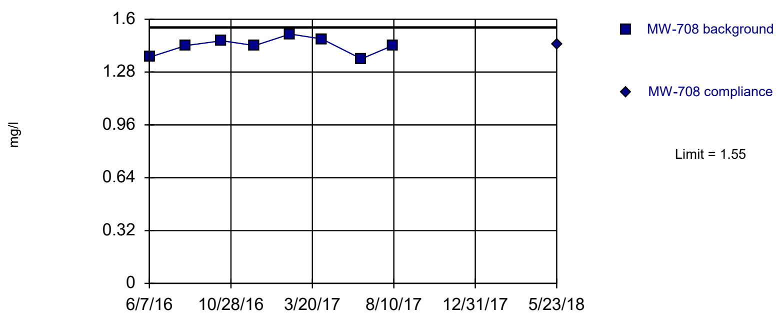
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.44, Std. Dev.=0.0517, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.916, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

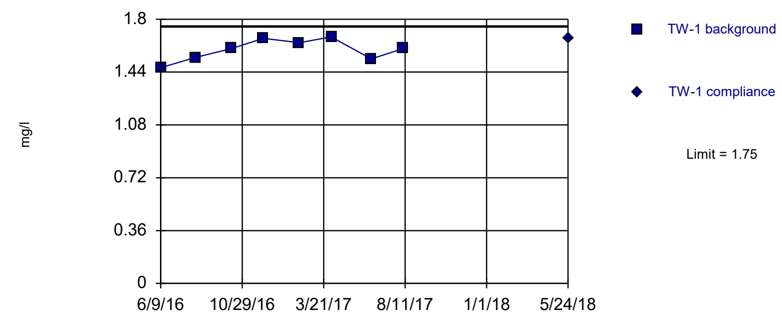
Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.59, Std. Dev.=0.0734, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.946, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: BORON Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: BORON (mg/l) Analysis Run 8/27/2018 3:31 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-706	MW-706
6/8/2016	2.14	
8/9/2016	2.19	
10/11/2016	2.17	
12/6/2016	2.25	
2/7/2017	2.18	
4/4/2017	2.13	
6/13/2017	2.05	
8/9/2017	2.18	
5/24/2018		2.18

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	1.38	
8/9/2016	1.94	
10/11/2016	1.88	
12/6/2016	1.98	
2/7/2017	1.97	
4/4/2017	1.93	
6/13/2017	1.95	
8/8/2017	2.02	
5/24/2018		2.04

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	1.37	
8/10/2016	1.44	
10/12/2016	1.47	
12/9/2016	1.44	
2/9/2017	1.51	
4/6/2017	1.48	
6/14/2017	1.36	
8/8/2017	1.44	
5/23/2018		1.45

Prediction Limit

Constituent: BORON (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

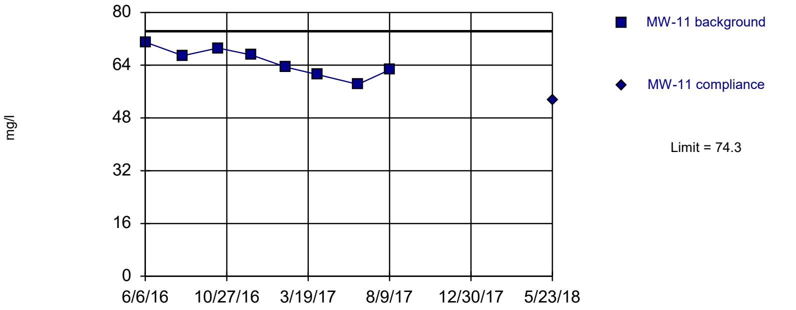
	TW-1	TW-1
6/9/2016	1.47	
8/9/2016	1.54	
10/11/2016	1.6	
12/6/2016	1.67	
2/7/2017	1.64	
4/4/2017	1.68	
6/13/2017	1.53	
8/8/2017	1.6	
5/24/2018		1.67

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=64.9, Std. Dev.=4.33, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.97, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

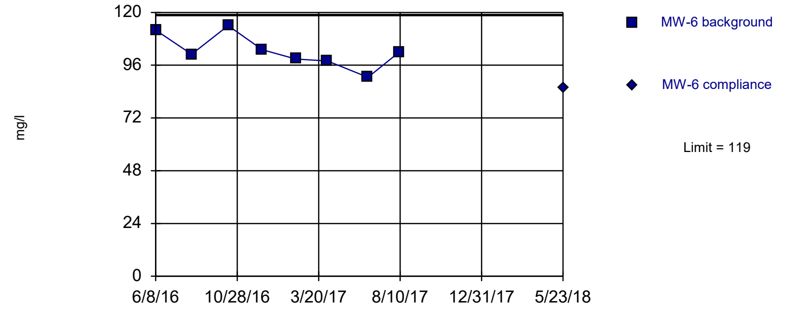
Constituent: CALCIUM Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=102, Std. Dev.=7.6, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

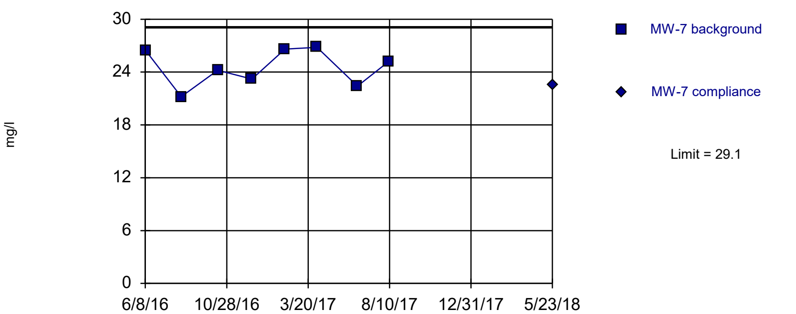
Constituent: CALCIUM Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=24.5, Std. Dev.=2.11, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.915, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

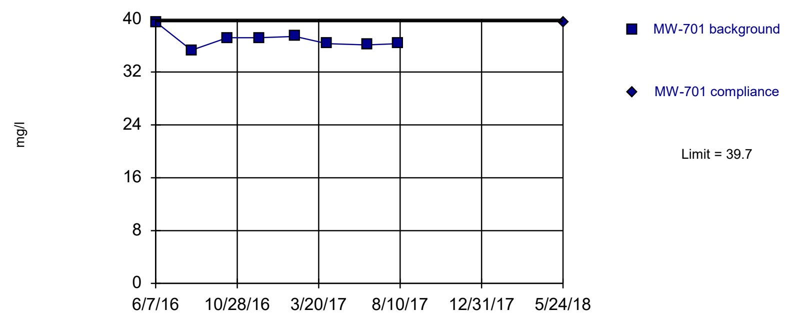
Constituent: CALCIUM Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=36.9, Std. Dev.=1.29, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.892, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CALCIUM Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 8/27/2018 3:31 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-11	MW-11
6/6/2016	71	
8/11/2016	66.9	
10/12/2016	69.2	
12/9/2016	67.1	
2/9/2017	63.4	
4/6/2017	61.1	
6/15/2017	58.2	
8/10/2017	62.6	
5/23/2018		53.4

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	112	
8/10/2016	101	
10/13/2016	114	
12/12/2016	103	
2/9/2017	98.8	
4/5/2017	97.9	
6/15/2017	90.5	
8/9/2017	102	
5/23/2018		85.6

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	26.5	
8/10/2016	21.2	
10/13/2016	24.2	
12/12/2016	23.2	
2/8/2017	26.6	
4/5/2017	26.8	
6/15/2017	22.4	
8/9/2017	25.2	
5/23/2018		22.6

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

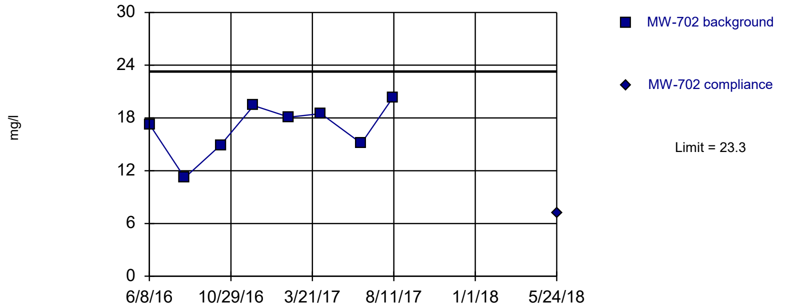
	MW-701	MW-701
6/7/2016	39.6	
8/9/2016	35.3	
10/11/2016	37.2	
12/6/2016	37.2	
2/7/2017	37.4	
4/4/2017	36.3	
6/13/2017	36.1	
8/8/2017	36.3	
5/24/2018		39.5

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=16.9, Std. Dev.=2.97, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.929, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

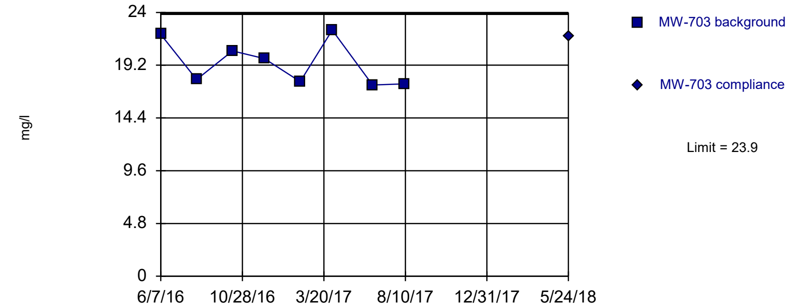
Constituent: CALCIUM Analysis Run 8/27/2018 3:09 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=19.4, Std. Dev.=2.07, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.852, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

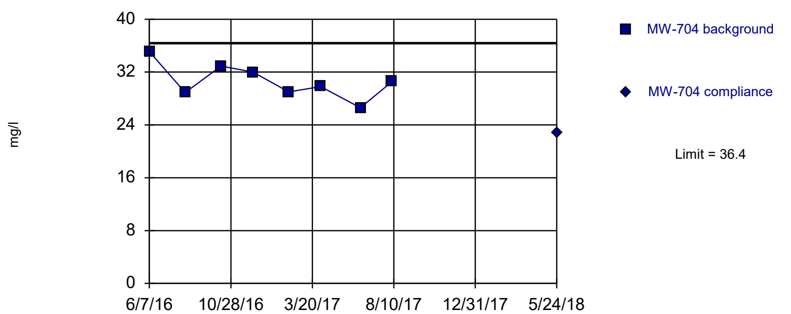
Constituent: CALCIUM Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=30.6, Std. Dev.=2.66, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.982, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

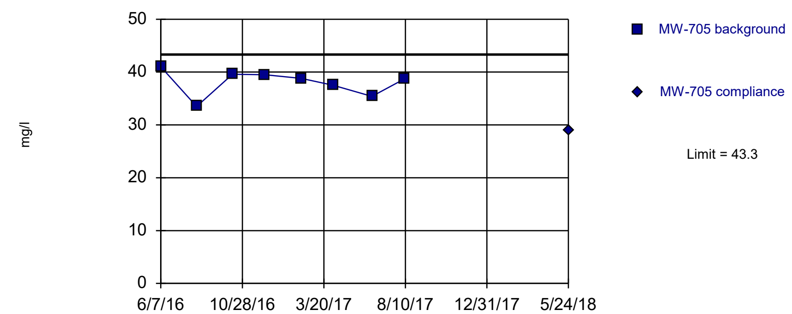
Constituent: CALCIUM Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=38, Std. Dev.=2.46, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.917, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CALCIUM Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 8/27/2018 3:31 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-702	MW-702
6/8/2016	17.3	
8/9/2016	11.2	
10/11/2016	14.9	
12/8/2016	19.4	
2/8/2017	18.1	
4/5/2017	18.5	
6/15/2017	15.1	
8/9/2017	20.3	
5/24/2018		7.13

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	22	
8/9/2016	17.9	
10/11/2016	20.5	
12/6/2016	19.8	
2/7/2017	17.7	
4/4/2017	22.4	
6/14/2017	17.4	
8/10/2017	17.5	
5/24/2018		21.8

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 8/27/2018 3:31 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	35.1	
8/9/2016	28.9	
10/11/2016	32.9	
12/6/2016	32	
2/7/2017	29	
4/4/2017	29.8	
6/13/2017	26.6	
8/8/2017	30.6	
5/24/2018		22.7

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 8/27/2018 3:31 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

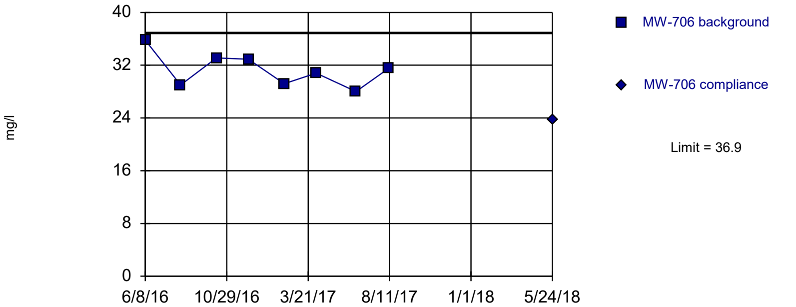
	MW-705	MW-705
6/7/2016	41	
8/9/2016	33.5	
10/11/2016	39.6	
12/7/2016	39.5	
2/9/2017	38.8	
4/6/2017	37.5	
6/13/2017	35.4	
8/9/2017	38.7	
5/24/2018		28.9

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=31.3, Std. Dev.=2.59, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

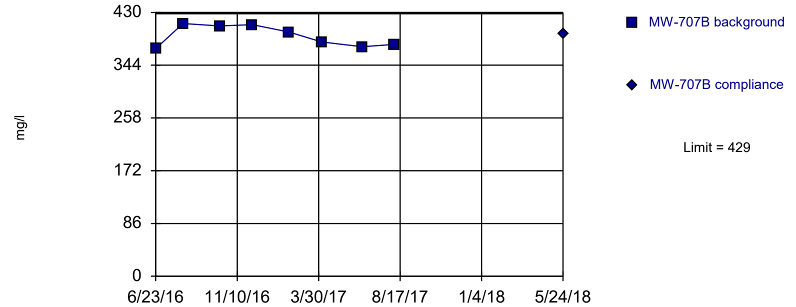
Constituent: CALCIUM Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=392, Std. Dev.=17.2, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.863, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

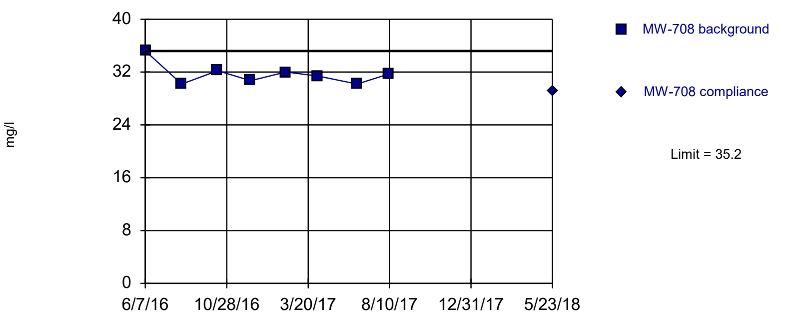
Constituent: CALCIUM Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=31.7, Std. Dev.=1.61, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.838, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

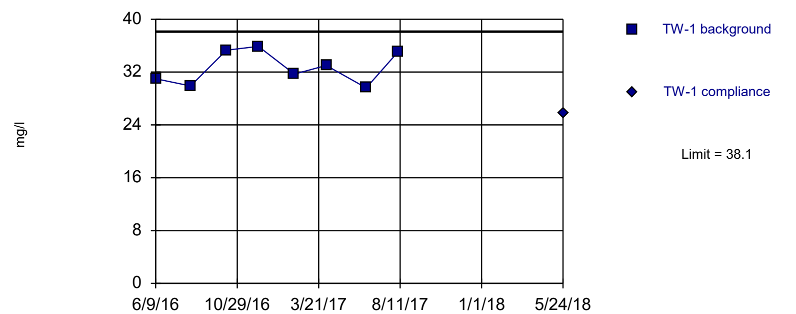
Constituent: CALCIUM Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=32.7, Std. Dev.=2.51, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.901, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CALCIUM Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-706	MW-706
6/8/2016	35.8	
8/9/2016	29	
10/11/2016	33.1	
12/6/2016	32.9	
2/7/2017	29.2	
4/4/2017	30.8	
6/13/2017	28	
8/9/2017	31.5	
5/24/2018		23.8

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	371	
8/9/2016	412	
10/11/2016	408	
12/6/2016	410	
2/7/2017	398	
4/4/2017	382	
6/13/2017	374	
8/8/2017	378	
5/24/2018		396

Prediction Limit

Constituent: CALCIUM (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	35.2	
8/10/2016	30.2	
10/12/2016	32.2	
12/9/2016	30.7	
2/9/2017	32	
4/6/2017	31.4	
6/14/2017	30.2	
8/8/2017	31.7	
5/23/2018		29.2

Prediction Limit

Constituent: CALCIUM (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

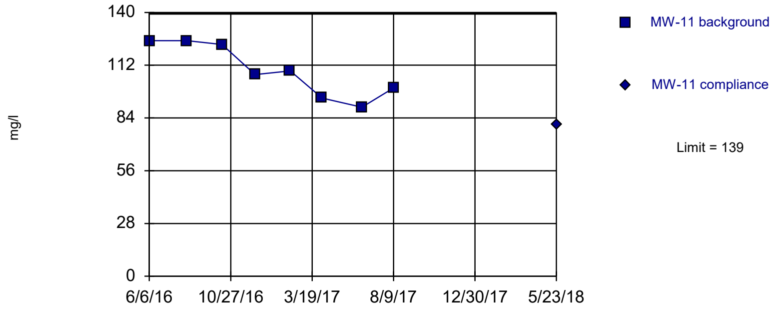
	TW-1	TW-1
6/9/2016	31	
8/9/2016	29.9	
10/11/2016	35.3	
12/6/2016	35.9	
2/7/2017	31.7	
4/4/2017	33	
6/13/2017	29.6	
8/8/2017	35.1	
5/24/2018		25.7

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=109, Std. Dev.=14, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.897, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

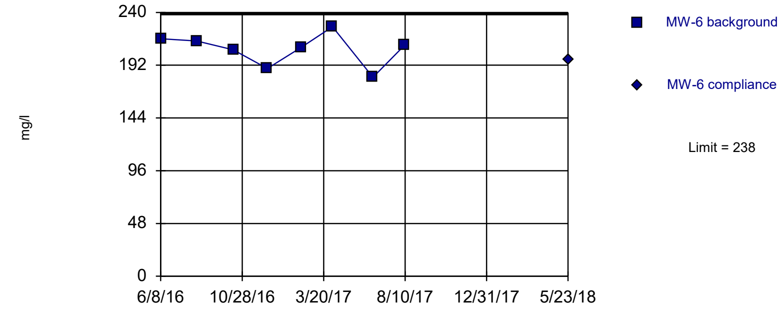
Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=206, Std. Dev.=14.8, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

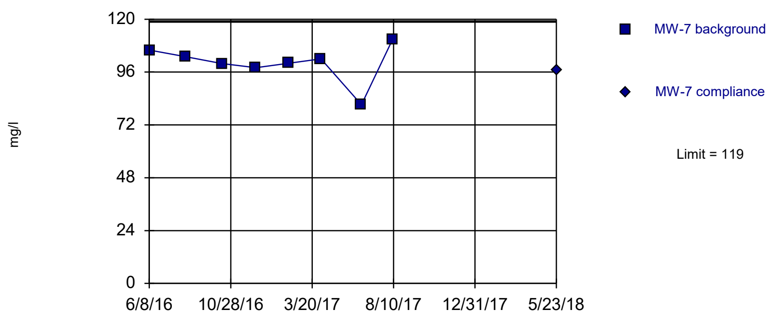
Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=100, Std. Dev.=8.68, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.854, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

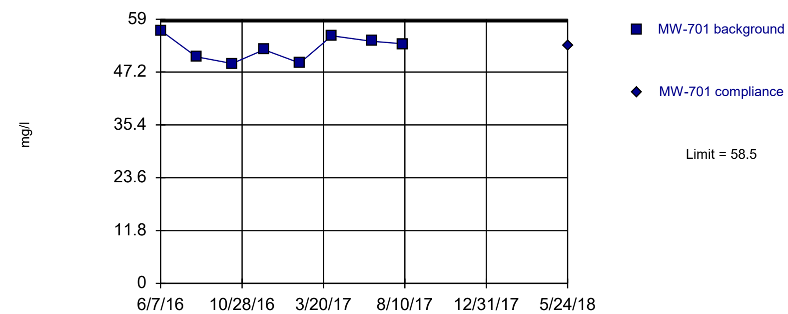
Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=52.6, Std. Dev.=2.77, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.94, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11
6/6/2016	125	
8/11/2016	125	
10/12/2016	123	
12/9/2016	107	
2/9/2017	109	
4/6/2017	94.5	
6/15/2017	89.7	
8/10/2017	100	
5/23/2018		80.2

Prediction Limit

Constituent: CHLORIDE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-6	MW-6
6/8/2016	216	
8/10/2016	214	
10/13/2016	206	
12/12/2016	189	
2/9/2017	208	
4/5/2017	227	
6/15/2017	181	
8/9/2017	210	
5/23/2018		197

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	106	
8/10/2016	103	
10/13/2016	99.9	
12/12/2016	98	
2/8/2017	100	
4/5/2017	102	
6/15/2017	81.2	
8/9/2017	111	
5/23/2018		96.9

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

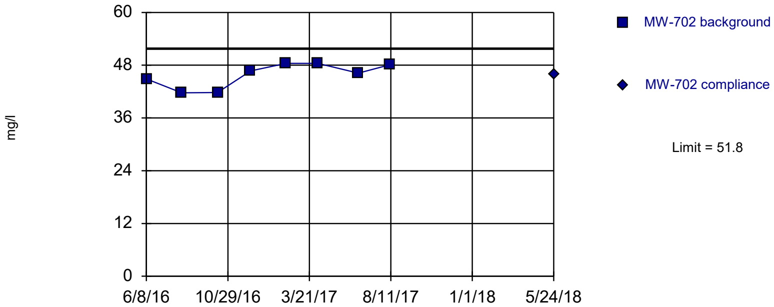
LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-701	MW-701
6/7/2016	56.5	
8/9/2016	50.6	
10/11/2016	49.1	
12/6/2016	52.2	
2/7/2017	49.2	
4/4/2017	55.3	
6/13/2017	54.1	
8/8/2017	53.5	
5/24/2018		53

Within Limit

Prediction Limit

Intrawell Parametric



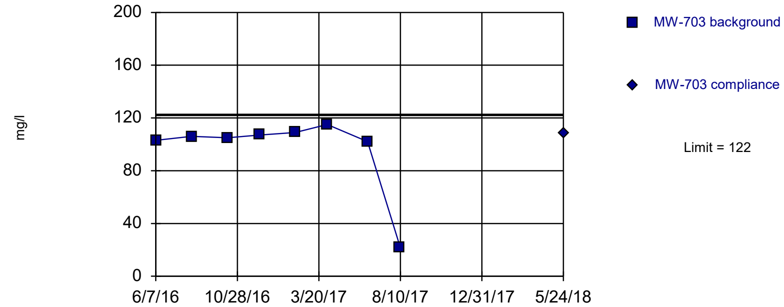
Background Data Summary: Mean=45.8, Std. Dev.=2.76, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.848, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limit

Prediction Limit

Intrawell Parametric



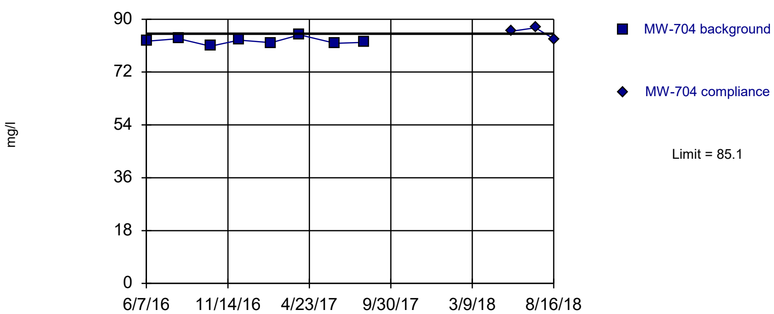
Background Data Summary (based on x^4 transformation): Mean=1.1e8, Std. Dev.=5.1e7, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.798, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limit

Prediction Limit

Intrawell Parametric



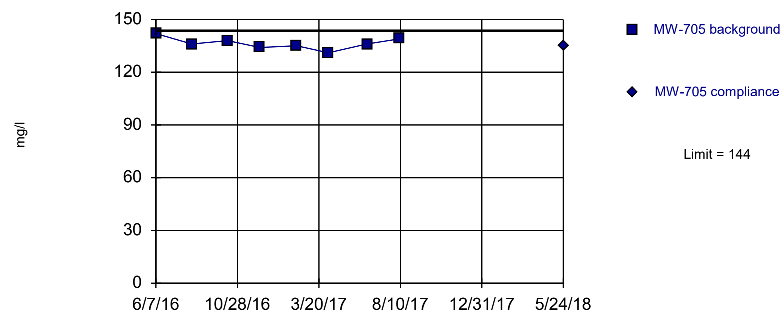
Background Data Summary: Mean=82.5, Std. Dev.=1.17, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.967, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=136, Std. Dev.=3.34, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.986, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	44.9	
8/9/2016	41.7	
10/11/2016	41.8	
12/8/2016	46.7	
2/8/2017	48.4	
4/5/2017	48.4	
6/15/2017	46.2	
8/9/2017	48.1	
5/24/2018		45.8

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	103	
8/9/2016	106	
10/11/2016	105	
12/6/2016	107	
2/7/2017	109	
4/4/2017	115	
6/14/2017	102	
8/10/2017	22.3	
5/24/2018		108

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704	
6/7/2016	82.5		
8/9/2016	83.4		
10/11/2016	80.8		
12/6/2016	82.9		
2/7/2017	82		
4/4/2017	84.7		
6/13/2017	81.8		
8/8/2017	82.1		
5/24/2018		85.9	
7/11/2018		87.1	1st verification re-sample
8/16/2018		83.3	2nd verification re-sample

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

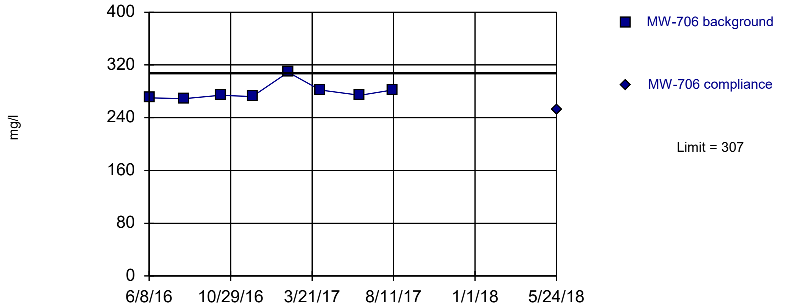
	MW-705	MW-705
6/7/2016	142	
8/9/2016	136	
10/11/2016	138	
12/7/2016	134	
2/9/2017	135	
4/6/2017	131	
6/13/2017	136	
8/9/2017	139	
5/24/2018		135

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=5.63, Std. Dev.=0.0453, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.753, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

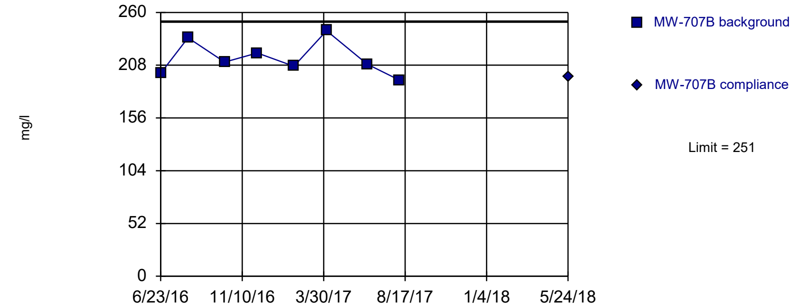
Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=215, Std. Dev.=16.8, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.939, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

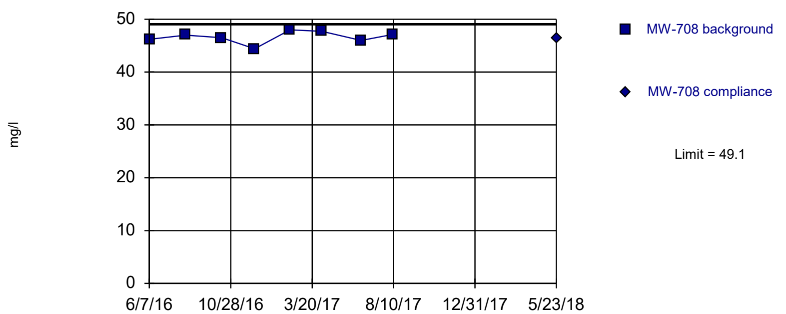
Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=46.6, Std. Dev.=1.13, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.941, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

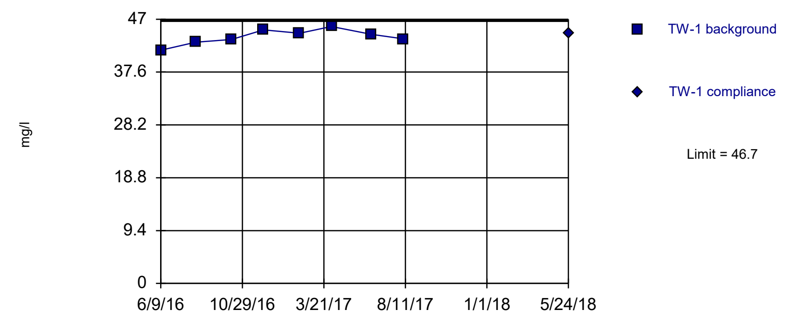
Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=43.9, Std. Dev.=1.33, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.977, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: CHLORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: CHLORIDE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-706	MW-706
6/8/2016	270	
8/9/2016	269	
10/11/2016	274	
12/6/2016	272	
2/7/2017	309	
4/4/2017	282	
6/13/2017	274	
8/9/2017	282	
5/24/2018		252

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	200	
8/9/2016	235	
10/11/2016	211	
12/6/2016	220	
2/7/2017	207	
4/4/2017	242	
6/13/2017	209	
8/8/2017	193	
5/24/2018		197

Prediction Limit

Constituent: CHLORIDE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-708	MW-708
6/7/2016	46.2	
8/10/2016	47	
10/12/2016	46.5	
12/9/2016	44.4	
2/9/2017	48	
4/6/2017	47.7	
6/14/2017	46	
8/8/2017	47.1	
5/23/2018		46.3

Prediction Limit

Constituent: CHLORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

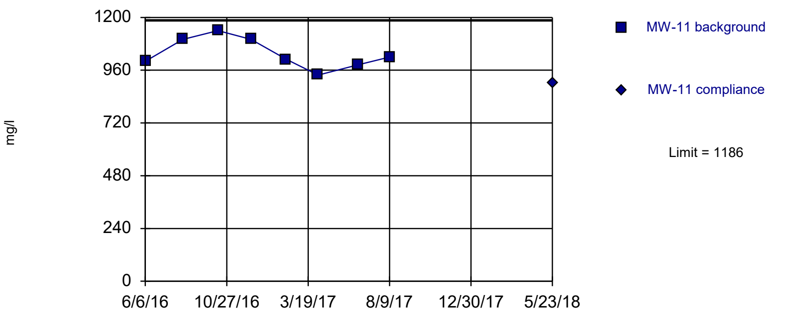
	TW-1	TW-1
6/9/2016	41.5	
8/9/2016	42.9	
10/11/2016	43.4	
12/6/2016	45.1	
2/7/2017	44.5	
4/4/2017	45.7	
6/13/2017	44.3	
8/8/2017	43.5	
5/24/2018		44.5

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1037, Std. Dev.=69.2, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

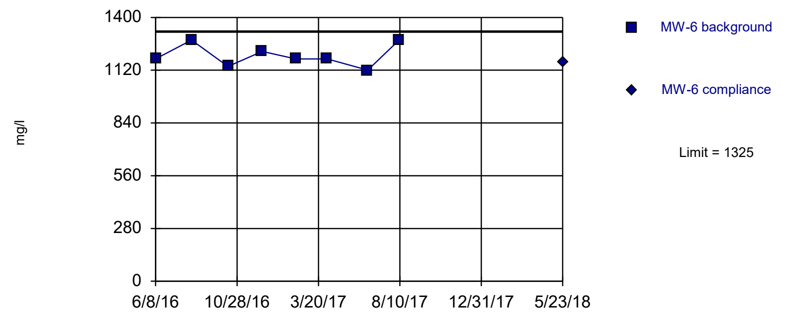
Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1198, Std. Dev.=59, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.901, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

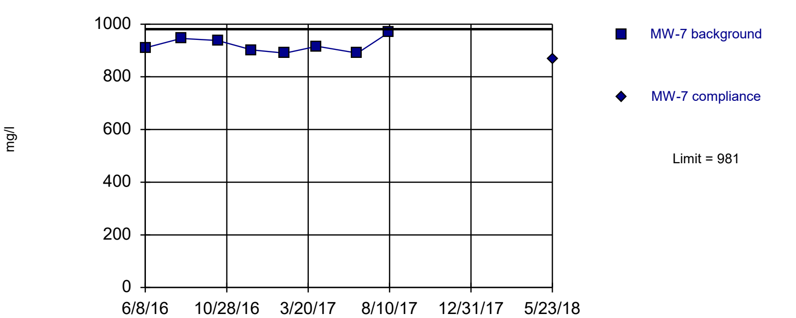
Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=920, Std. Dev.=28.1, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.923, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

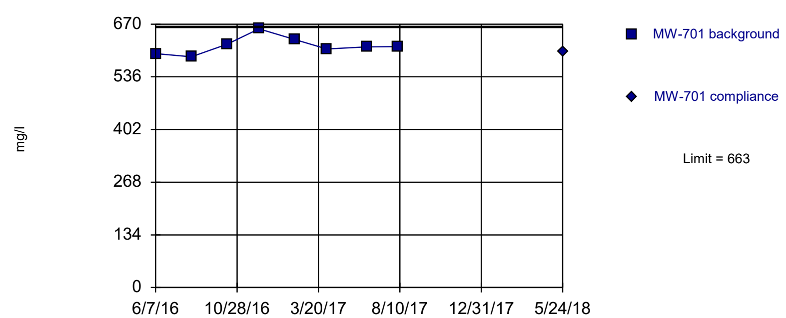
Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=615, Std. Dev.=22, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.944, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-11	MW-11
6/6/2016	1000	
8/11/2016	1100	
10/12/2016	1140	
12/9/2016	1100	
2/9/2017	1010	
4/6/2017	938	
6/15/2017	984	
8/10/2017	1020	
5/23/2018		902

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	1180	
8/10/2016	1280	
10/13/2016	1140	
12/12/2016	1220	
2/9/2017	1180	
4/5/2017	1180	
6/15/2017	1120	
8/9/2017	1280	
5/23/2018		1160

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	910	
8/10/2016	946	
10/13/2016	938	
12/12/2016	902	
2/8/2017	890	
4/5/2017	916	
6/15/2017	890	
8/9/2017	968	
5/23/2018		868

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

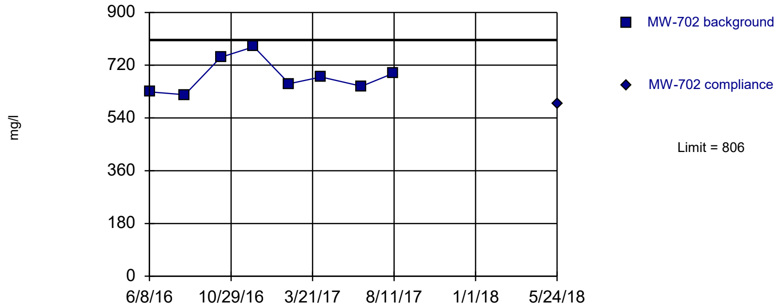
LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-701	MW-701
6/7/2016	595	
8/9/2016	587	
10/11/2016	619	
12/6/2016	658	
2/7/2017	631	
4/4/2017	607	
6/13/2017	612	
8/8/2017	613	
5/24/2018		599

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=682, Std. Dev.=57.4, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.918, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

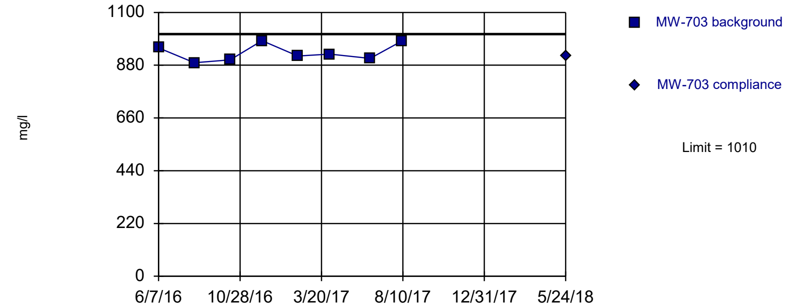
Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=933, Std. Dev.=35.6, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.895, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

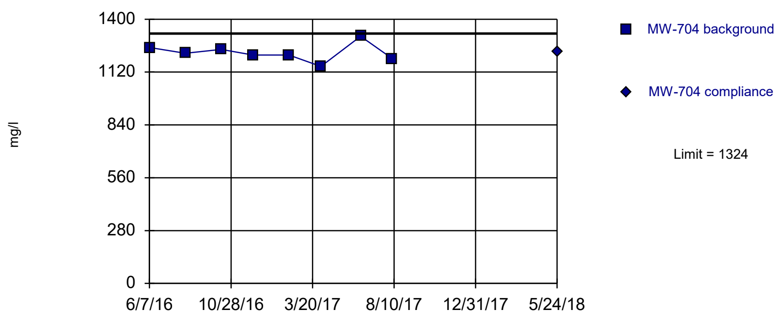
Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1223, Std. Dev.=46.8, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.963, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

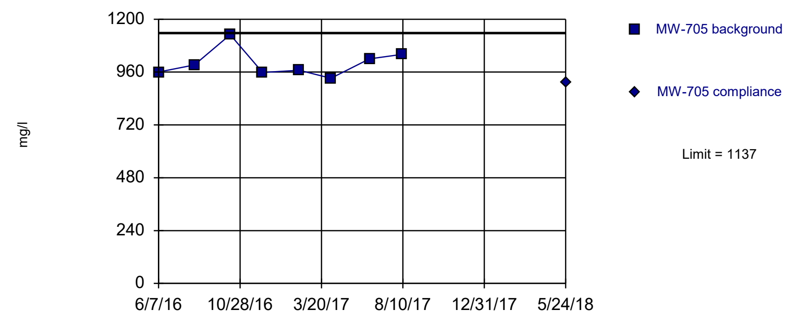
Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1000, Std. Dev.=63.2, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.888, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: DISSOLVED SOLIDS Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	629	
8/9/2016	619	
10/11/2016	747	
12/8/2016	783	
2/8/2017	657	
4/5/2017	680	
6/15/2017	648	
8/9/2017	692	
5/24/2018		590

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	952	
8/9/2016	890	
10/11/2016	902	
12/6/2016	982	
2/7/2017	918	
4/4/2017	926	
6/14/2017	908	
8/10/2017	982	
5/24/2018		918

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	1250	
8/9/2016	1220	
10/11/2016	1240	
12/6/2016	1210	
2/7/2017	1210	
4/4/2017	1150	
6/13/2017	1310	
8/8/2017	1190	
5/24/2018		1230

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

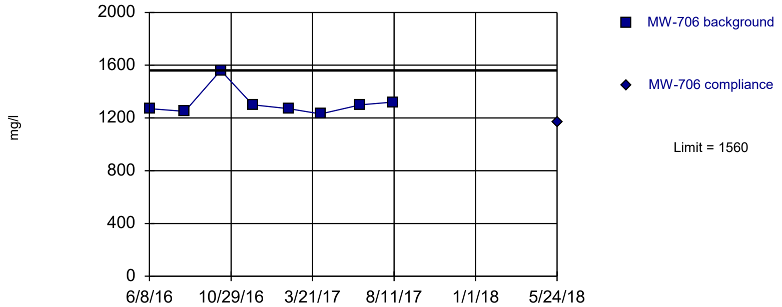
LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-705	MW-705
6/7/2016	960	
8/9/2016	992	
10/11/2016	1130	
12/7/2016	958	
2/9/2017	968	
4/6/2017	932	
6/13/2017	1020	
8/9/2017	1040	
5/24/2018		912

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 8 background values. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

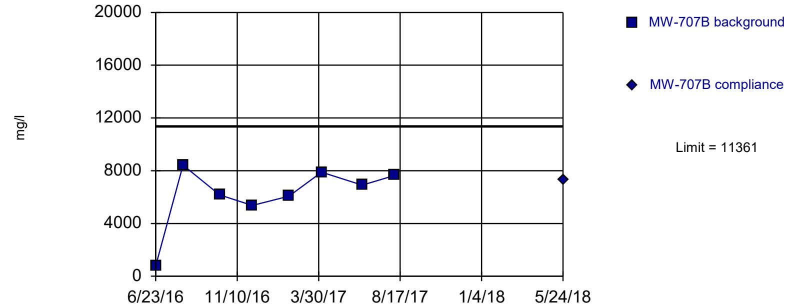
Constituent: DISSOLVED SOLIDS   Analysis Run 8/27/2018 3:10 PM   View: Upper AQC III
LaCygne   Client: SCS Engineers   Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6154, Std. Dev.=2406, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.814, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

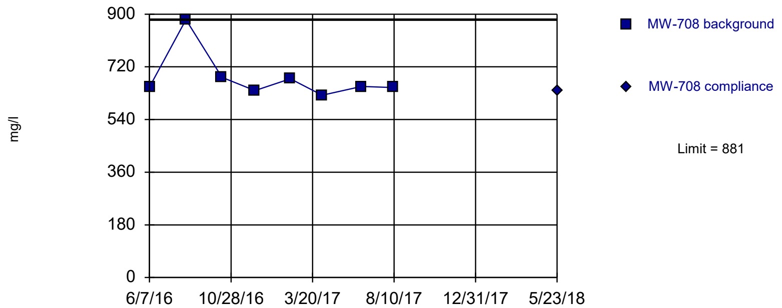
Constituent: DISSOLVED SOLIDS   Analysis Run 8/27/2018 3:10 PM   View: Upper AQC III
LaCygne   Client: SCS Engineers   Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. 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 8 background values. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

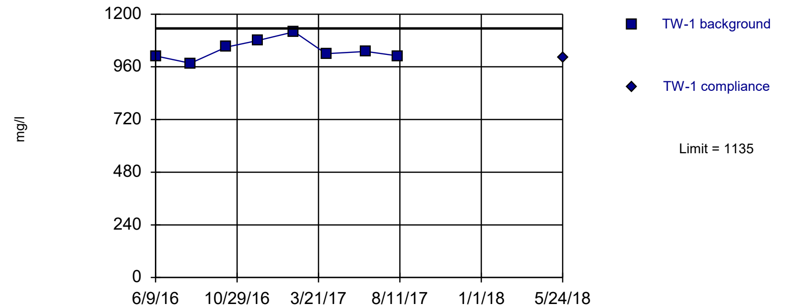
Constituent: DISSOLVED SOLIDS   Analysis Run 8/27/2018 3:10 PM   View: Upper AQC III
LaCygne   Client: SCS Engineers   Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1037, Std. Dev.=45.4, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.946, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: DISSOLVED SOLIDS   Analysis Run 8/27/2018 3:10 PM   View: Upper AQC III
LaCygne   Client: SCS Engineers   Data: LaC GW Data

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-706	MW-706
6/8/2016	1270	
8/9/2016	1250	
10/11/2016	1560	
12/6/2016	1300	
2/7/2017	1270	
4/4/2017	1230	
6/13/2017	1300	
8/9/2017	1320	
5/24/2018		1170

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	770	
8/9/2016	8420	
10/11/2016	6160	
12/6/2016	5370	
2/7/2017	6070	
4/4/2017	7890	
6/13/2017	6910	
8/8/2017	7640	
5/24/2018		7260

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	651	
8/10/2016	881	
10/12/2016	684	
12/9/2016	639	
2/9/2017	679	
4/6/2017	623	
6/14/2017	653	
8/8/2017	649	
5/23/2018		639

Prediction Limit

Constituent: DISSOLVED SOLIDS (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

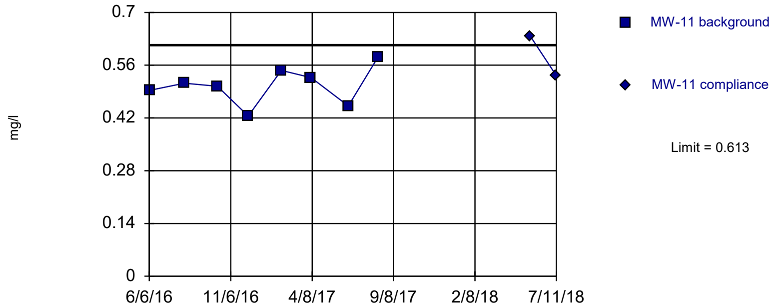
	TW-1	TW-1
6/9/2016	1010	
8/9/2016	976	
10/11/2016	1050	
12/6/2016	1080	
2/7/2017	1120	
4/4/2017	1020	
6/13/2017	1030	
8/8/2017	1010	
5/24/2018		1000

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.505, Std. Dev.=0.05, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.983, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

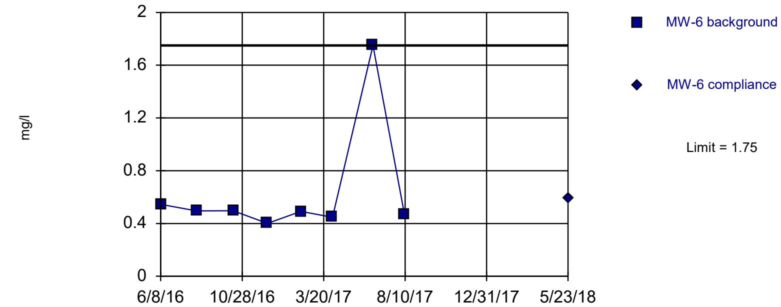
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. 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 8 background values. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

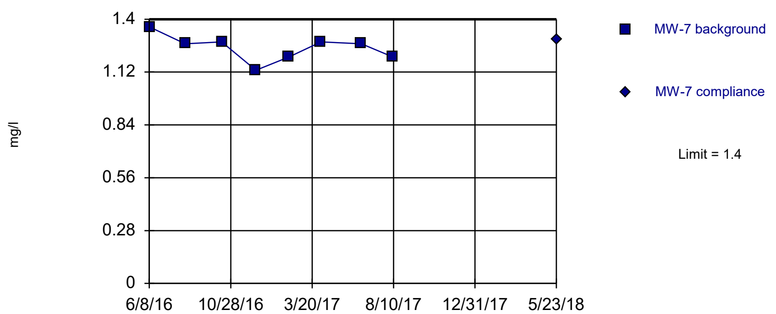
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.25, Std. Dev.=0.0698, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.934, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

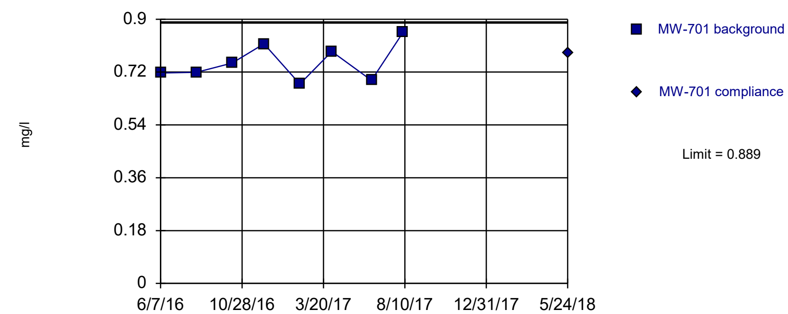
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.753, Std. Dev.=0.063, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11	
6/6/2016	0.493		
8/11/2016	0.512		
10/12/2016	0.504		
12/9/2016	0.425		
2/9/2017	0.546		
4/6/2017	0.527		
6/15/2017	0.452		
8/10/2017	0.582		
5/23/2018		0.637	
7/11/2018		0.532	1st verification re-sample

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	0.545	
8/10/2016	0.495	
10/13/2016	0.497	
12/12/2016	0.401	
2/9/2017	0.492	
4/5/2017	0.447	
6/15/2017	1.75	
8/9/2017	0.473	
5/23/2018		0.595

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	1.36	
8/10/2016	1.27	
10/13/2016	1.28	
12/12/2016	1.13	
2/8/2017	1.2	
4/5/2017	1.28	
6/15/2017	1.27	
8/9/2017	1.2	
5/23/2018		1.29

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

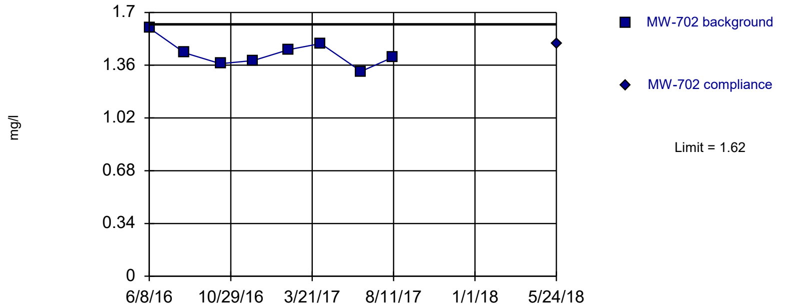
	MW-701	MW-701
6/7/2016	0.717	
8/9/2016	0.719	
10/11/2016	0.751	
12/6/2016	0.816	
2/7/2017	0.679	
4/4/2017	0.79	
6/13/2017	0.692	
8/8/2017	0.857	
5/24/2018		0.785

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.44, Std. Dev.=0.0863, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.966, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

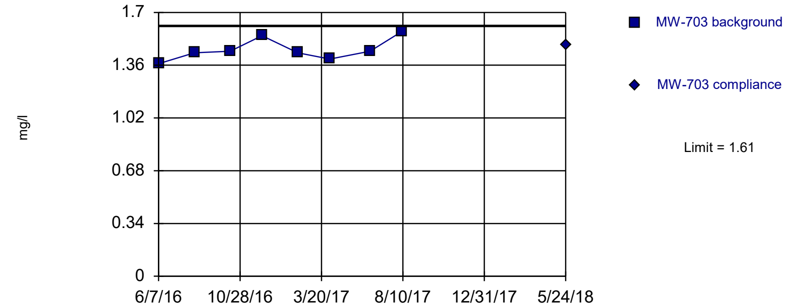
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.46, Std. Dev.=0.0709, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.889, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

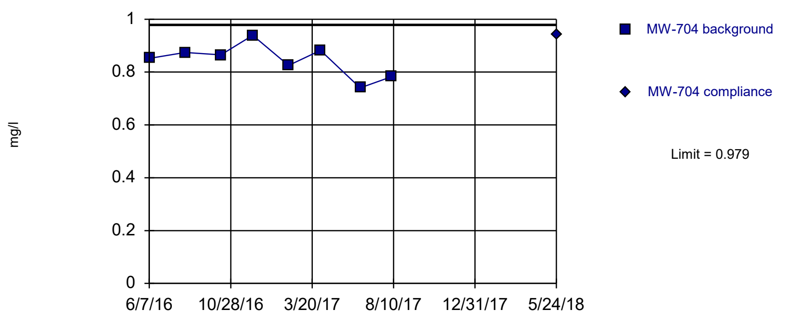
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.845, Std. Dev.=0.0618, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.969, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

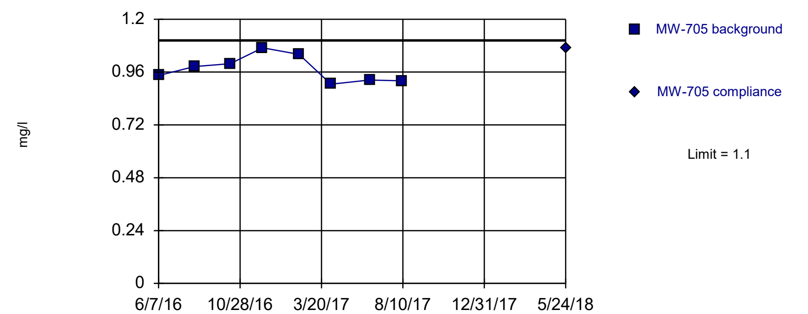
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.973, Std. Dev.=0.0602, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.924, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	1.6	
8/9/2016	1.44	
10/11/2016	1.37	
12/8/2016	1.39	
2/8/2017	1.46	
4/5/2017	1.5	
6/15/2017	1.32	
8/9/2017	1.41	
5/24/2018		1.5

Prediction Limit

Constituent: FLUORIDE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-703	MW-703
6/7/2016	1.37	
8/9/2016	1.44	
10/11/2016	1.45	
12/6/2016	1.55	
2/7/2017	1.44	
4/4/2017	1.4	
6/14/2017	1.45	
8/10/2017	1.58	
5/24/2018		1.49

Prediction Limit

Constituent: FLUORIDE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-704	MW-704
6/7/2016	0.852	
8/9/2016	0.874	
10/11/2016	0.865	
12/6/2016	0.939	
2/7/2017	0.825	
4/4/2017	0.882	
6/13/2017	0.74	
8/8/2017	0.783	
5/24/2018		0.943

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

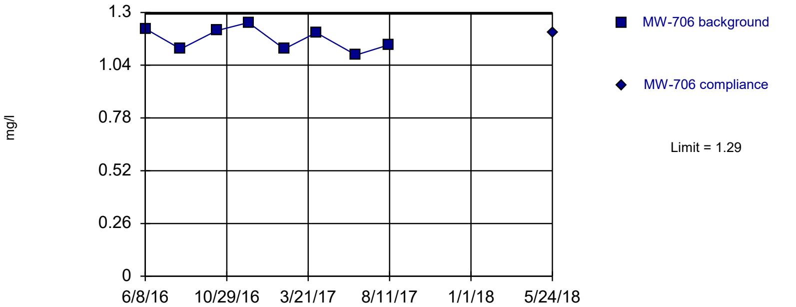
	MW-705	MW-705
6/7/2016	0.944	
8/9/2016	0.985	
10/11/2016	0.998	
12/7/2016	1.07	
2/9/2017	1.04	
4/6/2017	0.905	
6/13/2017	0.924	
8/9/2017	0.92	
5/24/2018		1.07

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.17, Std. Dev.=0.0582, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.919, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

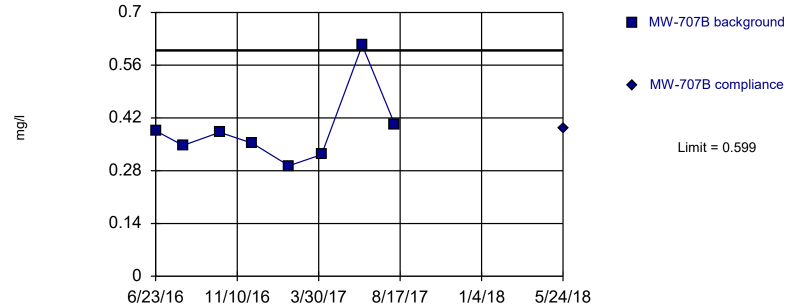
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.387, Std. Dev.=0.0978, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.77, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

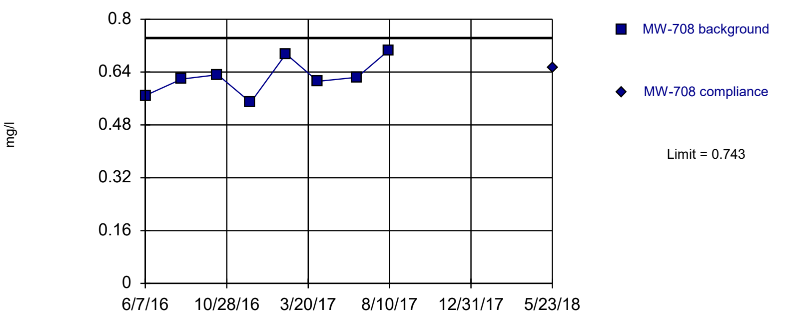
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.626, Std. Dev.=0.0543, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.932, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

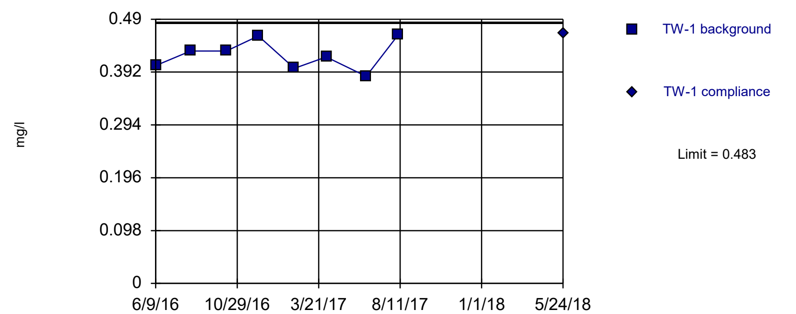
Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.424, Std. Dev.=0.0276, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.943, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: FLUORIDE Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-706	MW-706
6/8/2016	1.22	
8/9/2016	1.12	
10/11/2016	1.21	
12/6/2016	1.25	
2/7/2017	1.12	
4/4/2017	1.2	
6/13/2017	1.09	
8/9/2017	1.14	
5/24/2018		1.2

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	0.386	
8/9/2016	0.347	
10/11/2016	0.382	
12/6/2016	0.353	
2/7/2017	0.293	
4/4/2017	0.323	
6/13/2017	0.613	
8/8/2017	0.402	
5/24/2018		0.392

Prediction Limit

Constituent: FLUORIDE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-708	MW-708
6/7/2016	0.569	
8/10/2016	0.619	
10/12/2016	0.632	
12/9/2016	0.548	
2/9/2017	0.695	
4/6/2017	0.612	
6/14/2017	0.624	
8/8/2017	0.705	
5/23/2018		0.653

Prediction Limit

Constituent: FLUORIDE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

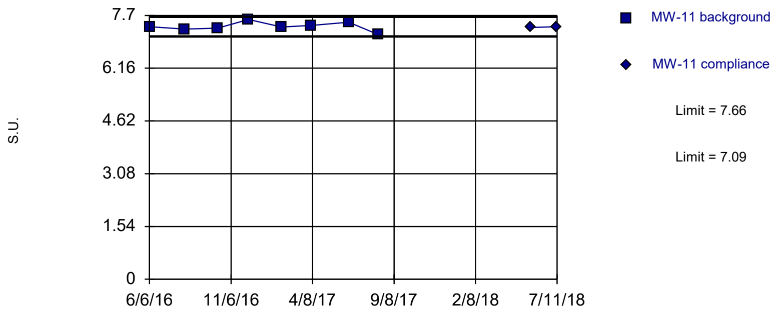
	TW-1	TW-1
6/9/2016	0.404	
8/9/2016	0.431	
10/11/2016	0.431	
12/6/2016	0.459	
2/7/2017	0.399	
4/4/2017	0.42	
6/13/2017	0.384	
8/8/2017	0.461	
5/24/2018		0.463

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.37, Std. Dev.=0.132, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.97, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

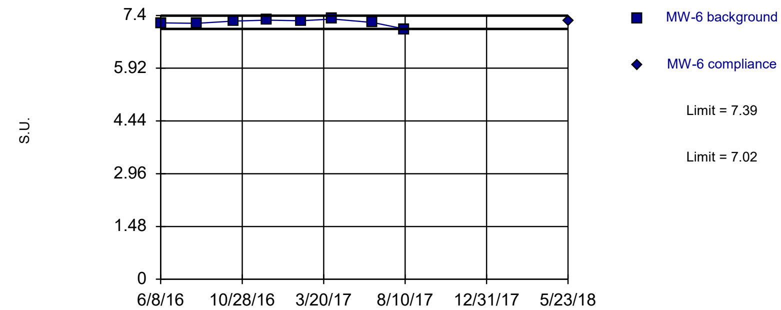
Constituent: pH Analysis Run 8/27/2018 3:10 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.21, Std. Dev.=0.0858, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.86, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

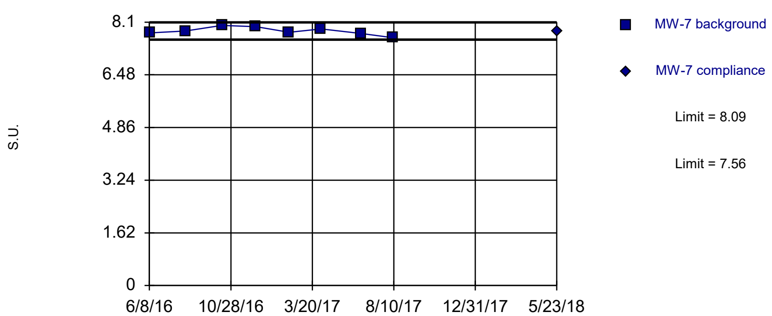
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.83, Std. Dev.=0.122, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.973, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

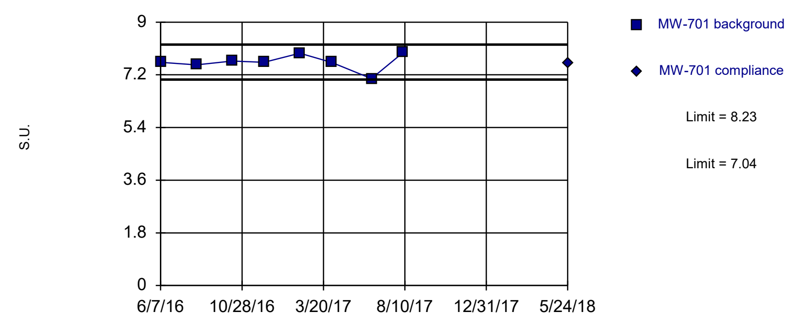
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.63, Std. Dev.=0.276, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.864, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-11	MW-11	
6/6/2016	7.37		
8/11/2016	7.3		
10/12/2016	7.33		
12/9/2016	7.58		
2/9/2017	7.36		
4/6/2017	7.41		
6/15/2017	7.5		
8/10/2017	7.14		
5/23/2018		7.35	
7/11/2018		7.37	extra sample

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	7.19	
8/10/2016	7.18	
10/13/2016	7.24	
12/12/2016	7.27	
2/9/2017	7.25	
4/5/2017	7.3	
6/15/2017	7.2	
8/9/2017	7.02	
5/23/2018		7.26

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	7.77	
8/10/2016	7.83	
10/13/2016	8	
12/12/2016	7.96	
2/8/2017	7.79	
4/5/2017	7.89	
6/15/2017	7.75	
8/9/2017	7.62	
5/23/2018		7.83

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

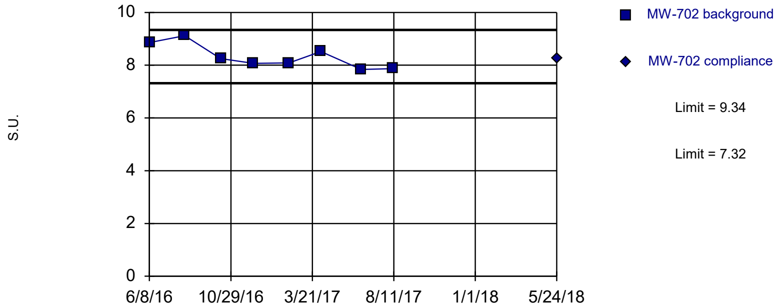
	MW-701	MW-701
6/7/2016	7.63	
8/9/2016	7.54	
10/11/2016	7.67	
12/6/2016	7.63	
2/7/2017	7.94	
4/4/2017	7.62	
6/13/2017	7.07	
8/8/2017	7.97	
5/24/2018		7.6

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.33, Std. Dev.=0.467, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.906, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

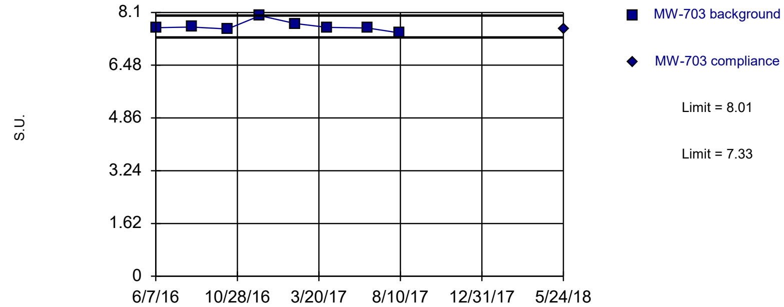
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.67, Std. Dev.=0.155, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.857, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

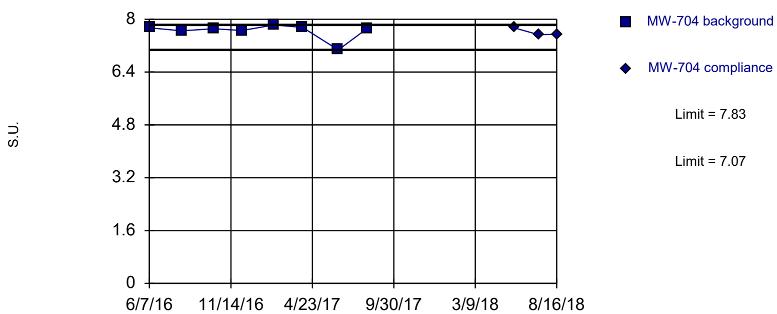
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.0236. Individual comparison alpha = 0.0118 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

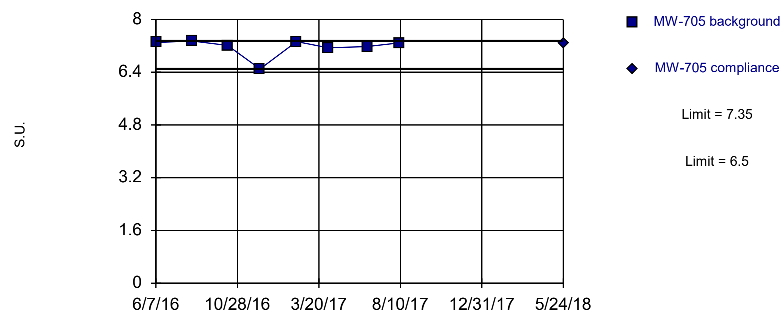
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.0236. Individual comparison alpha = 0.0118 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	8.86	
8/9/2016	9.12	
10/11/2016	8.25	
12/8/2016	8.07	
2/8/2017	8.09	
4/5/2017	8.52	
6/15/2017	7.84	
8/9/2017	7.87	
5/24/2018		8.26

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	7.63	
8/9/2016	7.65	
10/11/2016	7.59	
12/7/2016	8	
2/7/2017	7.76	
4/4/2017	7.64	
6/14/2017	7.62	
8/10/2017	7.47	
5/24/2018		7.6

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704	
6/7/2016	7.74		
8/9/2016	7.65		
10/11/2016	7.71		
12/6/2016	7.66		
2/7/2017	7.83		
4/4/2017	7.75		
6/13/2017	7.07		
8/8/2017	7.71		
5/24/2018		7.74	
7/11/2018		7.53	extra sample
8/16/2018		7.54	extra sample

Prediction Limit

Constituent: pH (S.U.) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

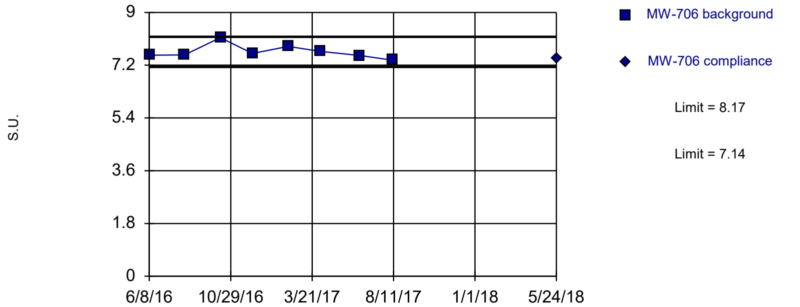
LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-705	MW-705
6/7/2016	7.3	
8/9/2016	7.35	
10/11/2016	7.21	
12/7/2016	6.5	
2/9/2017	7.33	
4/6/2017	7.14	
6/13/2017	7.18	
8/9/2017	7.29	
5/24/2018		7.29

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.66, Std. Dev.=0.237, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.883, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

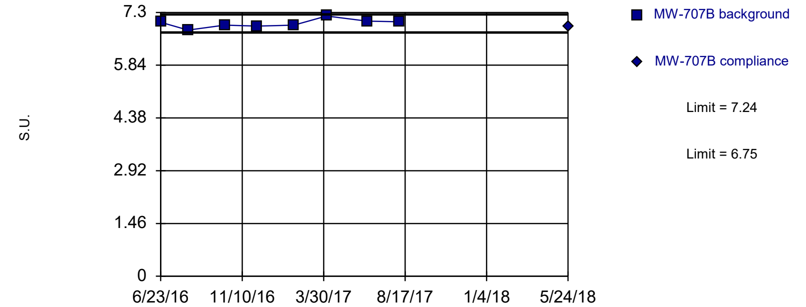
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7, Std. Dev.=0.116, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.967, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

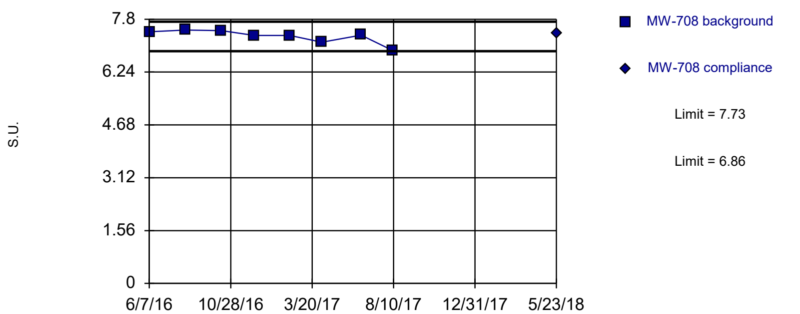
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.29, Std. Dev.=0.202, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.844, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

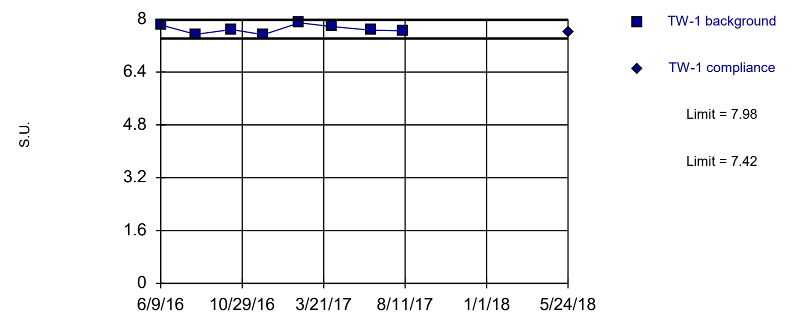
Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.7, Std. Dev.=0.129, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.947, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: pH Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-706	MW-706
6/8/2016	7.54	
8/9/2016	7.55	
10/11/2016	8.14	
12/6/2016	7.6	
2/7/2017	7.84	
4/4/2017	7.67	
6/13/2017	7.53	
8/9/2017	7.37	
5/24/2018		7.44

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	7.03	
8/9/2016	6.81	
10/11/2016	6.95	
12/6/2016	6.92	
2/7/2017	6.95	
4/4/2017	7.2	
6/13/2017	7.06	
8/8/2017	7.04	
5/24/2018		6.92

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	7.43	
8/10/2016	7.48	
10/12/2016	7.46	
12/9/2016	7.32	
2/9/2017	7.32	
4/6/2017	7.12	
6/14/2017	7.33	
8/8/2017	6.88	
5/23/2018		7.39

Prediction Limit

Constituent: pH (S.U.)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

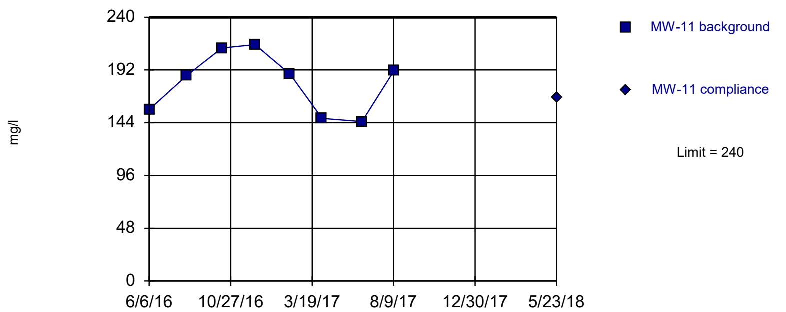
	TW-1	TW-1
6/9/2016	7.83	
8/9/2016	7.54	
10/11/2016	7.69	
12/6/2016	7.53	
2/7/2017	7.89	
4/4/2017	7.78	
6/13/2017	7.67	
8/8/2017	7.65	
5/24/2018		7.6

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=180, Std. Dev.=27.5, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.891, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

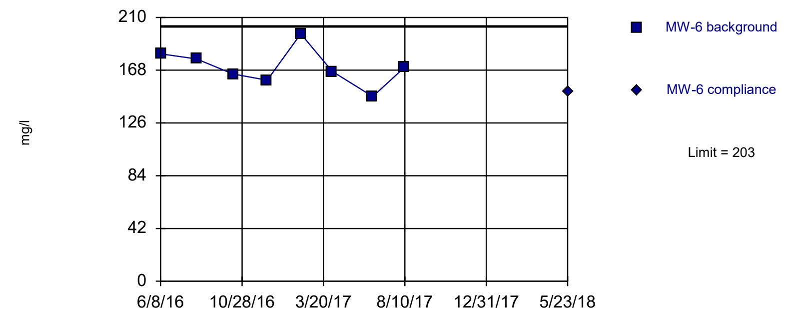
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=171, Std. Dev.=14.9, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.983, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

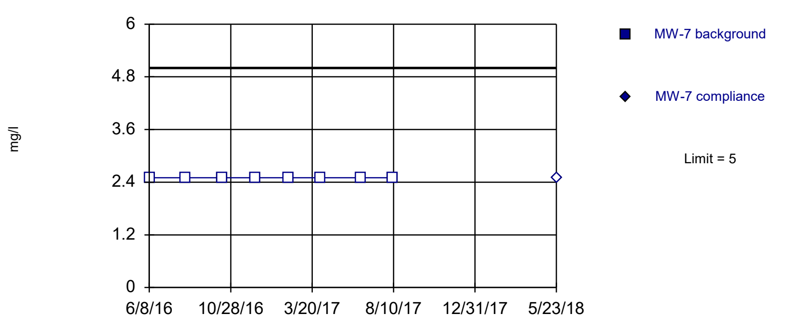
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate 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 = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

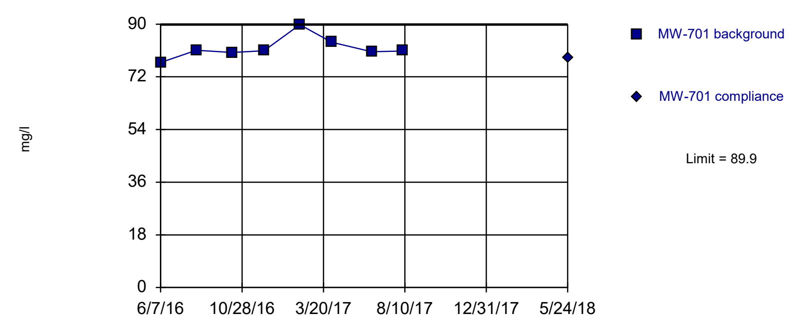
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=81.8, Std. Dev.=3.74, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.828, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: SULFATE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-11	MW-11
6/6/2016	156	
8/11/2016	187	
10/12/2016	212	
12/9/2016	215	
2/9/2017	188	
4/6/2017	148	
6/15/2017	145	
8/10/2017	191	
5/23/2018		167

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-6	MW-6
6/8/2016	181	
8/10/2016	177	
10/13/2016	165	
12/12/2016	160	
2/9/2017	197	
4/5/2017	167	
6/15/2017	147	
8/9/2017	170	
5/23/2018		151

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-7	MW-7
6/8/2016	<5	
8/10/2016	<5	
10/13/2016	<5	
12/12/2016	<5	
2/8/2017	<5	
4/5/2017	<5	
6/15/2017	<5	
8/9/2017	<5	
5/23/2018		<5

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

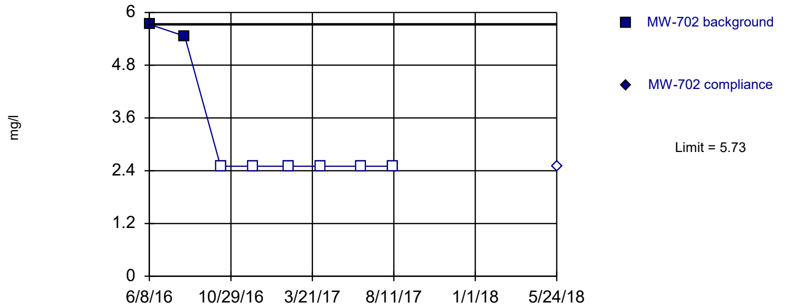
	MW-701	MW-701
6/7/2016	76.9	
8/9/2016	81.1	
10/11/2016	80.3	
12/6/2016	80.9	
2/7/2017	89.8	
4/4/2017	83.8	
6/13/2017	80.6	
8/8/2017	80.8	
5/24/2018		78.6

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

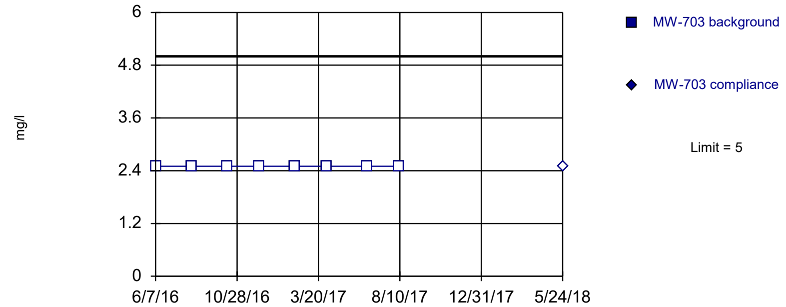
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate 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 = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

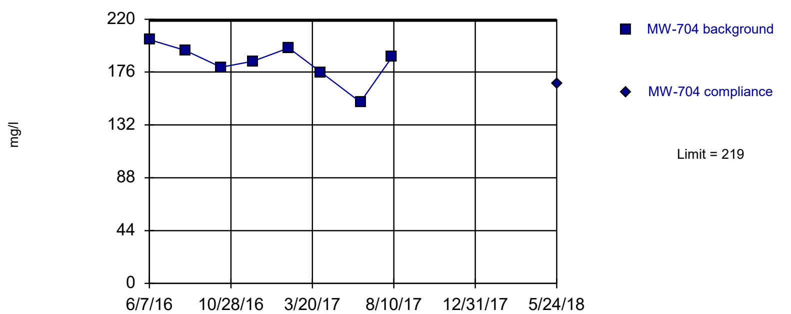
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=184, Std. Dev.=16, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.91, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

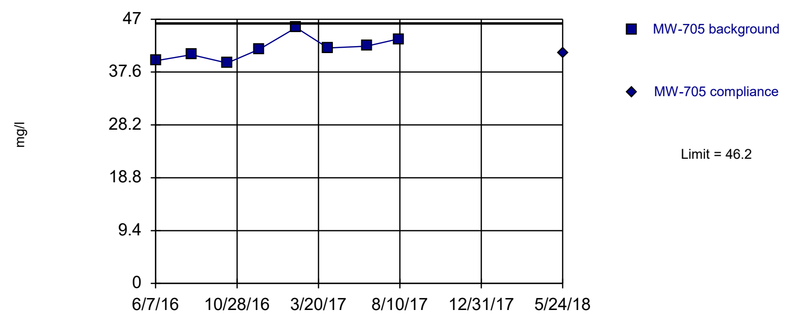
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=41.8, Std. Dev.=2.06, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-702	MW-702
6/8/2016	5.73	
8/9/2016	5.46	
10/11/2016	<5	
12/8/2016	<5	
2/8/2017	<5	
4/5/2017	<5	
6/15/2017	<5	
8/9/2017	<5	
5/24/2018		<5

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-703	MW-703
6/7/2016	<5	
8/9/2016	<5	
10/11/2016	<5	
12/6/2016	<5	
2/7/2017	<5	
4/4/2017	<5	
6/14/2017	<5	
8/10/2017	<5	
5/24/2018		<5

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-704	MW-704
6/7/2016	203	
8/9/2016	194	
10/11/2016	180	
12/6/2016	185	
2/7/2017	196	
4/4/2017	176	
6/13/2017	151	
8/8/2017	189	
5/24/2018		166

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

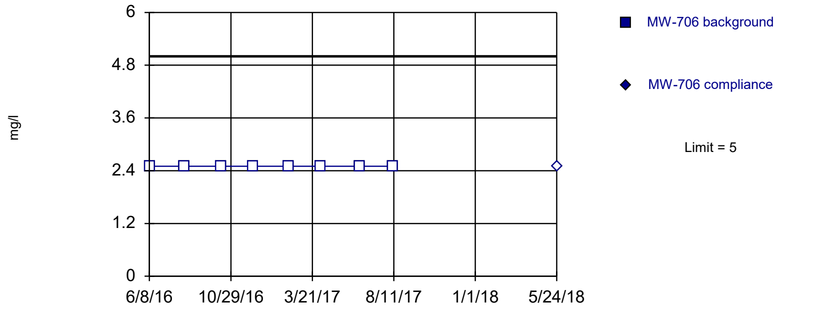
	MW-705	MW-705
6/7/2016	39.6	
8/9/2016	40.7	
10/11/2016	39.2	
12/7/2016	41.7	
2/9/2017	45.5	
4/6/2017	41.9	
6/13/2017	42.2	
8/9/2017	43.5	
5/24/2018		41

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG
Hollow symbols indicate 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 = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0118. Individual comparison alpha = 0.00591 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

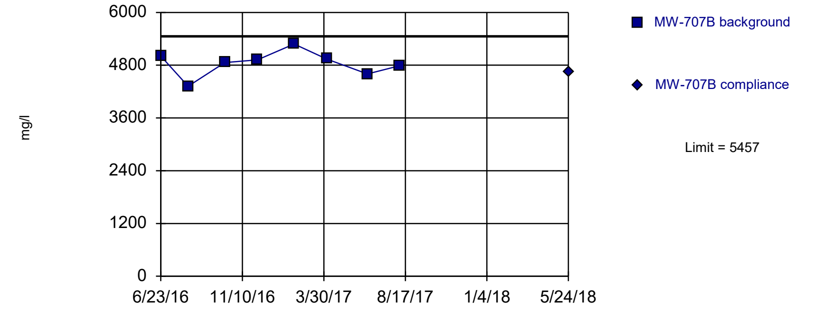
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4840, Std. Dev.=285, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.962, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

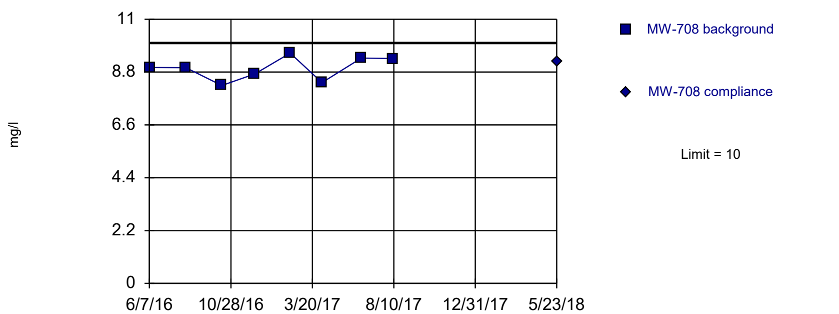
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.95, Std. Dev.=0.488, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

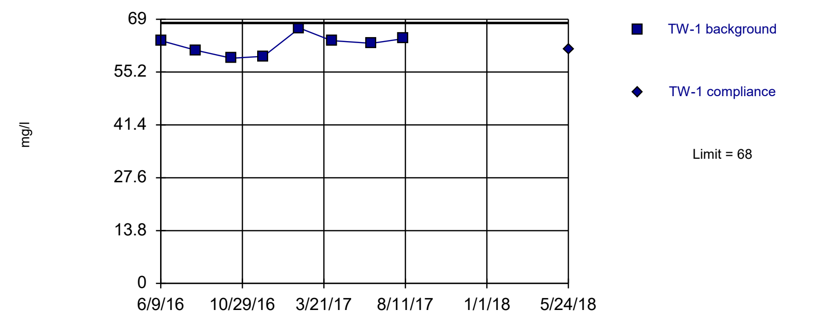
Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Sanitas™ v.9.6.09 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=62.4, Std. Dev.=2.61, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.945, critical = 0.749. Kappa = 2.16 (c=7, w=9, 1 of 3, event alpha = 0.0513). Report alpha = 0.000836.

Constituent: SULFATE Analysis Run 8/27/2018 3:11 PM View: Upper AQC III
LaCygne Client: SCS Engineers Data: LaC GW Data

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-706	MW-706
6/8/2016	<5	
8/9/2016	<5	
10/11/2016	<5	
12/6/2016	<5	
2/7/2017	<5	
4/4/2017	<5	
6/13/2017	<5	
8/9/2017	<5	
5/24/2018		<5

Prediction Limit

Constituent: SULFATE (mg/l) Analysis Run 8/27/2018 3:32 PM View: Upper AQC III

LaCygne Client: SCS Engineers Data: LaC GW Data

	MW-707B	MW-707B
6/23/2016	5010	
8/9/2016	4320	
10/11/2016	4860	
12/6/2016	4920	
2/7/2017	5280	
4/4/2017	4940	
6/13/2017	4600	
8/8/2017	4790	
5/24/2018		4650

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	MW-708	MW-708
6/7/2016	8.99	
8/10/2016	8.98	
10/12/2016	8.24	
12/9/2016	8.72	
2/9/2017	9.59	
4/6/2017	8.36	
6/14/2017	9.38	
8/8/2017	9.36	
5/23/2018		9.25

Prediction Limit

Constituent: SULFATE (mg/l)   Analysis Run 8/27/2018 3:32 PM   View: Upper AQC III

LaCygne   Client: SCS Engineers   Data: LaC GW Data

	TW-1	TW-1
6/9/2016	63.4	
8/9/2016	60.9	
10/11/2016	58.8	
12/6/2016	59.3	
2/7/2017	66.7	
4/4/2017	63.4	
6/13/2017	62.7	
8/8/2017	63.9	
5/24/2018		61.1

Prediction Limit

LaCygne   Client: SCS Engineers   Data: LaC GW Data   Printed 8/27/2018, 3:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
BORON (mg/l)	MW-11	1.17	n/a	7/11/2018	1.17	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-6	1.24	n/a	5/23/2018	1.23	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-7	1.71	n/a	5/23/2018	1.65	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-701	1.1	n/a	5/24/2018	1.06	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-702	2.04	n/a	5/24/2018	1.74	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-703	1.97	n/a	5/24/2018	1.9	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-704	2.15	n/a	5/24/2018	2.14	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-705	2.34	n/a	5/24/2018	2.3	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-706	2.29	n/a	5/24/2018	2.18	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-707B	2.12	n/a	5/24/2018	2.04	No	8	0	x^6	0.000836	Param Intra 1 of 3
BORON (mg/l)	MW-708	1.55	n/a	5/23/2018	1.45	No	8	0	No	0.000836	Param Intra 1 of 3
BORON (mg/l)	TW-1	1.75	n/a	5/24/2018	1.67	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-11	74.3	n/a	5/23/2018	53.4	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-6	119	n/a	5/23/2018	85.6	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-7	29.1	n/a	5/23/2018	22.6	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-701	39.7	n/a	5/24/2018	39.5	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-702	23.3	n/a	5/24/2018	7.13	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-703	23.9	n/a	5/24/2018	21.8	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-704	36.4	n/a	5/24/2018	22.7	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-705	43.3	n/a	5/24/2018	28.9	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-706	36.9	n/a	5/24/2018	23.8	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-707B	429	n/a	5/24/2018	396	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	MW-708	35.2	n/a	5/23/2018	29.2	No	8	0	No	0.000836	Param Intra 1 of 3
CALCIUM (mg/l)	TW-1	38.1	n/a	5/24/2018	25.7	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-11	139	n/a	5/23/2018	80.2	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-6	238	n/a	5/23/2018	197	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-7	119	n/a	5/23/2018	96.9	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-701	58.5	n/a	5/24/2018	53	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-702	51.8	n/a	5/24/2018	45.8	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-703	122	n/a	5/24/2018	108	No	8	0	x^4	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-704	85.1	n/a	8/16/2018	83.3	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-705	144	n/a	5/24/2018	135	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-706	307	n/a	5/24/2018	252	No	8	0	ln(x)	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-707B	251	n/a	5/24/2018	197	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	MW-708	49.1	n/a	5/23/2018	46.3	No	8	0	No	0.000836	Param Intra 1 of 3
CHLORIDE (mg/l)	TW-1	46.7	n/a	5/24/2018	44.5	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-11	1186	n/a	5/23/2018	902	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-6	1325	n/a	5/23/2018	1160	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-7	981	n/a	5/23/2018	868	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-701	663	n/a	5/24/2018	599	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-702	806	n/a	5/24/2018	590	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-703	1010	n/a	5/24/2018	918	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-704	1324	n/a	5/24/2018	1230	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-705	1137	n/a	5/24/2018	912	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-706	1560	n/a	5/24/2018	1170	No	8	0	n/a	0.00591	NP Intra (normality) ...
DISSOLVED SOLIDS (mg/l)	MW-707B	11361	n/a	5/24/2018	7260	No	8	0	No	0.000836	Param Intra 1 of 3
DISSOLVED SOLIDS (mg/l)	MW-708	881	n/a	5/23/2018	639	No	8	0	n/a	0.00591	NP Intra (normality) ...
DISSOLVED SOLIDS (mg/l)	TW-1	1135	n/a	5/24/2018	1000	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-11	0.613	n/a	7/11/2018	0.532	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-6	1.75	n/a	5/23/2018	0.595	No	8	0	n/a	0.00591	NP Intra (normality) ...

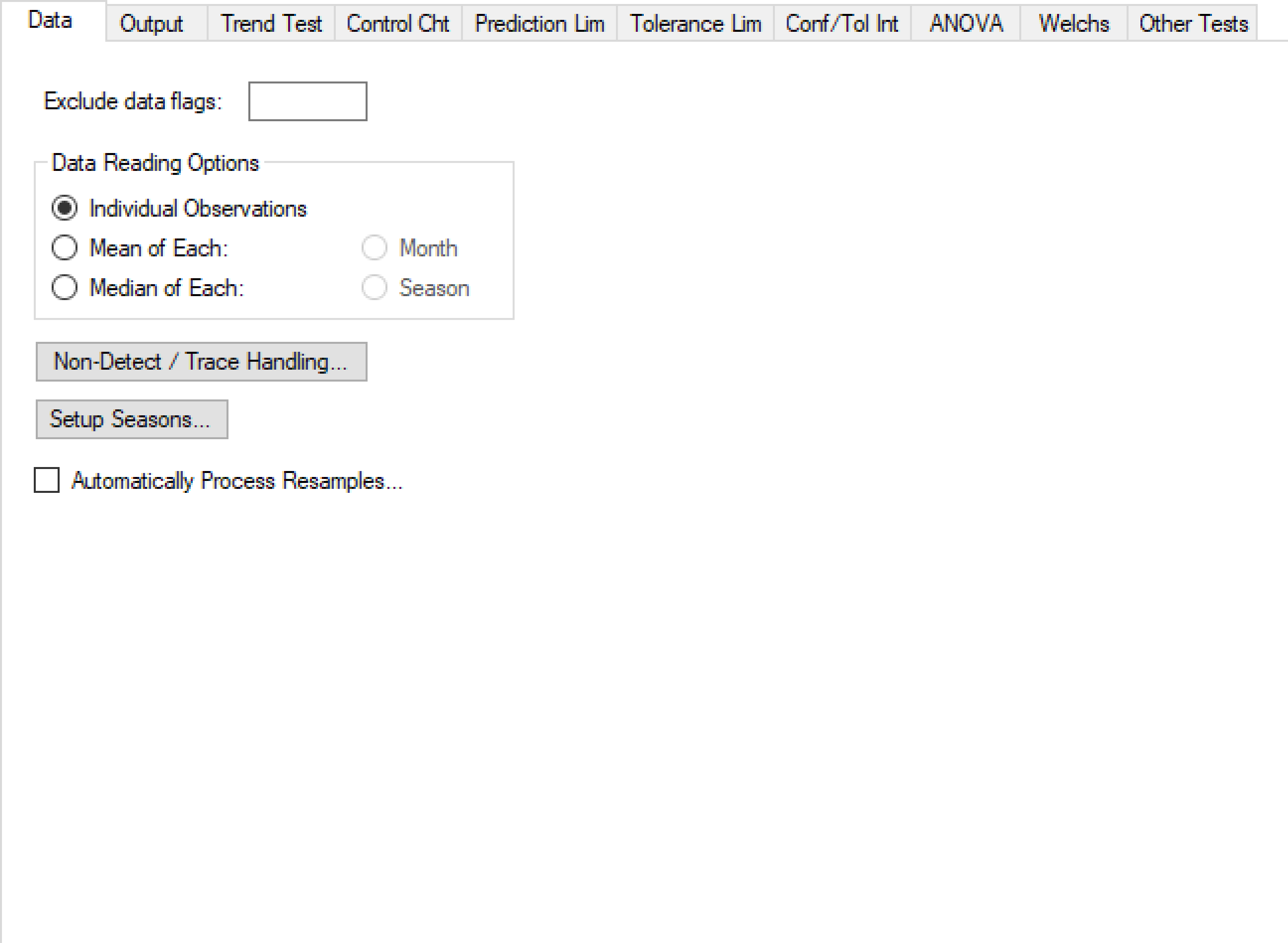
Prediction Limit

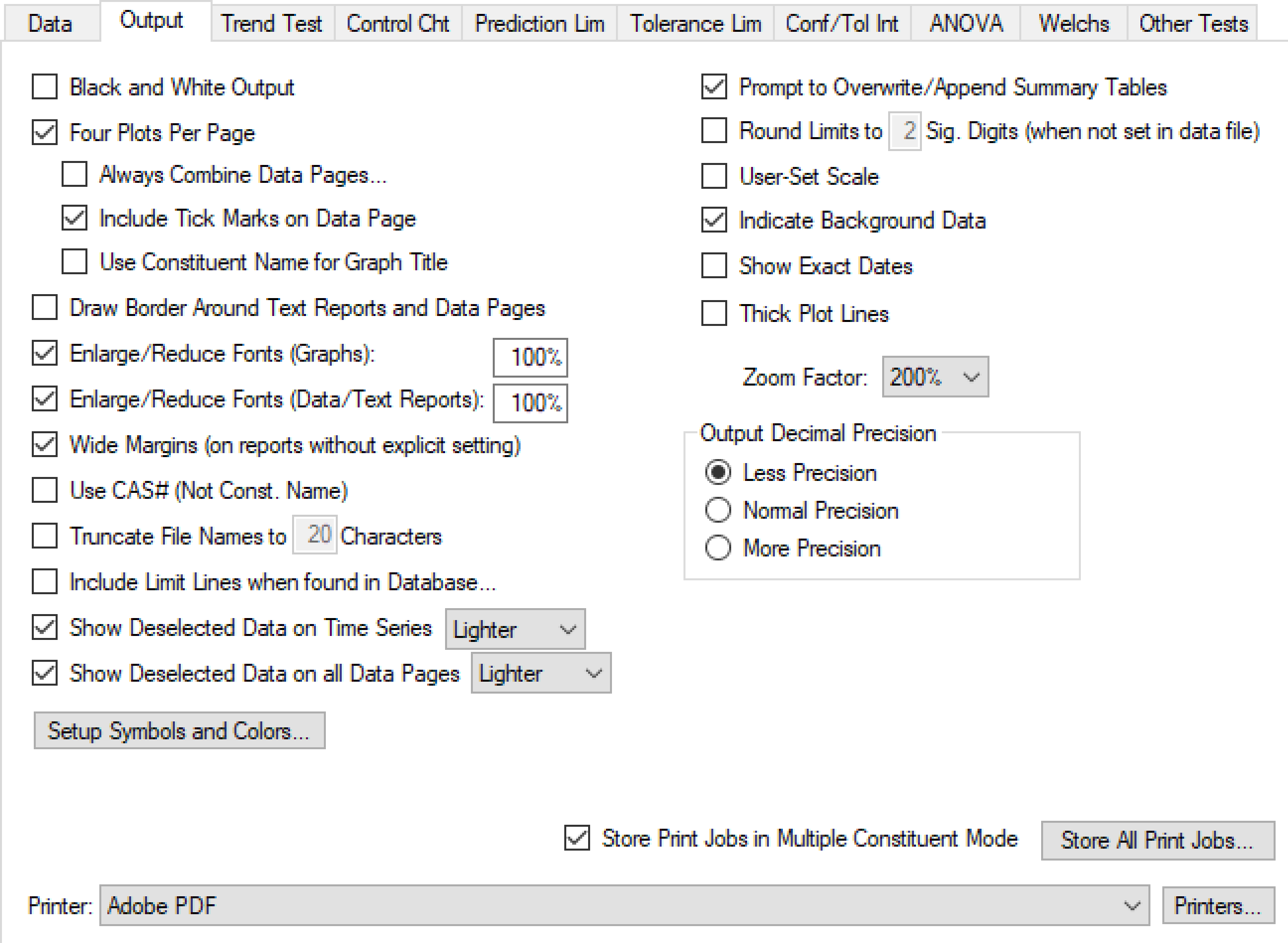
LaCygne Client: SCS Engineers Data: LaC GW Data Printed 8/27/2018, 3:32 PM

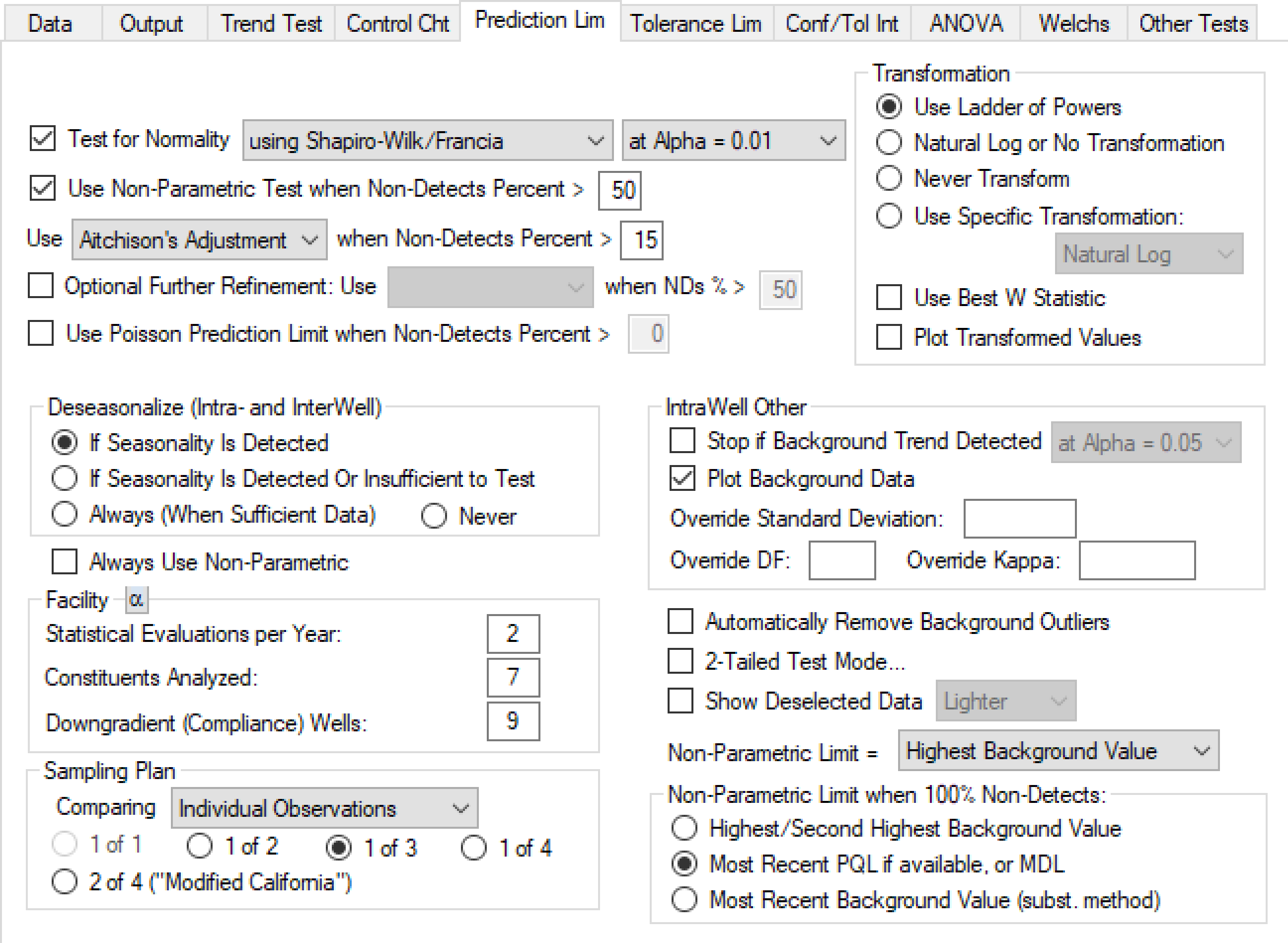
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
FLUORIDE (mg/l)	MW-7	1.4	n/a	5/23/2018	1.29	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-701	0.889	n/a	5/24/2018	0.785	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-702	1.62	n/a	5/24/2018	1.5	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-703	1.61	n/a	5/24/2018	1.49	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-704	0.979	n/a	5/24/2018	0.943	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-705	1.1	n/a	5/24/2018	1.07	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-706	1.29	n/a	5/24/2018	1.2	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-707B	0.599	n/a	5/24/2018	0.392	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	MW-708	0.743	n/a	5/23/2018	0.653	No	8	0	No	0.000836	Param Intra 1 of 3
FLUORIDE (mg/l)	TW-1	0.483	n/a	5/24/2018	0.463	No	8	0	No	0.000836	Param Intra 1 of 3
pH (S.U.)	MW-11	7.66	7.09	7/11/2018	7.37	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-6	7.39	7.02	5/23/2018	7.26	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-7	8.09	7.56	5/23/2018	7.83	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-701	8.23	7.04	5/24/2018	7.6	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-702	9.34	7.32	5/24/2018	8.26	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-703	8.01	7.33	5/24/2018	7.6	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-704	7.83	7.07	8/16/2018	7.54	No	8	0	n/a	0.0118	NP Intra (normality) ...
pH (S.U.)	MW-705	7.35	6.5	5/24/2018	7.29	No	8	0	n/a	0.0118	NP Intra (normality) ...
pH (S.U.)	MW-706	8.17	7.14	5/24/2018	7.44	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-707B	7.24	6.75	5/24/2018	6.92	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	MW-708	7.73	6.86	5/23/2018	7.39	No	8	0	No	0.000418	Param Intra 1 of 3
pH (S.U.)	TW-1	7.98	7.42	5/24/2018	7.6	No	8	0	No	0.000418	Param Intra 1 of 3
SULFATE (mg/l)	MW-11	240	n/a	5/23/2018	167	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-6	203	n/a	5/23/2018	151	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-7	5	n/a	5/23/2018	2.5ND	No	8	100	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-701	89.9	n/a	5/24/2018	78.6	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-702	5.73	n/a	5/24/2018	2.5ND	No	8	75	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-703	5	n/a	5/24/2018	2.5ND	No	8	100	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-704	219	n/a	5/24/2018	166	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-705	46.2	n/a	5/24/2018	41	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-706	5	n/a	5/24/2018	2.5ND	No	8	100	n/a	0.00591	NP Intra (NDs) 1 of 3
SULFATE (mg/l)	MW-707B	5457	n/a	5/24/2018	4650	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	MW-708	10	n/a	5/23/2018	9.25	No	8	0	No	0.000836	Param Intra 1 of 3
SULFATE (mg/l)	TW-1	68	n/a	5/24/2018	61.1	No	8	0	No	0.000836	Param Intra 1 of 3

ATTACHMENT 2

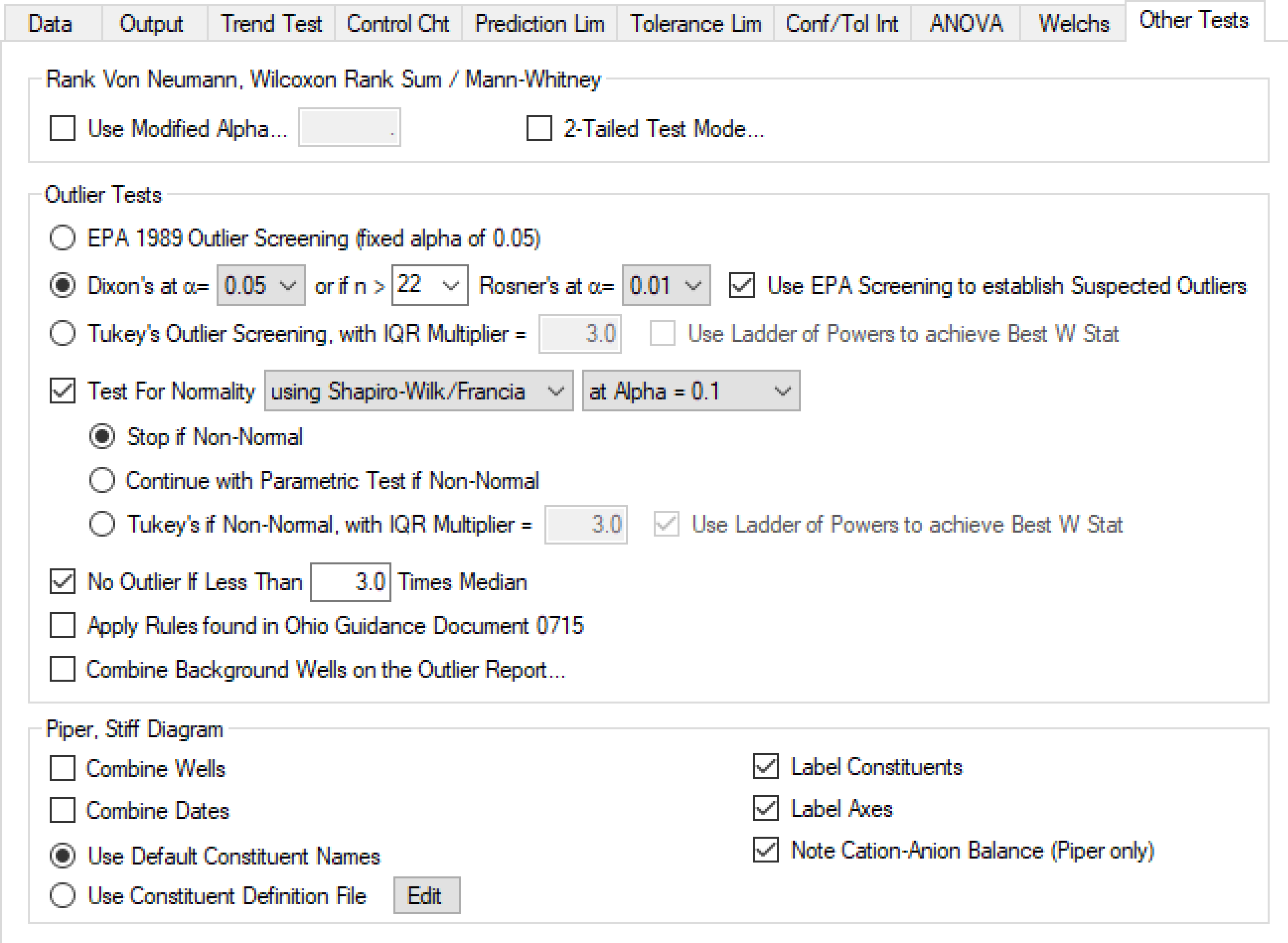
Sanitas™ Configuration Settings


Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Exclude data flags:
Data Reading Options
Individual Observations
Mean of Each:
Month
Median of Each:
Season
Non-Detect / Trace Handling...
Setup Seasons...
Automatically Process Resamples...


Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Black and White Output
Four Plots Per Page
Always Combine Data Pages...
Include Tick Marks on Data Page
Use Constituent Name for Graph Title
Draw Border Around Text Reports and Data Pages
Enlarge/Reduce Fonts (Graphs):
100%
Enlarge/Reduce Fonts (Data/Text Reports):
100%
Wide Margins (on reports without explicit setting)
Use CAS# (Not Const. Name)
Truncate File Names to
20
Characters
Include Limit Lines when found in Database...
Show Deselected Data on Time Series
Lighter
Show Deselected Data on all Data Pages
Lighter
Setup Symbols and Colors...
Prompt to Overwrite/Append Summary Tables
Round Limits to
2
Sig. Digits (when not set in data file)
User-Set Scale
Indicate Background Data
Show Exact Dates
Thick Plot Lines
Zoom Factor:
200%
Output Decimal Precision
Less Precision
Normal Precision
More Precision
Store Print Jobs in Multiple Constituent Mode
Store All Print Jobs...
Printer:
Adobe PDF
Printers...

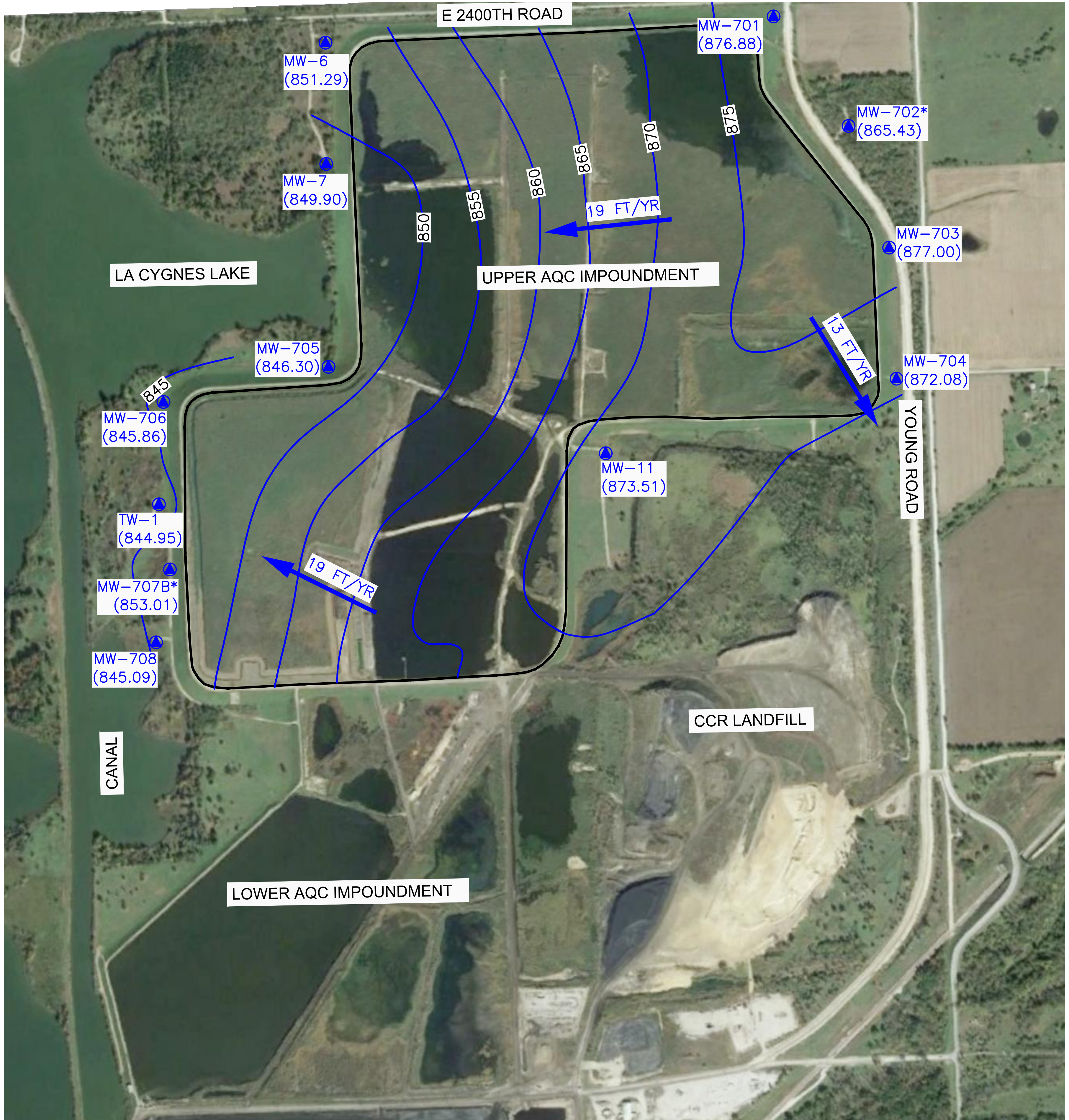


Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Test for Normality
using Shapiro-Wilk/Francia
at Alpha = 0.01
Use Non-Parametric Test when Non-Detects Percent >
50
Use
Aitchison's Adjustment
when Non-Detects Percent >
15
Optional Further Refinement: Use
when NDs % >
50
Use Poisson Prediction Limit when Non-Detects Percent >
0
Transformation
Use Ladder of Powers
Natural Log or No Transformation
Never Transform
Use Specific Transformation:
Natural Log
Use Best W Statistic
Plot Transformed Values
Deseasonalize (Intra- and InterWell)
If Seasonality Is Detected
If Seasonality Is Detected Or Insufficient to Test
Always (When Sufficient Data)
Never
Always Use Non-Parametric
Facility
α
Statistical Evaluations per Year:
2
Constituents Analyzed:
7
Downgradient (Compliance) Wells:
9
Sampling Plan
Comparing
Individual Observations
1 of 1
1 of 2
1 of 3
1 of 4
2 of 4 ("Modified California")
IntraWell Other
Stop if Background Trend Detected
at Alpha = 0.05
Plot Background Data
Override Standard Deviation:
Override DF:
Override Kappa:
Automatically Remove Background Outliers
2-Tailed Test Mode...
Show Deselected Data
Lighter
Non-Parametric Limit =
Highest Background Value
Non-Parametric Limit when 100% Non-Detects:
Highest/Second Highest Background Value
Most Recent PQL if available, or MDL
Most Recent Background Value (subst. method)


Data
Output
Trend Test
Control Cht
Prediction Lim
Tolerance Lim
Conf/Tol Int
ANOVA
Welchs
Other Tests
Rank Von Neumann, Wilcoxon Rank Sum / Mann-Whitney
Use Modified Alpha...
2-Tailed Test Mode...
Outlier Tests
EPA 1989 Outlier Screening (fixed alpha of 0.05)
Dixon's at α= 0.05 or if n > 22 Rosner's at α= 0.01
Use EPA Screening to establish Suspected Outliers
Tukey's Outlier Screening, with IQR Multiplier = 3.0
Use Ladder of Powers to achieve Best W Stat
Test For Normality using Shapiro-Wilk/Francia at Alpha = 0.1
Stop if Non-Normal
Continue with Parametric Test if Non-Normal
Tukey's if Non-Normal, with IQR Multiplier = 3.0
Use Ladder of Powers to achieve Best W Stat
No Outlier If Less Than 3.0 Times Median
Apply Rules found in Ohio Guidance Document 0715
Combine Background Wells on the Outlier Report...
Piper, Stiff Diagram
Combine Wells
Combine Dates
Use Default Constituent Names
Use Constituent Definition File
Edit
Label Constituents
Label Axes
Note Cation-Anion Balance (Piper only)

ATTACHMENT 3

Groundwater Potentiometric Surface Maps



LEGEND

CCR UNIT BOUNDARY (APPROXIMATE LIMITS)

MW−704 (869.52) CCR GROUNDWATER MONITORING SYSTEM WELLS (GROUNDWATER ELEVATION)

−875− GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS

MW−702* INDICATES WELL NOT USED IN POTENTIOMETRIC SURFACE MAP CREATION

16 FT/YR DIRECTION OF GROUNDWATER FLOW AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)

NOTES:

1. KDHE FACILITY PERMIT AND LANDFILL PERMIT BOUNDARIES VARY FROM THAT SHOWN.
2. GOOGLE EARTH IMAGE DATED OCTOBER 2014. BOUNDARY AND MONITOR WELL LOCATIONS ARE APPROXIMATE.
3. BOUNDARY AND MONITOR WELL LOCATIONS ARE PROVIDED BY AECOM.
4. WATER LEVEL MEASUREMENTS COMPLETED ON MAY 23 AND 24, 2018

SCALE 800 0 800 1600 FEET

SHEET TITLE: POTENTIOMETRIC SURFACE MAP UAQC IMPOUNDMENT (MAY 2018)

PROJECT TITLE: 2018 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ADDENDUM

CLIENT: EVERGY METRO, INC LA CYGNE GENERATING STATION LA CYGNE, KANSAS

SCS ENGINEERS
7311 W. 130th St, Ste. 100
Overland Park, Kansas 66213
PH. (913) 681-0030 FAX. (913) 681-0012

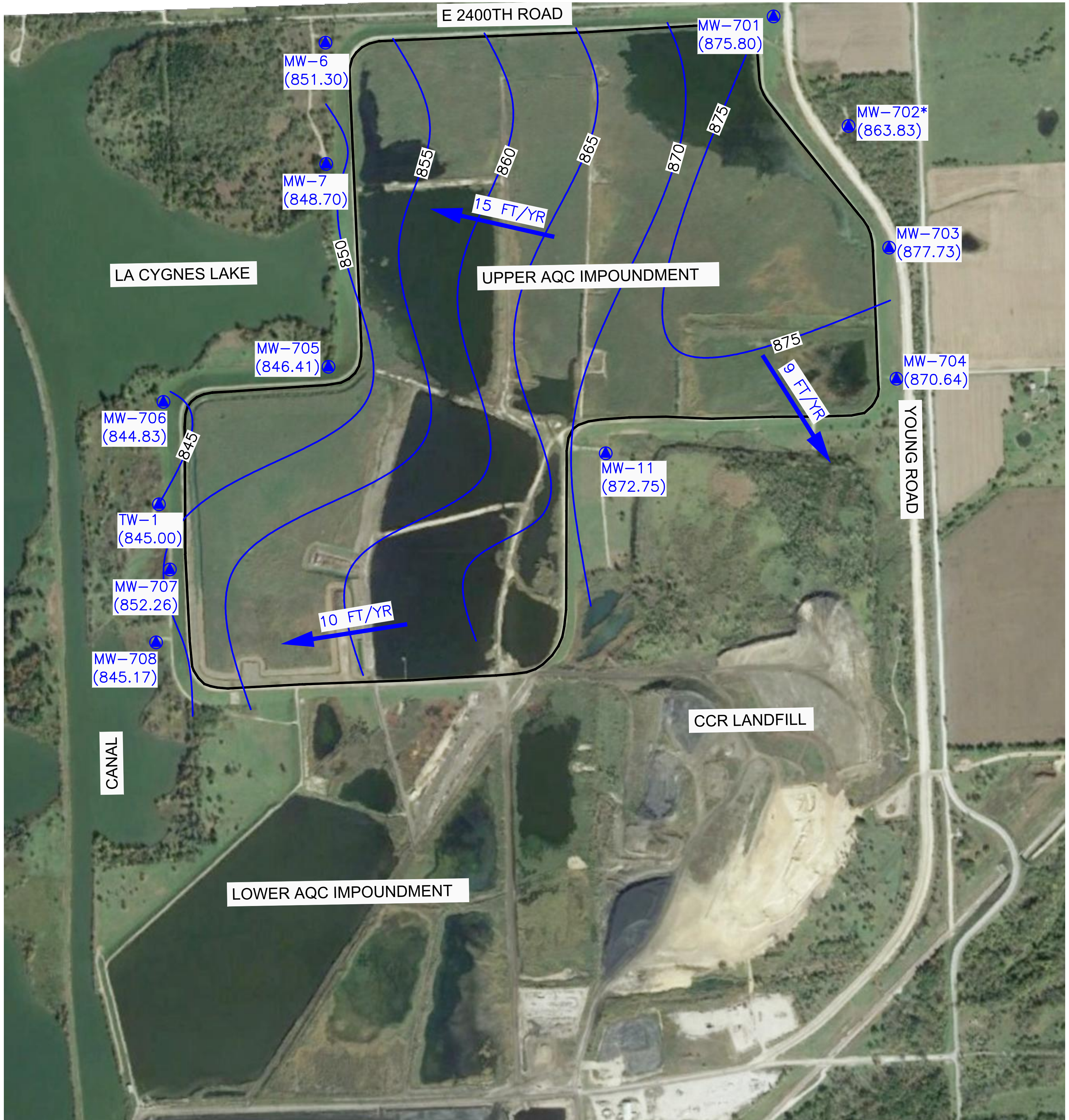
PROJ. NO. 27217233.00 | DWN. BY: RCW | Q/A RVW BY: JRR | DSN. BY: RCW | CHK. BY: JRR | PROJ. MGR: JRR

CADD FILE: LA CYGNE LF LAQC IMP & UAQC FIG 1_MAY 2018 − COMBINED.DWG

DATE: 11/30/22

FIGURE NO. 1

N:\KCPL\Projects\Groundwater\DWG\La Cygne\2018\GW\La Cygne LF LAQC Imp & UAQC Fig 1_MAY 2018 - COMBINED.dwg Nov 30, 2022 - 3:29pm Layout Name: Fig 1 UAQC By: cgoeringer



LEGEND

	CCR UNIT BOUNDARY (APPROXIMATE LIMITS)
MW-704 (869.52)	CCR GROUNDWATER MONITORING SYSTEM WELLS (GROUNDWATER ELEVATION)
-875-	GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS
MW-702*	INDICATES WELL NOT USED IN POTENTIOMETRIC SURFACE MAP CREATION
16 FT/YR	DIRECTION OF GROUNDWATER FLOW AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)

NOTES:

1. KDHE FACILITY PERMIT AND LANDFILL PERMIT BOUNDARIES VARY FROM THAT SHOWN.
2. GOOGLE EARTH IMAGE DATED OCTOBER 2014. BOUNDARY AND MONITOR WELL LOCATIONS ARE APPROXIMATE.
3. BOUNDARY AND MONITOR WELL LOCATIONS ARE PROVIDED BY AECOM.
4. WATER LEVEL MEASUREMENTS COMPLETED ON NOVEMBER 30 THROUGH DECEMBER 4, 2018

800 0 800 1600

SCALE FEET

SHEET TITLE
POTENTIOMETRIC SURFACE MAP UAQC IMPOUNDMENT (DECEMBER 2018)

PROJECT TITLE
2018 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ADDENDUM

CLIENT
EVERGY METRO, INC
LA CYGNE GENERATING STATION
LA CYGNE, KANSAS

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO. 27217233.18 | DWN. BY: TGW | Q/A RVW BY: JRR
DSN. BY: TGW | CHK. BY: JRR | PROJ. MGR: JRR

CADD FILE: LA CYGNE LF LAQC IMP & UAQC FIG 1_COMBINED.DWG

DATE: 5/23/19

FIGURE NO.
2