Annual Groundwater Monitoring Report

Appalachian Power Company

John E. Amos Plant

Fly Ash Pond CCR Management Unit

Winfield, West Virginia

August 2019

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APPALACHIAN POWER℠

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I. Overview

This *Annual Groundwater Monitoring and Corrective Action Report* (Report) has been prepared to report the status of activities for the preceding year for an existing CCR unit at Appalachian Power Company's, a wholly-owned subsidiary of American Electric Power Company (AEP), John E. Amos Power Plant. The USEPA's CCR rules require that the Annual Groundwater Monitoring and Corrective Action Report for inactive surface impoundments be posted to the operating record no later than August 1, 2019 and annually thereafter.

In general, the following activities were completed:

- Monitoring wells were installed and developed to establish a certified groundwater monitoring system around each CCR unit, in accordance with the requirements of 40 CFR 257.91 pursuant AEP's *Groundwater Monitoring System Design and Construction Certification (April 2019)*;
- Groundwater samples were collected and analyzed for Appendix III and Appendix IV constituents, as specified in 40 CFR 257.94 *et seq.* and AEP's *Groundwater Sampling and Analysis Plan (2016, Revised 2019)*;
- Groundwater data underwent various validation tests, including tests for completeness, valid values, transcription errors, and consistent units;
- Background values for each Appendix III and Appendix IV constituent were established;
- A statistical process in accordance with 40 CFR 257.93 to evaluate groundwater data was prepared, certified, and posted to AEP's CCR website in April 2017. The plan was revised in April 2019 and posted to AEP's CCR website in May 2019. AEP's *Statistical Method Selection Certification (2019*). The statistical process was guided by USEPA's *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (*"Unified Guidance", USEPA, 2009*);
- Detection Monitoring sampling was initiated. The initial detection monitoring sampling event resulted in no statistically significant increases of appendix III parameters.

The major components of this annual report, to the extent applicable at this time, are presented in sections that follow:

- A map, aerial photograph or a drawing showing the CCR management unit(s), all groundwater monitoring wells and monitoring well identification numbers.
- Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a statement as to why that happened.
- All of the monitoring data collected, including the rate and direction of groundwater flow, plus a summary showing the number of samples collected per monitoring well, the dates

the samples were collected and whether the sample was collected as part of detection monitoring or assessment monitoring programs (Attached as **Appendix 1**).

- A summary of any transition between monitoring programs or an alternate monitoring frequency, for example the date and circumstances for transitioning from detection monitoring to assessment monitoring, in addition to identifying the constituents detected at a statistically significant increase over background concentrations (Attached as **Appendix 2**).
- Other information required to be included in the annual report such as alternate source demonstration or assessment of corrective measures, if applicable.

In addition, this report summarizes key actions completed, and where applicable, describes any problems encountered and actions taken to resolve those problems. The report includes a projection of key activities for the upcoming year.

II. Groundwater Monitoring Well Locations and Identification Numbers

Figure 1 depicts the PE-certified groundwater monitoring network, the monitoring well locations and their corresponding identification numbers. The groundwater monitoring network has been determined to adequately monitor upgradient, downgradient, and background areas adjacent to the Fly Ash Pond, as detailed in the *Groundwater Monitoring System Design and Construction Certification* that was placed on the AEP CCR public internet site on May 1, 2019. The groundwater quality monitoring network includes the following:

- Five upgradient or sidegradient monitoring wells: MW-1807A, MW-1807B, MW-1808A, MW-1809A, and MW-1810A.
- Ten downgradient monitoring wells: MW-1, MW-2, MW-5, MW-6, MW-7, MW-8, MW-9, MW-1801A, MW-1804A, and MW-1806A.

MW-1807B is screened in the Clarksburg shale to provide background groundwater quality in a deeper secondary groundwater-bearing zone that is hydraulically connected to the uppermost aquifer. Since this monitoring well is not located within the uppermost aquifer or a hydraulically connected aquifer, it is shown only on the site figure and not included in the groundwater flow direction maps.

Legend

- Upgradient Sampling Location
- Downgradient Sampling Location
- Fly Ash Pond

Notes

- Monitoring well coordinates and site features provided by AEP.

1,000 500 0 1,000 Feet

Site Layout
Fly Ash Pond

AEP Amos Generating Plant
Winfield, West Virginia

Geosyntec consultants

Columbus, Ohio | 2019/07/30

Figure 1

P:\Projects\AEP\Groundwater Statistical Evaluation - CHA8423\Groundwater Mapping\GIS Files\MXD\Amos\2018\AEP-Amos_FAP_Site_Layout.mxd. ARevezzo. 7/30/2019. CHA8423.

III. Monitoring Wells Installed or Decommissioned

From November 2017 to July 2018 a total of 22 monitoring wells were installed in order to address gaps in the monitoring well network at the Amos Fly Ash Pond. The network design, as summarized in the *Groundwater Monitoring System Design and Construction Certification* (*April 2019*) and as posted at the CCR web site for Amos Plant details the monitoring well installation activities, boring logs, well construction diagrams, and additional tests that were performed. That design report, viewable on the AEP CCR web site, discusses the facility location, the hydrogeological setting, the hydrostratigraphic units, the uppermost aquifer, downgradient monitoring well locations and the upgradient/background monitoring well locations.

IV. Groundwater Quality Data and Static Water Elevation Data, With Flow Rate and Direction Calculations and Discussion

Appendix 1 contains Table 1 which displays the groundwater quality data collected during the establishment of background quality and the first detection monitoring event. **Appendix 1** also contains Table 2 which displays the groundwater velocity and residence time determinations for each sampling event, to date. Static water elevation data from each monitoring event were used to develop potentiometric maps and determine the groundwater flow direction (**Appendix 1 Figures 1-9**).

V. Groundwater Quality Data Statistical Analysis

Statistical analysis of the first detection monitoring samples taken in March 2019 was completed in July 2019. There were no statistically significant increases (SSIs) for the Appendix III parameters. **Appendix 2** of this report includes the *Statistical Analysis Summary* (*July 2019*) and the memorandum summarizing the evaluation of the first detection monitoring event data at the Amos Fly Ash Pond.

VI. Discussion About Transition Between Monitoring Requirements or Alternate Monitoring Frequency

As of this first annual groundwater report date there has been no transition between detection monitoring and assessment monitoring. Detection monitoring will continue throughout 2019. The sampling frequency of twice per year will be maintained for the Appendix III parameters (boron, calcium, chloride, fluoride, pH, sulfate and total dissolved solids).

Regarding defining an alternate monitoring frequency, the groundwater velocity and monitoring well production is high enough at this facility that no modification of the twice-per-year detection monitoring effort is needed.

VII. Other Information Required

Existing monitoring wells MW-1, MW-2, MW-5, MW-6, MW-8, and MW-9 had the concrete pads replaced during June and July 2019. All other required information is included in this report.

VIII. Description of Any Problems Encountered and Actions Taken

No significant problems were encountered. The low flow sampling effort went smoothly and the schedule was met to support this first annual groundwater report preparation.

IX. A Projection of Key Activities for the Upcoming Year

Key activities for the upcoming year include:

- Detection monitoring on a twice per year schedule;
- Responding to any new data received in light of what the CCR rule requires; and
- Preparation of the second annual groundwater report.

APPENDIX 1

Tables follow, showing a summary of the number of samples collected per monitoring well and the groundwater monitoring data collected, the groundwater velocity, and the direction of groundwater flow. The dates that the samples were collected also is shown.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-1								
		7/24/2018	8/28/2018	10/3/2018	10/22/2018	11/13/2018	12/19/2018	1/23/2019	2/19/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.0200 J	0.0200 J	<0.0200	<0.0200	<0.0200	0.0300 J	0.0600 J	0.0500 J	-
Arsenic	ug/L	7.65	7.90	7.98	6.84	8.04	7.65	7.64	7.83	-
Barium	ug/L	52.9	49.5	51.5	44.7	51.9	48.6	43.7	44.7	-
Beryllium	ug/L	<0.00400	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	-
Boron	mg/L	0.182	0.135	0.138	0.180	0.209	0.117	0.115	0.126	0.110
Cadmium	ug/L	0.00800 J	<0.00500	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	-
Calcium	mg/L	2.83	2.80	2.95	2.36	3.03	2.71	2.29	2.36	2.60
Chloride	mg/L	11.7	11.3	11.1	11.4	11.5	10.7	14.6	10.9	11.0
Chromium	ug/L	0.0750	0.0920	0.100 J	0.100 J	0.583	0.0800 J	0.0900 J	0.100 J	-
Cobalt	ug/L	0.0310	0.0390	0.0300 J	0.0500 J	0.0300 J	0.0300 J	0.0300 J	0.0300 J	-
Combined Radium	pCi/L	1.09	0.261	1.78	0.608	0.456	0.316	0.688	0.00538	-
Fluoride	mg/L	0.420	0.450	0.400	0.420	0.450	0.430	0.410	0.440	0.430
Lead	ug/L	0.0410	0.0470	0.0200 J	0.0700 J	0.0600 J	0.0200 J	0.0300 J	0.111	-
Lithium	mg/L	0.0120	0.00900	<0.00900	<0.00900	<0.00900	0.0200 J	<0.00900	0.0100 J	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	1.94	1.48	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J	-
Selenium	ug/L	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.0500 J	-
Total Dissolved Solids	mg/L	473	435	457	434	444	428	453	457	458
Sulfate	mg/L	30.6	31.6	30.8	30.7	32.2	30.9	55.9	31.3	31.6
Thallium	ug/L	0.0300 J	0.0100 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	8.15	8.50	8.29	8.33	8.03	8.12	8.17	8.45	8.18

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	MW-1801A								
		7/24/2018	8/29/2018	10/2/2018	10/24/2018	11/14/2018	12/19/2018	1/24/2019	2/20/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.130	0.0500 J	0.140	0.0600 J	0.0800 J	0.0400 J	0.0600 J	0.0900 J	-
Arsenic	ug/L	0.360	0.570	0.820	0.720	1.01	1.11	1.57	1.52	-
Barium	ug/L	54.4	56.5	47.1	51.3	51.3	56.0	55.3	56.6	-
Beryllium	ug/L	<0.00400	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	-
Boron	mg/L	0.274	0.288	0.137	0.105	0.236	0.289	0.168	0.0900 J	0.0900 J
Cadmium	ug/L	0.0100 J	<0.00500	<0.0100	<0.0100	0.0300 J	0.0200 J	<0.0100	<0.0100	-
Calcium	mg/L	62.5	64.0	61.0	63.1	65.4	62.8	53.4	53.3	51.2
Chloride	mg/L	9.64	10.8	7.48	8.14	9.86	9.08	9.18	8.96	9.40
Chromium	ug/L	0.113	0.143	0.0900 J	0.0800 J	0.0800 J	0.100 J	0.0700 J	0.100 J	-
Cobalt	ug/L	0.194	0.260	0.422	0.380	0.414	0.349	0.326	0.290	-
Combined Radium	pCi/L	0.602	1.22	0.254	0.654	0.690	0.836	0.595	0.588	-
Fluoride	mg/L	0.100 J	0.110	0.100 J	0.100 J	0.100 J	0.120	0.140	0.130	0.160
Lead	ug/L	0.0420	0.0240	0.0400 J	0.0200 J	0.0500 J	0.0300 J	<0.0200	<0.0200	-
Lithium	mg/L	0.00900	0.00700	0.0200 J	0.00900 J	<0.00900	0.0100 J	<0.00900	<0.00900	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	4.97	3.07	4.79	2.08	2.34	2.77	2.22	3.57	-
Selenium	ug/L	0.0900 J	0.0500 J	0.100 J	0.200 J	0.100 J	0.0900 J	0.100 J	0.200 J	-
Total Dissolved Solids	mg/L	372	420	356	357	386	361	365	343	306
Sulfate	mg/L	49.4	54.8	46.7	41.8	49.3	45.5	46.3	40.0	41.7
Thallium	ug/L	0.0400 J	0.0400 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	7.56	7.43	7.42	7.45	7.29	7.27	6.33	8.01	7.45

Notes:
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J: Estimated value. Parameter was detected in concentrations below the reporting limit.
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D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	MW-1804A									
		7/27/2018	8/1/2018	8/28/2018	10/2/2018	10/23/2018	11/13/2018	12/19/2018	1/24/2019	2/21/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.540	-	0.150	0.530	0.180	0.0900 J	0.130	0.300	0.190	-
Arsenic	ug/L	2.48	-	3.59	2.35	3.36	4.16	4.00	3.32	4.48	-
Barium	ug/L	245	-	204	390	131	135	169	183	116	-
Beryllium	ug/L	0.00800 J	-	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	-
Boron	mg/L	0.672	-	0.779	0.629	0.675	0.846	0.772	0.673	0.611	0.568
Cadmium	ug/L	<0.00500	-	<0.00500	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	-
Calcium	mg/L	28.1	-	15.9	38.8	12.9	8.90	10.1	12.1	7.43	10.2
Chloride	mg/L	-	3.87	5.27	3.63	4.79	5.32	4.51	3.14	3.29	3.55
Chromium	ug/L	0.185	-	0.304	0.100 J	0.100 J	0.200 J	0.100 J	0.200 J	0.200 J	-
Cobalt	ug/L	0.458	-	0.314	0.693	0.137	0.160	0.176	0.137	0.0960	-
Combined Radium	pCi/L	1.81	-	1.56	1.66	0.444	0.523	1.09	1.42	0.894	-
Fluoride	mg/L	-	0.700	0.840	0.610	0.780	0.910	0.780	0.710	0.890	0.850
Lead	ug/L	0.445	-	0.0310	0.0500 J	0.114	0.133	0.111	0.140	0.219	-
Lithium	mg/L	0.0180	-	0.0150	0.0320	0.0100 J	0.0200 J	0.0100 J	<0.00900	<0.00900	-
Mercury	ug/L	<0.00200	-	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	136	-	136	111	116	129	130	110	115	-
Selenium	ug/L	1.80	-	0.200	3.10	0.700	0.200	0.500	1.70	0.600	-
Total Dissolved Solids	mg/L	-	423	452	458	452	498	433	414	461	411
Sulfate	mg/L	-	35.2	44.7	35.7	36.9	46.0	40.1	32.3	33.8	34.0
Thallium	ug/L	0.0690	-	0.0500 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	-	7.39	8.28	7.90	7.61	7.84	7.90	7.37	8.03	7.92

Notes:
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D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	MW-1806A									
		7/27/2018	8/1/2018	8/29/2018	10/2/2018	10/23/2018	11/13/2018	12/19/2018	1/24/2019	2/18/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	1.16	-	0.890	0.280	0.190	0.110	0.170	0.150	0.100 J	-
Arsenic	ug/L	2.65	-	3.29	5.30	5.16	5.91	5.65	3.97	4.21	-
Barium	ug/L	163	-	148	65.4	88.3	98.7	65.6	168	78.8	-
Beryllium	ug/L	0.0100 J	-	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	-
Boron	mg/L	0.164	-	0.162	0.150	0.158	0.213	0.162	0.168	0.133	0.130
Cadmium	ug/L	0.0100 J	-	0.00800 J	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	-
Calcium	mg/L	12.9	-	12.0	5.81	7.43	7.51	5.14	12.2	5.67	4.98
Chloride	mg/L	-	17.7	16.2	7.21	8.62	8.15	5.29	11.7	6.24	5.51
Chromium	ug/L	0.416	-	1.54	0.100 J	0.252	0.100 J	0.100 J	0.0800 J	0.200 J	-
Cobalt	ug/L	0.240	-	0.161	0.0800	0.152	0.163	0.0710	0.159	0.0500	-
Combined Radium	pCi/L	0.998	-	1.53	0.900	0.469	0.344	0.861	1.16	0.419	-
Fluoride	mg/L	-	0.560	0.550	0.800	0.770	0.850	0.850	0.590	0.810	0.830
Lead	ug/L	0.368	-	0.154	0.158	0.195	0.137	0.122	0.0600 J	0.110	-
Lithium	mg/L	0.0120	-	0.0100	0.0200 J	0.0200 J	<0.00900	<0.00900	0.0200 J	0.0100 J	-
Mercury	ug/L	<0.00200	-	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	17.0	-	14.2	7.73	6.66	7.44	6.02	5.62	4.74	-
Selenium	ug/L	0.100	-	0.0900 J	0.0700 J	0.0700 J	0.0500 J	0.0600 J	0.0400 J	0.0300 J	-
Total Dissolved Solids	mg/L	-	426	445	435	423	442	409	445	460	430
Sulfate	mg/L	-	48.4	45.6	36.2	40.8	40.1	30.9	48.1	33.0	32.9
Thallium	ug/L	0.0300 J	-	0.0200 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	-	7.55	8.02	8.50	8.42	8.12	8.47	8.11	8.56	8.81

Notes:
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J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	MW-1807A								
		7/26/2018	8/28/2018	10/4/2018	10/24/2018	11/14/2018	12/20/2018	1/25/2019	2/21/2019	3/14/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.130	0.870	0.140	0.180	0.170	0.170	0.120	0.0800 J	-
Arsenic	ug/L	0.990	1.13	1.10	0.840	0.960	0.940	0.920	0.820	-
Barium	ug/L	32.6	32.6	30.1	27.8	28.8	29.5	27.4	24.1	-
Beryllium	ug/L	0.00600 J	0.00500 J	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	-
Boron	mg/L	0.170	0.137	0.129	0.199	0.175	0.208	0.183	0.0800 J	0.0900 J
Cadmium	ug/L	0.0200	0.0600	0.0500 J	0.0300 J	0.0300 J	0.0300 J	0.0300 J	0.0300 J	-
Calcium	mg/L	146	136	166	144	155	151	156	150	160
Chloride	mg/L	9.57	11.8	12.5	10.3	10.5	9.68	11.3	12.0	11.1
Chromium	ug/L	0.0980	0.253	0.205	0.200 J	0.0900 J	0.403	0.100 J	0.100 J	-
Cobalt	ug/L	0.629	0.565	0.918	0.579	0.614	0.616	0.733	0.811	-
Combined Radium	pCi/L	1.37	1.51	1.13	0.389	0.985	1.02	1.27	0.735	-
Fluoride	mg/L	0.210	0.210	0.160	0.200	0.210	0.190	0.150	0.140	0.150
Lead	ug/L	0.0460	0.300	0.142	0.105	0.0900 J	0.251	0.126	0.118	-
Lithium	mg/L	0.0200	0.0180	<0.00900	0.0200 J	0.0100 J	0.0200 J	0.0300	0.0100 J	-
Mercury	ug/L	<0.00200	0.00200 J	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	1.65	9.07	11.1	2.00 J	2.00 J	1.00 J	1.00 J	0.600 J	-
Selenium	ug/L	0.300	0.600	0.200 J	0.200 J	0.200	0.300	0.100 J	0.100 J	-
Total Dissolved Solids	mg/L	929	953	985	838	904	931	876	1050	1020
Sulfate	mg/L	334	356	367	308	326	315	361	396	363
Thallium	ug/L	0.0300 J	0.0540	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	7.51	6.94	6.68	6.92	6.82	7.16	8.24	7.18	6.70

Notes:
µg/L: micrograms per liter
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J: Estimated value. Parameter was detected in concentrations below the reporting limit.
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BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-1807B								
		7/26/2018	8/28/2018	10/5/2018	10/24/2018	11/14/2018	12/20/2018	1/25/2019	2/21/2019	3/14/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.270	0.230	0.150	0.250	0.160	0.430	0.0900 J	0.350	-
Arsenic	ug/L	1.93	1.94	1.70	1.26	1.28	1.75	1.23	1.48	-
Barium	ug/L	49.6	56.3	59.6	42.3	41.4	73.7	43.0	66.9	-
Beryllium	ug/L	0.0490	<0.00400	0.0300 J	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	-
Boron	mg/L	0.195	0.178	0.201	0.176	0.211	0.164	0.277	0.168	0.163
Cadmium	ug/L	0.0100 J	<0.00500	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	-
Calcium	mg/L	8.76	8.39	9.21	8.92	8.87	11.6	9.33	11.0	12.7
Chloride	mg/L	8.46	10.8	9.94	7.93	8.52	9.88	7.68	9.53	10.8
Chromium	ug/L	1.40	0.134	0.263	0.381	0.247	0.335	0.0800 J	0.100 J	-
Cobalt	ug/L	0.525	0.0460	0.179	0.139	0.0730	0.114	0.0500 J	0.0510	-
Combined Radium	pCi/L	0.719	1.31	2.08	0.305	0.348	0.267	1.00	0.291	-
Fluoride	mg/L	0.750	1.13	1.01	0.810	0.910	1.16	0.790	1.06	1.19
Lead	ug/L	0.756	0.0350	0.310	0.203	0.0800 J	0.145	0.0400 J	0.0400 J	-
Lithium	mg/L	0.0210	0.0100	<0.00900	0.0200 J	0.0200 J	0.0200 J	0.0200 J	<0.00900	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	4.22	23.9	12.5	5.59	5.62	13.5	4.21	9.27	-
Selenium	ug/L	0.300	0.0800 J	0.200 J	0.0700 J	0.0500 J	0.100 J	0.0600 J	0.0800 J	-
Total Dissolved Solids	mg/L	732	706	752	735	732	738	742	791	793
Sulfate	mg/L	218	219	219	220	230	230	227	238	249
Thallium	ug/L	0.0300 J	0.0100 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	8.29	8.07	7.87	8.34	7.73	8.18	6.91	8.35	7.90

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-1808A								
		7/25/2018	8/28/2018	10/4/2018	10/24/2018	11/13/2018	12/20/2018	1/25/2019	2/21/2019	3/14/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.290	0.140	0.140	0.0300 J	0.0400 J	0.0500 J	0.0600 J	0.0200 J	-
Arsenic	ug/L	2.47	5.34	2.84	1.86	3.83	4.37	2.27	1.99	-
Barium	ug/L	86.2	105	78.1	86.2	74.1	71.0	80.3	78.9	-
Beryllium	ug/L	0.299	0.251	0.0500 J	0.0500 J	0.0300 J	0.0400 J	0.102	0.0500 J	-
Boron	mg/L	0.182	0.142	0.135	0.103	0.152	0.172	0.173	0.122	0.112
Cadmium	ug/L	0.00700 J	0.0100 J	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	-
Calcium	mg/L	40.4	38.5	38.6	41.5	40.2	40.3	47.4	39.4	62.9
Chloride	mg/L	19.6	19.4	16.7	17.1	18.4	21.6	18.3	17.4	20.9
Chromium	ug/L	0.831	1.25	0.500	0.443	0.381	0.293	0.415	0.213	-
Cobalt	ug/L	0.544	0.821	0.231	0.117	0.160	0.119	0.149	0.0760	-
Combined Radium	pCi/L	1.89	4.96	2.08	1.04	0.470	1.05	2.76	0.535	-
Fluoride	mg/L	0.520	0.570	0.410	0.550	0.510	0.470	0.400	0.400	0.330
Lead	ug/L	2.28	2.06	0.392	0.397	0.245	0.227	0.717	0.316	-
Lithium	mg/L	0.0240	0.0250	<0.00900	0.0200 J	0.0200 J	0.0300 J	0.0350	0.0100 J	-
Mercury	ug/L	0.00600	0.00500 J	<0.00200	<0.00200	0.00200 J	0.00300 J	<0.00200	<0.00200	-
Molybdenum	ug/L	6.46	11.7	4.56	3.06	2.75	2.00 J	1.00 J	1.00 J	-
Selenium	ug/L	0.500	0.400	0.0700 J	0.0700 J	0.0500 J	0.0800 J	0.200 J	0.0900 J	-
Total Dissolved Solids	mg/L	734	740	790	614	770	834	840	821	912
Sulfate	mg/L	184	227	216	126	210	242	231	213	290
Thallium	ug/L	0.0400 J	0.0830	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	7.70	7.56	7.43	7.72	7.43	7.58	6.11	7.21	7.70

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	MW-1809A								
		7/26/2018	8/28/2018	10/3/2018	10/23/2018	11/14/2018	12/19/2018	1/25/2019	2/22/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.0500	0.0300 J	0.0300 J	<0.0200	<0.0200	<0.0200	<0.0200	<0.100	-
Arsenic	ug/L	2.30	2.83	2.87	2.59	3.10	3.51	3.39	4.57	-
Barium	ug/L	60.2	67.3	61.4	53.0	58.0	63.4	57.2	64.5	-
Beryllium	ug/L	0.00400 J	0.00400 J	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.100	-
Boron	mg/L	0.0850	0.0910	0.0900 J	0.114	0.0900 J	0.0600 J	0.0800 J	0.0800 J	0.0500 J
Cadmium	ug/L	<0.00500	<0.00500	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0500	-
Calcium	mg/L	173	179	191	181	188	182	188	184	189
Chloride	mg/L	26.1	28.8	26.8	26.6	28.4	27.7	28.1	30.2	31.0
Chromium	ug/L	0.119	0.200	0.100 J	0.0900 J	0.0800 J	0.212	0.0600 J	<0.200	-
Cobalt	ug/L	0.555	0.754	0.533	0.424	0.447	0.504	0.375	0.559	-
Combined Radium	pCi/L	1.56	1.19	4.22	1.50	1.72	1.42	2.99	1.56	-
Fluoride	mg/L	0.160	0.170	0.140	0.140	0.160	0.150	0.140	0.140	0.140
Lead	ug/L	0.0350	0.0100 J	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.100	-
Lithium	mg/L	0.0200	0.0240	<0.00900	0.0430	0.0100 J	0.0320	0.0460	0.0380	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	7.18	3.01	2.27	2.00 J	2.00 J	2.88	2.00 J	2.00 J	-
Selenium	ug/L	0.0400 J	0.0600 J	0.0500 J	0.0300 J	<0.0300	<0.0300	<0.0300	<0.200	-
Total Dissolved Solids	mg/L	1020	1020	1070	1050	1050	1040	1080	1080	1090
Sulfate	mg/L	386	386	388	390	403	384	390	403	396
Thallium	ug/L	0.0100 J	0.0200 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.500	-
pH	SU	7.22	7.14	7.14	7.11	7.18	6.97	5.12	7.20	7.19

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-1810A									
		7/26/2018	8/2/2018	8/27/2018	10/3/2018	10/24/2018	11/13/2018	12/20/2018	1/23/2019	2/22/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.130	-	0.100	0.110	0.0700 J	0.0900 J	0.0800 J	0.0700 J	<0.100	-
Arsenic	ug/L	0.880	-	0.510	0.490	0.540	0.400	0.430	0.450	0.400 J	-
Barium	ug/L	124	-	83.4	83.0	88.5	83.5	87.9	84.2	87.8	-
Beryllium	ug/L	0.00900 J	-	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.100	-
Boron	mg/L	0.220	-	0.271	0.245	0.211	0.238	0.210	0.319	0.245	0.228
Cadmium	ug/L	<0.00500	-	<0.00500	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0500	-
Calcium	mg/L	23.0	-	25.9	28.0	23.7	30.2	30.1	24.8	32.3	30.5
Chloride	mg/L	-	23.4	21.6	19.0	18.6	19.5	17.0	16.3	15.4	15.4
Chromium	ug/L	0.442	-	0.229	0.200 J	0.100 J	0.100 J	0.100 J	0.0800 J	0.300 J	-
Cobalt	ug/L	0.150	-	0.0480	0.0300 J	0.0200 J	0.0200 J	0.0300 J	0.0200 J	<0.100	-
Combined Radium	pCi/L	0.382	-	0.842	1.22	0.992	0.240	0.565	0.768	0.650	-
Fluoride	mg/L	-	0.930	0.930	0.890	0.860	1.04	0.980	0.900	1.01	1.00
Lead	ug/L	0.149	-	0.0570	0.0900 J	0.0300 J	0.0400 J	0.0500 J	0.0300 J	0.100 J	-
Lithium	mg/L	0.0180	-	0.0150	<0.00900	0.0200 J	<0.00900	0.0200 J	0.0100 J	0.0200 J	-
Mercury	ug/L	<0.00200	-	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	9.26	-	8.52	7.06	6.28	6.03	5.24	5.94	4.00 J	-
Selenium	ug/L	0.0600 J	-	0.0400 J	0.0500 J	0.0400 J	0.0300 J	0.0300 J	0.0300 J	<0.200	-
Total Dissolved Solids	mg/L	-	565	525	542	473	544	548	494	580	548
Sulfate	mg/L	-	170	129	114	93.1	160	160	112	170	153
Thallium	ug/L	0.0510	-	0.0200 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.500	-
pH	SU	-	7.43	7.49	7.27	7.70	7.28	7.06	7.52	7.37	7.30

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-2								
		7/27/2018	8/29/2018	10/4/2018	10/23/2018	11/15/2018	12/19/2018	1/23/2019	2/22/2019	3/13/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.0600	0.0200 J	<0.0200	<0.0200	<0.0200	0.0300 J	<0.0200	<0.100	-
Arsenic	ug/L	1.68	1.62	1.76	1.24	1.66	1.33	1.55	1.35	-
Barium	ug/L	202	178	192	181	185	182	178	169	-
Beryllium	ug/L	0.00800 J	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.100	-
Boron	mg/L	0.259	0.249	0.256	0.262	0.328	0.225	0.318	0.237	0.230
Cadmium	ug/L	0.0200 J	<0.00500	<0.0100	<0.0100	<0.0100	0.0300 J	<0.0100	<0.0500	-
Calcium	mg/L	4.24	3.98	4.31	3.95	4.07	3.81	3.67	3.95	3.98
Chloride	mg/L	471	443	435	438	469	430	441	447	441
Chromium	ug/L	0.312	0.129	0.200 J	0.200 J	0.200 J	0.967	0.382	<0.200	-
Cobalt	ug/L	0.102	0.0340	0.0500 J	0.0550	0.0400 J	0.0400 J	0.0500	<0.100	-
Combined Radium	pCi/L	1.35	1.70	1.29	0.594	0.953	1.06	0.725	0.275	-
Fluoride	mg/L	3.08	2.99	2.99	3.08	3.30	3.03	3.00	3.06	3.02
Lead	ug/L	0.406	0.0330	0.100 J	0.214	0.110	0.290	0.166	<0.100	-
Lithium	mg/L	0.0190	0.0230	<0.00900	0.0300 J	0.0200 J	0.0200 J	0.0100 J	0.0200 J	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	27.2	34.5	30.8	26.1	29.2	25.5	29.2	21.9	-
Selenium	ug/L	0.0400 J	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.0400 J	<0.200	-
Total Dissolved Solids	mg/L	1260	1310	1280	1250	1250	1250	1310	1310	1300
Sulfate	mg/L	2.40	17.4	14.8	7.40	13.5	6.40	6.40	2.30	1.80
Thallium	ug/L	0.0200 J	0.0200 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.500	-
pH	SU	8.36	8.60	8.51	8.54	8.45	8.52	8.21	8.69	8.72

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	MW-5								
		7/24/2018	8/29/2018	10/3/2018	10/24/2018	11/13/2018	12/19/2018	1/23/2019	2/19/2019	3/13/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.0600	0.180	<0.0200	0.0200 J	<0.0200	<0.0200	<0.0400	<0.0600	-
Arsenic	ug/L	4.89	5.08	4.86	4.34	4.37	4.39	4.35	5.25	-
Barium	ug/L	356	359	373	363	353	364	351	349	-
Beryllium	ug/L	0.00400 J	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0400	<0.0600	-
Boron	mg/L	0.252	0.240	0.276	0.249	0.264	0.221	0.323	0.239	0.229
Cadmium	ug/L	0.00600 J	0.0100 J	<0.0100	<0.0100	<0.0100	<0.0100	<0.0200	<0.0300	-
Calcium	mg/L	6.75	6.71	7.03	7.09	6.79	6.48	5.98	6.79	6.85
Chloride	mg/L	793	780	776	811	832	783	782	793	804
Chromium	ug/L	0.152	0.278	0.626	0.219	0.100 J	0.0700 J	0.532	0.200 J	-
Cobalt	ug/L	0.0460	0.0850	0.0530	0.516	0.0400 J	0.0400 J	<0.0400	<0.0600	-
Combined Radium	pCi/L	1.37	1.81	1.63	0.731	1.82	1.51	1.05	1.45	-
Fluoride	mg/L	3.32	3.33	3.33	3.44	3.63	3.43	3.36	3.38	3.44
Lead	ug/L	0.222	0.284	0.0300 J	0.0600 J	0.0300 J	<0.0200	<0.0400	<0.0600	-
Lithium	mg/L	0.0320	0.0300	<0.00900	0.0300 J	0.0200 J	0.0300 J	0.0200 J	0.0340	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	36.5	38.4	35.7	35.1	34.7	34.8	35.0	33.6	-
Selenium	ug/L	<0.0300	<0.0300	<0.0300	0.0400 J	<0.0300	<0.0300	<0.0600	<0.0900	-
Total Dissolved Solids	mg/L	1890	1880	1860	1840	1880	1890	1910	1920	1930
Sulfate	mg/L	0.200	0.200	0.100 J	<0.0600	0.100 J	<0.0600	<0.0600	<0.0600	0.0800 J
Thallium	ug/L	0.0500 J	0.0200 J	<0.100	<0.100	<0.100	<0.100	<0.200	<0.300	-
pH	SU	8.13	8.16	8.12	8.06	7.97	7.94	8.08	8.19	7.99

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-6								
		7/24/2018	8/28/2018	10/3/2018	10/24/2018	11/13/2018	12/19/2018	1/23/2019	2/19/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.0100 J	0.0200 J	<0.0200	<0.0200	<0.0200	<0.0200	0.0400 J	<0.0200	-
Arsenic	ug/L	1.81	1.82	1.91	1.72	2.12	1.88	1.89	1.53	-
Barium	ug/L	536	527	523	494	524	510	486	482	-
Beryllium	ug/L	0.00900 J	0.00800 J	<0.0200	0.0300 J	<0.0200	<0.0200	<0.0200	<0.0200	-
Boron	mg/L	0.120	0.0960	0.125	0.100 J	0.111	0.0700 J	0.0800 J	0.0900 J	0.0800 J
Cadmium	ug/L	0.0100 J	0.0200	0.0100 J	<0.0100	<0.0100	0.0100 J	<0.0100	<0.0100	-
Calcium	mg/L	61.0	59.7	60.7	61.5	64.9	55.8	54.1	55.8	57.9
Chloride	mg/L	19.3	19.4	18.9	18.4	19.8	17.7	17.8	17.3	17.4
Chromium	ug/L	0.0940	0.663	0.0900 J	0.0700 J	0.0800 J	0.0600 J	0.0400 J	0.277	-
Cobalt	ug/L	0.242	0.323	0.260	0.258	0.233	0.234	0.220	0.219	-
Combined Radium	pCi/L	2.73	2.44	4.59	2.20	2.33	2.53	1.82	2.14	-
Fluoride	mg/L	0.220	0.240	0.210	0.230	0.240	0.230	0.220	0.240	0.230
Lead	ug/L	0.0200 J	0.167	<0.0200	0.0300 J	0.0300 J	0.0200 J	<0.0200	<0.0200	-
Lithium	mg/L	0.0120	0.00900	<0.00900	0.0100 J	<0.00900	0.0100 J	<0.00900	0.0200 J	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	0.580	0.600	0.500 J	0.600 J	0.700 J	0.700 J	0.600 J	0.600 J	-
Selenium	ug/L	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.0400 J	-
Total Dissolved Solids	mg/L	392	398	402	400	390	376	411	406	390
Sulfate	mg/L	44.4	44.6	43.4	42.0	44.6	41.7	41.3	40.4	39.8
Thallium	ug/L	0.0300 J	0.0200 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	6.91	6.93	6.82	6.85	6.67	6.67	6.59	7.00	6.85

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-7								
		7/26/2018	8/29/2018	10/3/2018	10/24/2018	11/13/2018	12/17/2018	1/23/2019	2/18/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.0400 J	0.0500 J	0.0700 J	0.180	0.120	0.0600 J	0.440	0.270	-
Arsenic	ug/L	5.31	5.51	5.65	5.13	5.24	5.21	5.86	5.33	-
Barium	ug/L	34.0	32.3	33.9	37.0	32.7	33.5	36.8	34.3	-
Beryllium	ug/L	<0.00400	<0.00400	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0300 J	-
Boron	mg/L	0.0870	0.112	0.156	0.0900 J	0.192	0.100 J	0.127	0.0600 J	0.0600 J
Cadmium	ug/L	0.0100 J	0.0100 J	<0.0100	0.0200 J	<0.0100	<0.0100	0.0200 J	0.0200 J	-
Calcium	mg/L	1.33	1.29	1.44	1.40	1.49	1.24	1.41	1.37	1.47
Chloride	mg/L	5.41	5.32	5.23	5.37	5.65	5.29	5.18	5.39	5.49
Chromium	ug/L	0.0820	0.190	0.0700 J	0.296	0.100 J	0.100 J	0.221	0.100 J	-
Cobalt	ug/L	0.0380	0.0230	<0.0200	0.134	0.0300 J	<0.0200	0.0680	0.0570	-
Combined Radium	pCi/L	1.96	0.745	2.39	0.113	0.954	1.24	0.558	0.543	-
Fluoride	mg/L	0.270	0.270	0.260	0.270	0.290	0.270	0.250	0.260	0.270
Lead	ug/L	0.211	0.121	0.111	0.476	0.146	0.100 J	0.420	0.230	-
Lithium	mg/L	0.00900	0.0100	<0.00900	<0.00900	<0.00900	<0.00900	<0.00900	0.0100 J	-
Mercury	ug/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	1.12	1.06	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J	-
Selenium	ug/L	<0.0300	<0.0300	0.0300 J	0.0500 J	<0.0300	0.0400 J	0.0500 J	<0.0300	-
Total Dissolved Solids	mg/L	368	387	376	344	379	387	389	401	385
Sulfate	mg/L	32.0	31.5	31.8	31.7	33.2	32.0	32.0	32.1	32.5
Thallium	ug/L	0.0100 J	0.0200 J	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	-
pH	SU	8.53	8.75	8.75	8.82	8.36	8.62	8.44	8.96	8.88

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	MW-8									
		7/26/2018	8/2/2018	8/30/2018	10/3/2018	10/23/2018	11/13/2018	12/19/2018	1/23/2019	2/20/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.0400 J	-	0.850	0.200	0.150	0.140	0.260	0.270	0.400 J	-
Arsenic	ug/L	3.02	-	5.71	5.18	4.26	3.49	2.91	3.49	2.41	-
Barium	ug/L	63.7	-	58.2	86.2	70.9	71.5	73.3	76.8	71.9	-
Beryllium	ug/L	0.00500 J	-	0.0490	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.100	-
Boron	mg/L	0.233	-	0.225	0.259	0.278	0.254	0.224	0.213	0.195	0.192
Cadmium	ug/L	<0.00500	-	0.0500	0.0200 J	<0.0100	<0.0100	<0.0100	<0.0100	<0.0500	-
Calcium	mg/L	2.15	-	1.99	2.74	2.32	2.46	2.28	2.39	2.49	2.32
Chloride	mg/L	-	105	109	108	108	116	110	111	111	110
Chromium	ug/L	0.114	-	1.89	0.200 J	0.229	0.200 J	0.264	0.463	0.400 J	-
Cobalt	ug/L	0.210	-	1.69	0.270	0.284	0.253	0.231	0.513	0.538	-
Combined Radium	pCi/L	1.56	-	0.655	3.98	0.294	0.691	0.956	0.386	0.736	-
Fluoride	mg/L	-	2.70	2.66	2.58	2.74	2.93	2.78	2.62	2.87	2.87
Lead	ug/L	0.237	-	2.78	0.427	0.491	0.352	0.357	0.990	0.770	-
Lithium	mg/L	0.0130	-	0.0120	<0.00900	0.0200 J	<0.00900	0.0200 J	<0.00900	0.00900 J	-
Mercury	ug/L	<0.00200	-	0.00400 J	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	-
Molybdenum	ug/L	11.7	-	20.6	8.76	10.2	7.64	6.93	11.0	8.00 J	-
Selenium	ug/L	0.0500 J	-	0.200	0.0800 J	0.0800 J	0.0800 J	0.100 J	0.0900 J	0.400 J	-
Total Dissolved Solids	mg/L	-	690	727	729	717	711	696	739	740	716
Sulfate	mg/L	-	21.6	24.2	31.6	26.3	27.2	26.4	30.1	26.4	27.4
Thallium	ug/L	0.0200 J	-	0.0760	<0.100	<0.100	<0.100	<0.100	<0.100	<0.500	-
pH	SU	-	8.20	8.90	7.86	8.45	8.15	8.45	8.08	9.15	8.51

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Geosyntec Consultants

Parameter	Unit	MW-9									
		7/26/2018	8/2/2018	8/30/2018	10/2/2018	10/23/2018	11/13/2018	12/20/2018	1/23/2019	2/20/2019	3/12/2019
		BG	BG	BG	BG	BG	BG	BG	BG	BG	D-1
Antimony	ug/L	0.210	-	0.910	0.590	1.28	0.350	0.330	1.08	0.400 J	-
Arsenic	ug/L	5.23	-	5.87	7.04	4.58	5.83	4.47	5.84	5.45	-
Barium	ug/L	46.8	-	46.8	66.0	45.4	51.1	35.8	44.6	41.5	-
Beryllium	ug/L	0.00400 J	-	0.0200 J	0.192	0.0800 J	0.115	<0.0200	0.0900 J	<0.100	-
Boron	mg/L	0.157	-	0.128	0.145	0.141	0.166	0.114	0.134	0.128	0.122
Cadmium	ug/L	0.0100 J	-	0.350	0.0700	0.0200 J	0.0200 J	0.100	0.0300 J	<0.0500	-
Calcium	mg/L	1.03	-	1.04	1.44	1.07	1.24	1.03	1.01	1.26	1.18
Chloride	mg/L	-	7.22	7.21	7.60	7.26	7.29	7.11	7.45	7.70	7.50
Chromium	ug/L	0.218	-	1.17	4.52	1.90	2.54	0.725	2.46	0.700 J	-
Cobalt	ug/L	1.00	-	2.15	3.70	1.39	1.92	0.393	1.43	0.349	-
Combined Radium	pCi/L	0.912	-	1.16	0.543	0.658	0.635	0.847	1.46	0.251	-
Fluoride	mg/L	-	0.870	0.860	0.830	0.870	0.910	0.840	0.770	0.840	0.910
Lead	ug/L	1.12	-	5.23	8.66	2.68	3.44	1.03	2.45	0.955	-
Lithium	mg/L	0.0100	-	0.0100	0.00900 J	0.0100 J	<0.00900	<0.00900	<0.00900	0.0100 J	-
Mercury	ug/L	<0.00200	-	0.0120	0.0160	0.00800	0.00400 J	0.0100	0.00900	0.00600	-
Molybdenum	ug/L	7.31	-	6.28	6.07	5.93	6.06	6.51	6.49	6.00 J	-
Selenium	ug/L	0.0600 J	-	0.200	0.900	0.400	0.600	0.400	0.500	0.300 J	-
Total Dissolved Solids	mg/L	-	421	468	513	460	449	435	484	505	463
Sulfate	mg/L	-	12.9	12.2	12.6	12.8	11.9	15.7	20.1	28.5	24.0
Thallium	ug/L	0.0600	-	0.209	0.400 J	0.300 J	0.200 J	0.100 J	0.200 J	<0.500	-
pH	SU	-	8.27	8.00	7.14	9.28	9.10	9.17	9.65	9.18	9.00

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
<: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
BG: Background monitoring event
D-1: First detection monitoring event

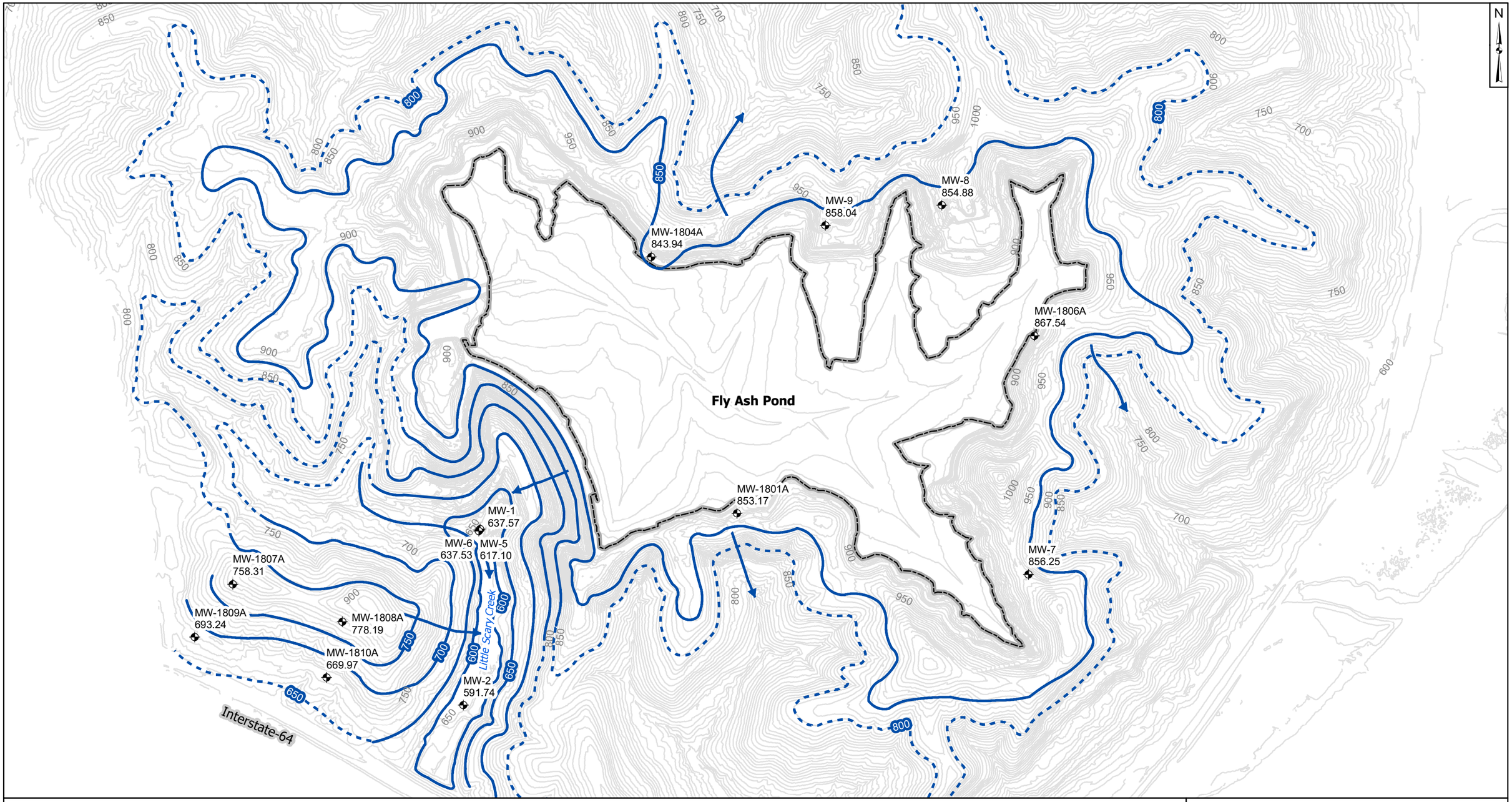
Table 2: Residence Time Calculation Summary
Amos Fly Ash Pond

Geosyntec Consultants, Inc.

CCR Management Unit	Monitoring Well	Well Diameter (inches)	2018-07		2018-08		2018-10-01		2018-10-22		2018-11	
			Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)
Fly Ash Pond	MW-1801A[1]	2.0	8.0	7.6	15.6	3.9	5.3	11.4	11.3	5.4	16.3	3.7
	MW-1804A[1]	2.0	19	3.2	32	1.9	33	1.8	23	2.7	32	1.9
	MW-1806A[1]	2.0	12.2	5.0	11.9	5.1	10.0	6.1	13.0	4.7	12.9	4.7
	MW-1807A[2]	2.0	10	6.2	37	1.7	31	2.0	11.4	5.3	13.1	4.6
	MW-1808A[2]	2.0	41	1.5	52	1.2	59	1.0	38	1.6	37	1.7
	MW-1809A[2]	2.0	11.4	5.3	15.4	4.0	6.7	9.1	7.9	7.7	12.4	4.9
	MW-1810A[2]	2.0	36	1.7	39	1.6	37	1.6	36	1.7	35	1.8
	MW-1 [1]	2.0	18	3.5	18.4	3.3	21	2.8	18.1	3.4	17.8	3.4
	MW-2 [1]	2.0	111	0.55	113	0.54	116	0.53	112	0.54	112	0.54
	MW-5 [1]	2.0	32	1.9	32	1.9	4.9	12.3	32	1.9	32	1.9
	MW-6 [1]	2.0	12	5.1	12.0	5.1	13.7	4.4	11.8	5.2	11.6	5.2
	MW-7 [1]	2.0	10.2	5.9	11.1	5.5	6.0	10.1	12.3	4.9	11.7	5.2
	MW-8 [1]	2.0	10.4	5.9	14.2	4.3	46	1.3	15.5	3.9	13.6	4.5
	MW-9 [1]	2.0	9.8	6.2	18.9	3.2	7.6	8.0	15.3	4.0	26	2.4

CCR Management Unit	Monitoring Well	Well Diameter (inches)	2018-12		2019-01		2019-02		2019-03	
			Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)
Fly Ash Pond	MW-1801A[1]	2.0	11.2	5.4	15.7	3.9	9.1	6.7	11.0	5.5
	MW-1804A[1]	2.0	21	2.9	18.7	3.3	21	2.9	17.4	3.5
	MW-1806A[1]	2.0	13.4	4.5	13.0	4.7	12.6	4.8	13.8	4.4
	MW-1807A[2]	2.0	18.3	3.3	16.6	3.7	13.9	4.4	12.2	5.0
	MW-1808A[2]	2.0	39	1.5	46	1.3	35	1.7	40	1.5
	MW-1809A[2]	2.0	10.5	5.8	11.6	5.3	10.6	5.7	10.3	5.9
	MW-1810A[2]	2.0	35	1.7	36	1.7	36	1.7	1.1	56
	MW-1 [1]	2.0	17.9	3.4	17.9	3.4	18.0	3.4	25	2.5
	MW-2 [1]	2.0	110	0.55	111	0.55	111	0.55	112	0.55
	MW-5 [1]	2.0	32	1.9	32	1.9	32	1.9	32	1.9
	MW-6 [1]	2.0	11.7	5.2	11.7	5.2	11.7	5.2	11.6	5.2
	MW-7 [1]	2.0	14.0	4.4	16.0	3.8	17.7	3.4	15.0	4.0
	MW-8 [1]	2.0	16.5	3.7	16.8	3.6	13.3	4.6	10.8	5.6
	MW-9 [1]	2.0	16.5	3.7	12.8	4.8	13.0	4.7	11.6	5.2

Notes:
[1] - Upgradient/Sidegradient Well
[2] - Downgradient Well



Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on July 23, 2018) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

1,000 500 0 1,000 Feet

Potentiometric Surface Map - Uppermost Aquifer
July 2018

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

Geosyntec consultants

Columbus, Ohio | 2019/07/29

Figure **1**

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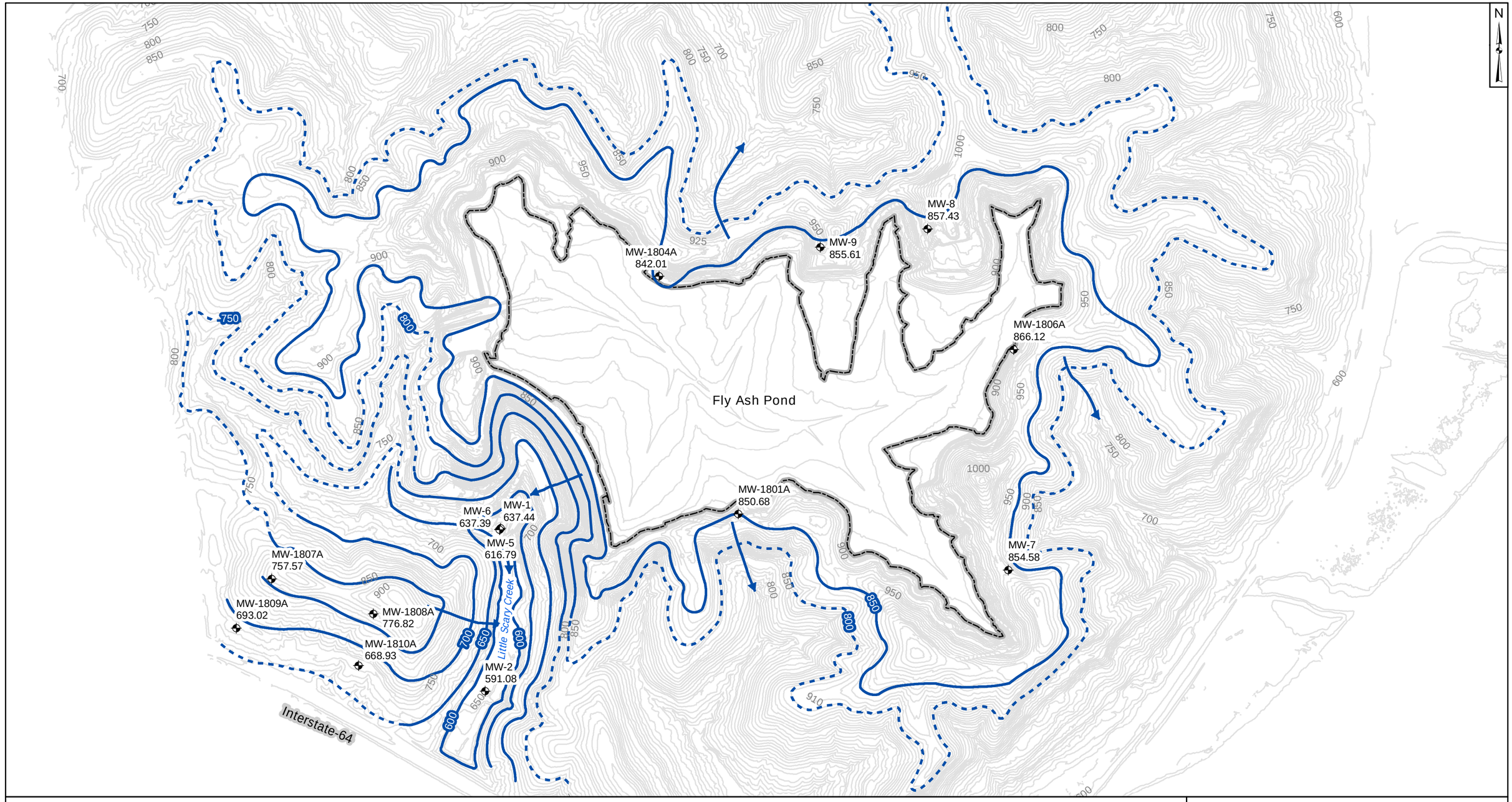

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on August 27, 2018) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

1,000 500 0 1,000 Feet

Potentiometric Surface Map - Uppermost Aquifer August 2018

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

Geosyntec consultants

Columbus, Ohio | 2019/07/29

Figure 2

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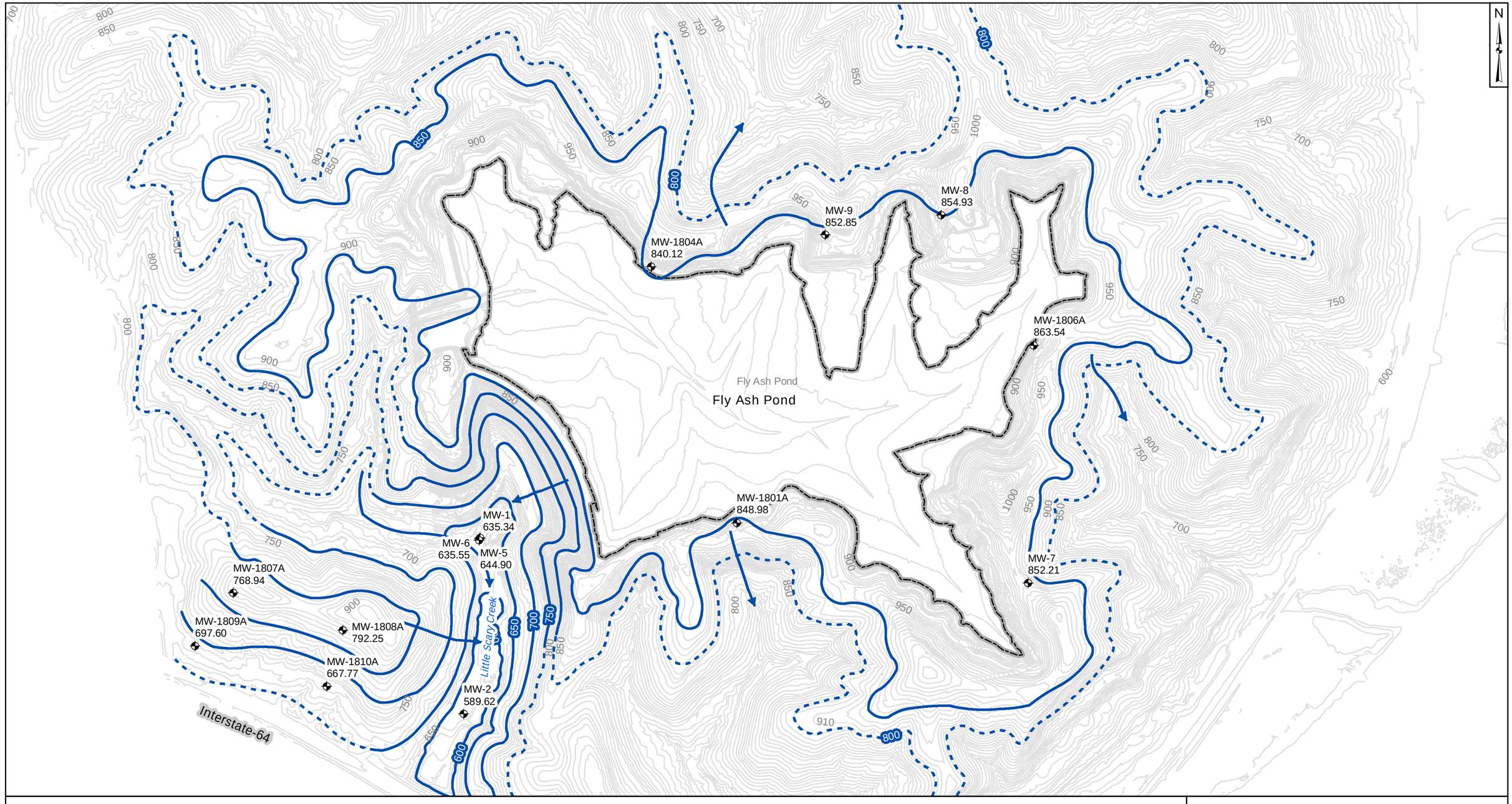

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on October 1, 2018) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

Potentiometric Surface Map - Uppermost Aquifer
October 1, 2018

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

Geosyntec consultants

Columbus, Ohio | 2019/07/29

Figure 3

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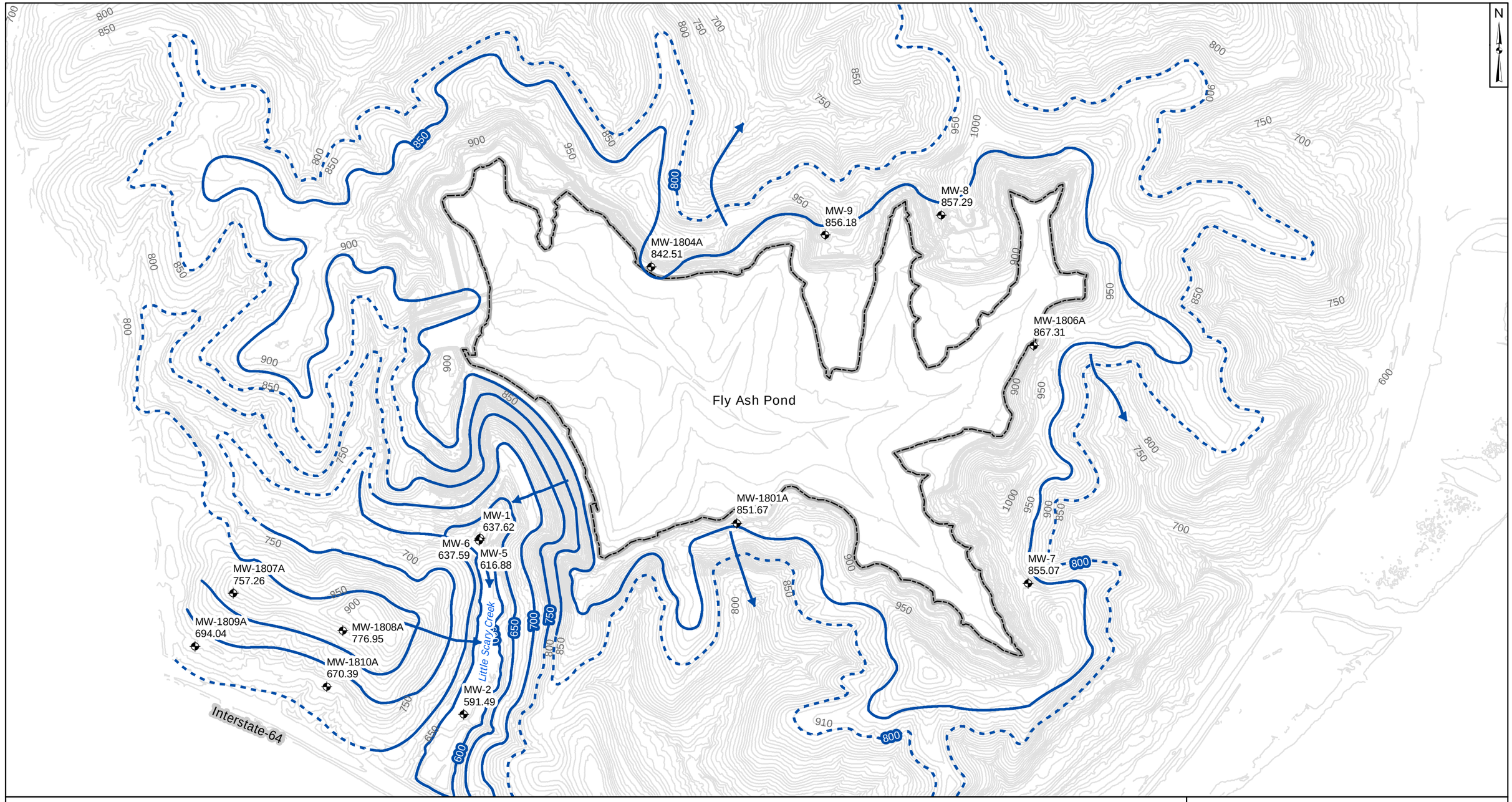

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on October 22, 2018) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

1,000 500 0 1,000 Feet

Potentiometric Surface Map - Uppermost Aquifer October 22, 2018

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

Geosyntec consultants

Columbus, Ohio | 2019/07/29

Figure 4

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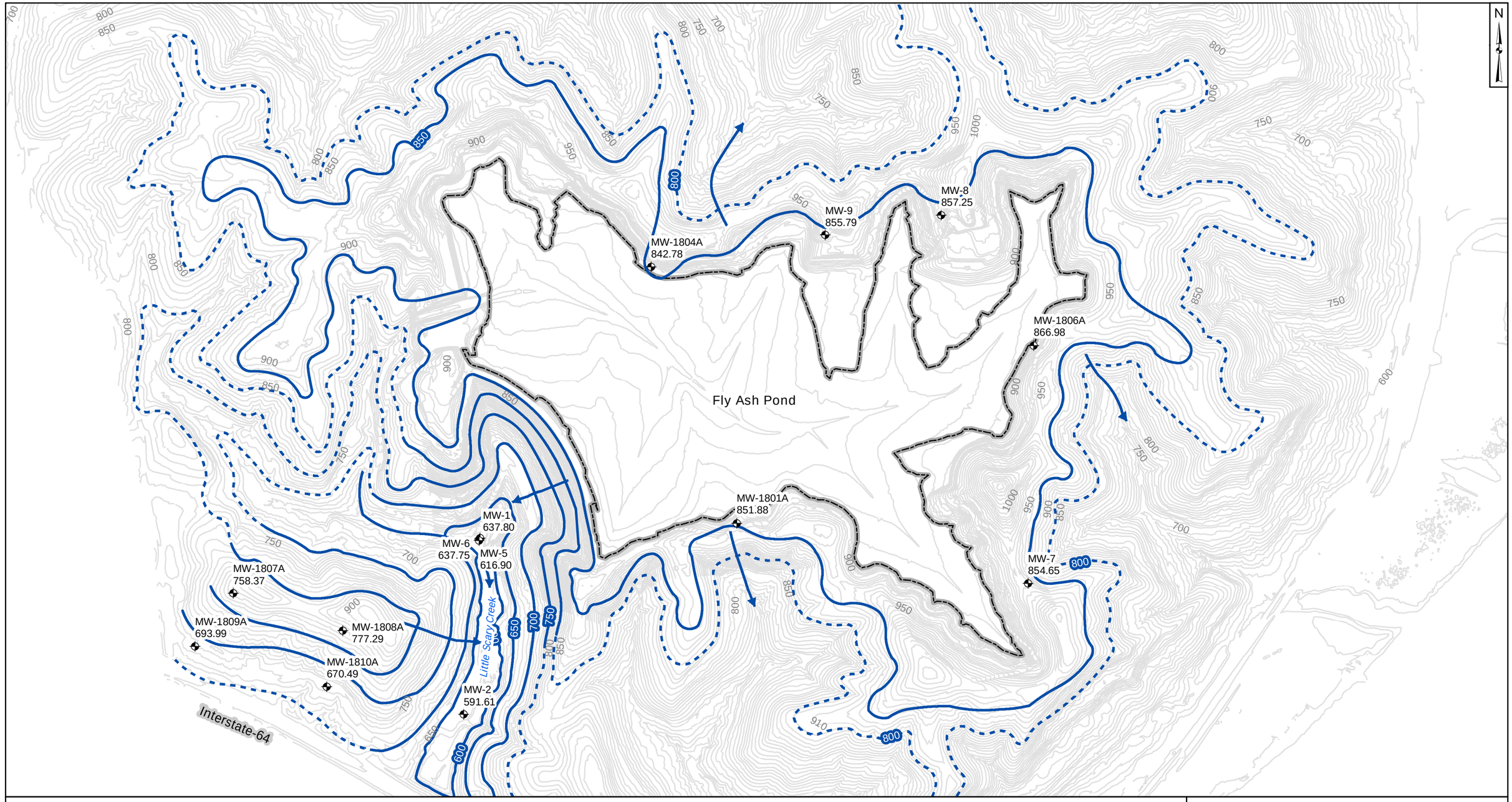

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on November 11, 2018) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

1,000 500 0 1,000 Feet

Potentiometric Surface Map - Uppermost Aquifer November 2018

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

Geosyntec consultants

Columbus, Ohio | 2019/07/29

Figure 5

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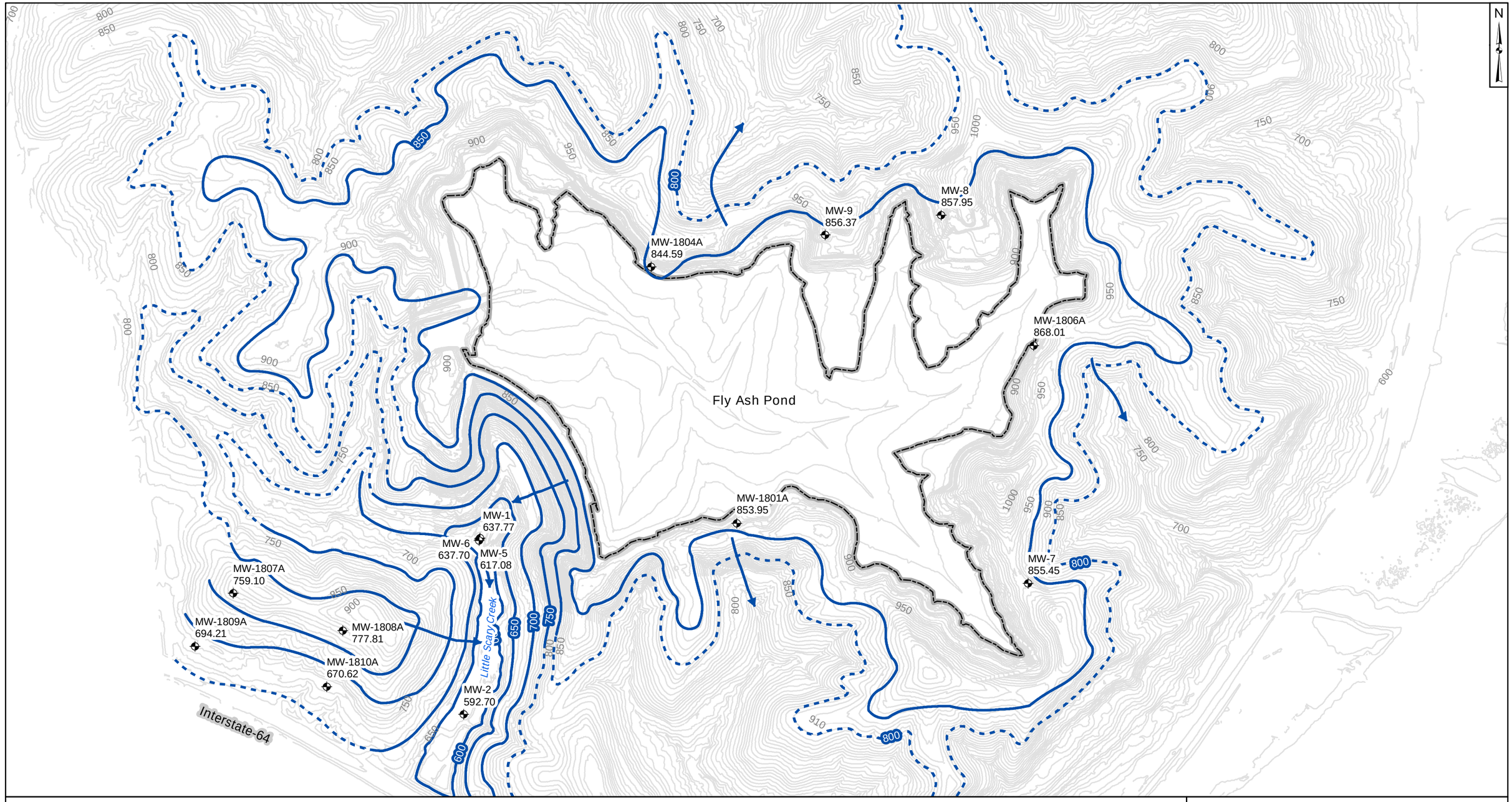

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on December 17, 2018) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

Potentioetric Surface Map - Uppermost Aquifer December 2018

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

Geosyntec consultants

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Figure 6

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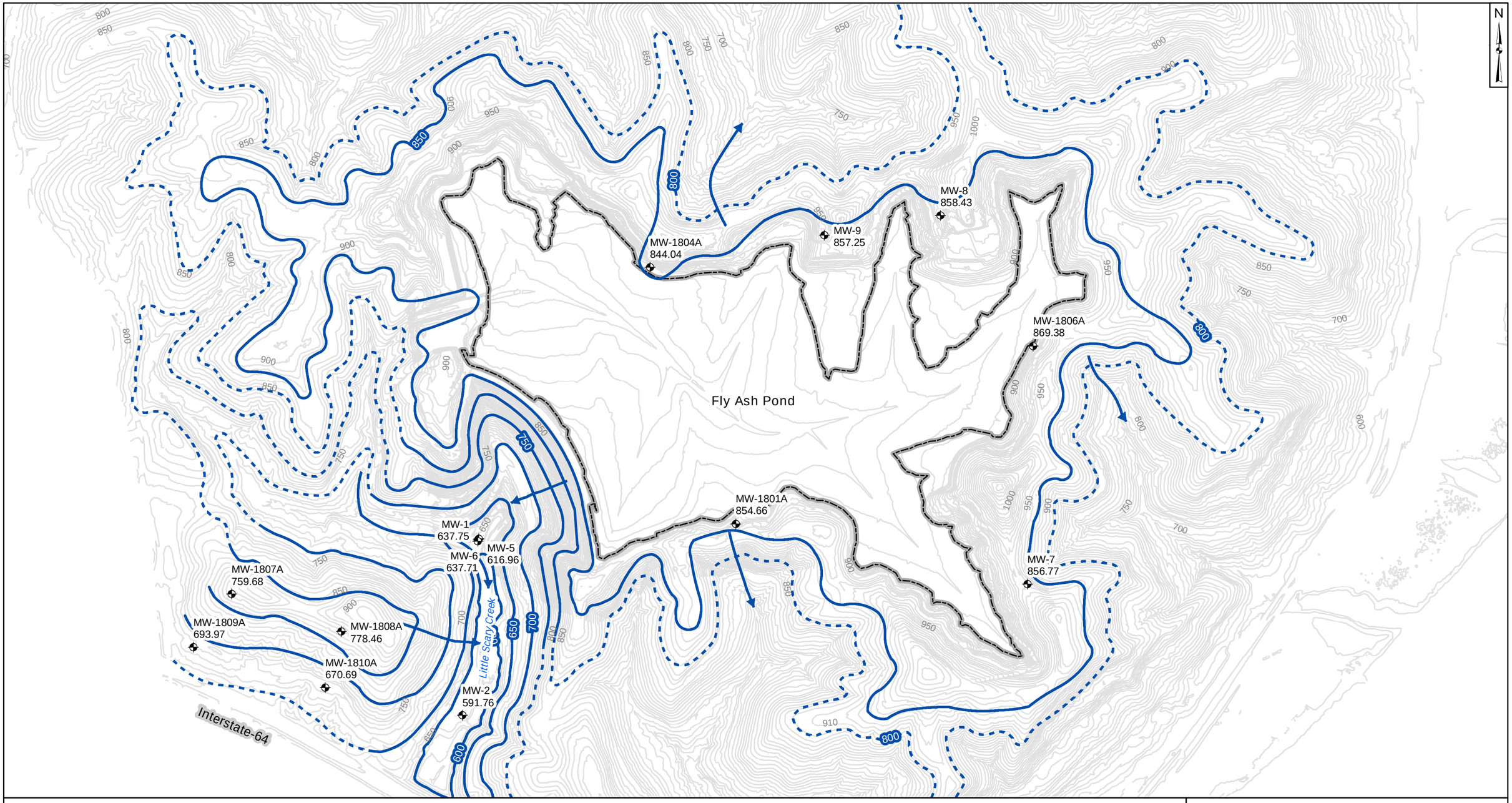

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on January 22, 2019) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

1,000 500 0 1,000 Feet

Potentiometric Surface Map - Uppermost Aquifer January 2019

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

Geosyntec consultants

Columbus, Ohio | 2019/07/29

Figure 7

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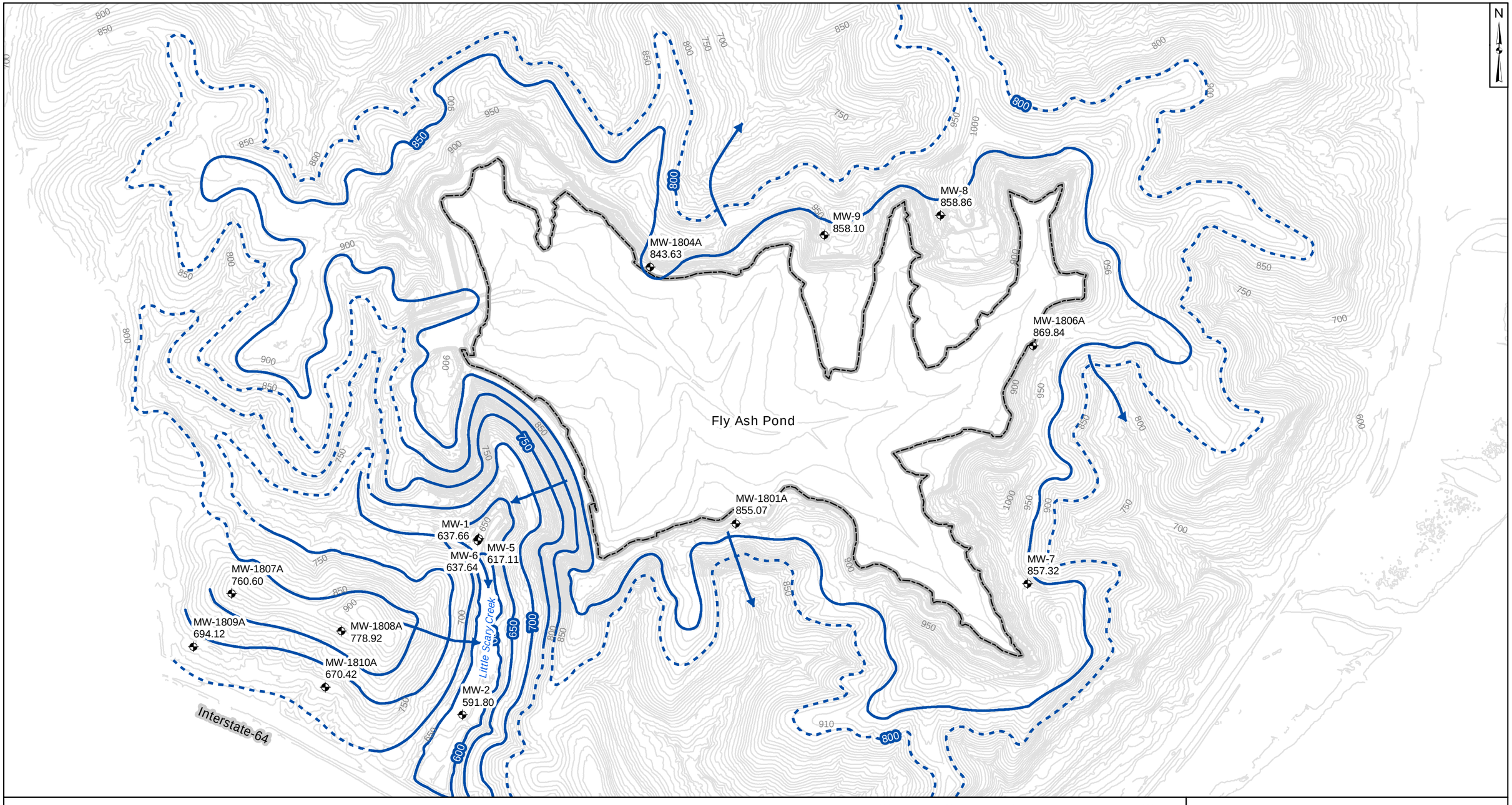

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on February 8, 2019) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

Potentioetric Surface Map - Uppermost Aquifer February 2019

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

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Figure 8

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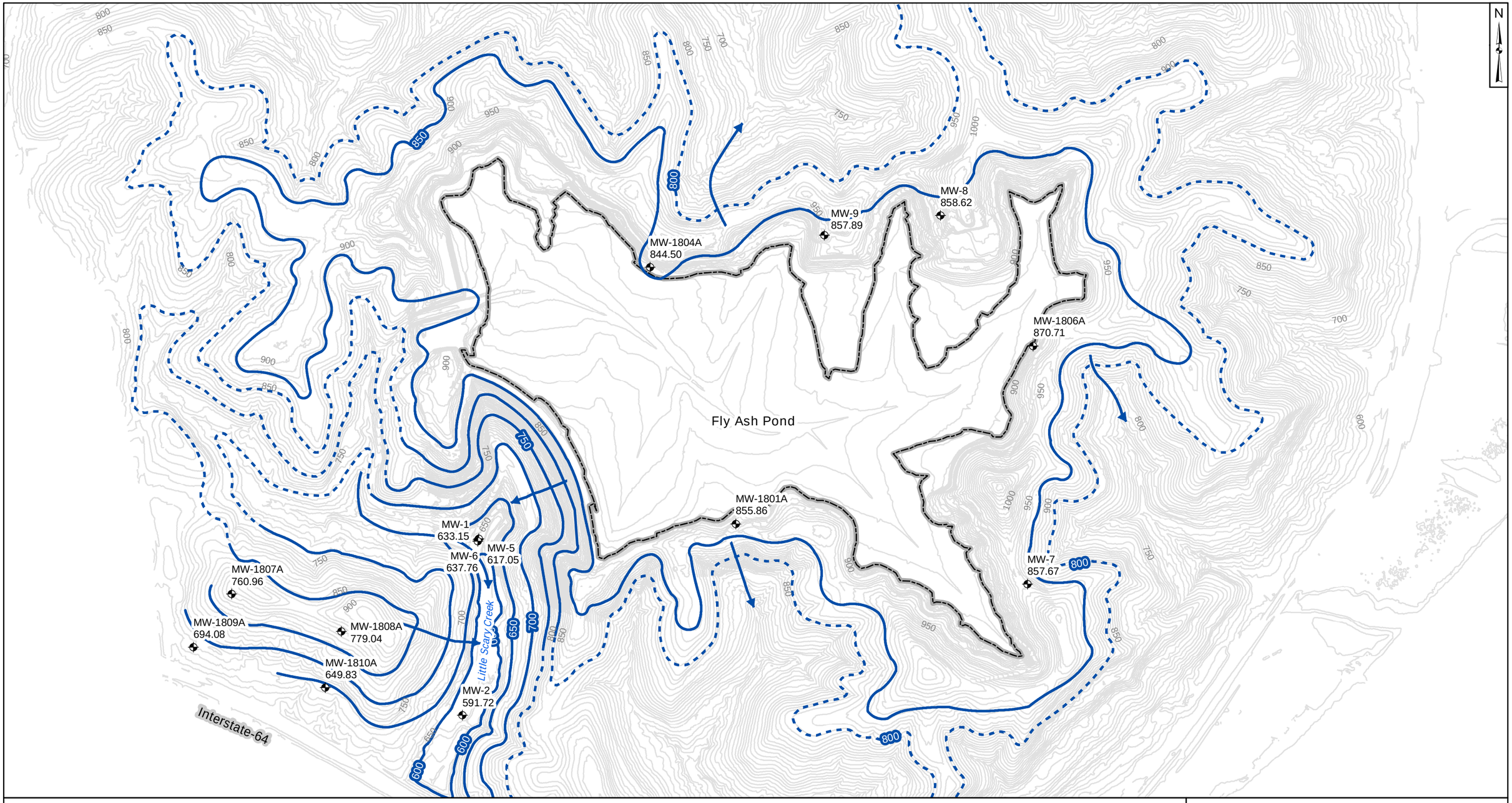

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Fly Ash Pond

Notes

- Monitoring well coordinates and water level data (collected on March 14, 2019) provided by AEP.
- Potentiometric surface contour interval is 50 feet.
- Topography basemap from AEP Drawing No. 13-30705-0 (topographic contour interval: 10 feet).
- Site features based on information available in the Fly Ash Pond CCR Groundwater Monitoring Well Network Evaluation - Amos Plant report (Arcadis, 2019) provided by AEP.
- Groundwater elevation units are in feet above mean sea level.

1,000 500 0 1,000 Feet

Potentiometric Surface Map - Uppermost Aquifer March 2019

AEP Amos Generating Plant - Fly Ash Pond
Winfield, West Virginia

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Figure 9

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APPENDIX 2

The background statistical analysis summary report and the first detection monitoring event statistical analysis determination follow.

Geosyntec consultants

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Memorandum

Date:	July 15, 2019
To:	David Miller (AEP)
Copies to:	Ben Kepchar (AEP)
From:	Allison Kreinberg and Bruce Sass, Ph.D. (Geosyntec)
Subject:	Evaluation of Detection Monitoring Data at Amos Plant's Fly Ash Pond (FAP)

In accordance with the United States Environmental Protection Agency's (USEPA's) regulations regarding the disposal of coal combustion residuals (CCR) in landfills and surface impoundments (40 CFR 257 Subpart D, "CCR rule"), a detection monitoring event was completed on March 12-13, 2019 at the Fly Ash Pond (FAP), an existing CCR unit at the John E. Amos Plant located in Winfield, West Virginia.

Eight background monitoring events were conducted at the Amos FAP prior to this detection monitoring event, and upper prediction limits (UPLs) were calculated for each Appendix III parameter to represent background values. Lower prediction limits (LPLs) were also calculated for pH. Details on the calculation of these background values are described in Geosyntec's *Statistical Analysis Summary* report, dated July 15, 2019.

To achieve an acceptably high statistical power while maintaining a site-wide false-positive rate (SWFPR) of 10% per year or less, prediction limits were calculated based on a one-of-three retesting procedure. With this procedure, a statistically significant increase (SSI) would be concluded only if all three samples in a series of three exceeds the UPL (or is below the LPL for pH). In practice, if the initial or second result did not exceed the UPL, subsequent samples were not collected or analyzed.

Detection monitoring results and the relevant background values are summarized in Table 1. No SSIs were observed at the Amos FAP CCR unit, and as a result the Amos FAP will remain in detection monitoring.

The statistical analysis was conducted within 90 days of completion of sampling and analysis in accordance with 40 CFR 257.93(h)(2). A certification of these statistics by a qualified professional engineer is provided in Attachment A.

Table 1: Detection Monitoring Data Evaluation
Amos Plant - Fly Ash Pond

Geosyntec Consultants, Inc.

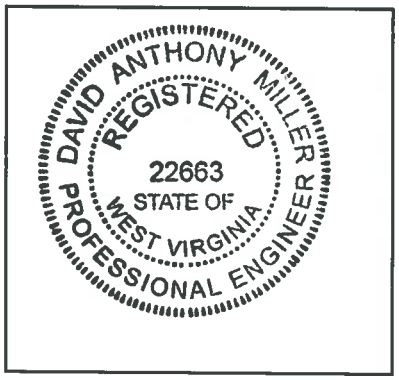
Parameter	Units	Description	MW-1	MW-1801A	MW-1804A	MW-1806A	MW-2	MW-5	MW-6	MW-7	MW-8	MW-9
			3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/13/2019	3/13/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Boron	mg/L	Intrawell Background Value (UPL)	0.261	0.459	0.965	0.235	0.382	0.355	0.159	0.248	0.320	0.192
		Detection Monitoring Result	0.11	0.09	0.568	0.13	0.23	0.229	0.08	0.06	0.192	0.122
Calcium	mg/L	Intrawell Background Value (UPL)	3.58	75.4	51.2	18.8	4.66	7.79	70.6	1.63	3.06	1.63
		Detection Monitoring Result	2.60	51.2	10.2	4.98	3.98	6.85	57.9	1.47	2.32	1.18
Chloride	mg/L	Intrawell Background Value (UPL)	14.6	12.4	6.93	24.6	495	853	21.4	5.80	120	8.00
		Detection Monitoring Result	11	9.4	3.55	5.51	441	804	17.4	5.49	110	7.5
Fluoride	mg/L	Intrawell Background Value (UPL)	0.485	0.162	1.10	1.14	3.39	3.72	0.264	0.304	3.11	0.976
		Detection Monitoring Result	0.43	0.16	0.85	0.83	3.02	3.44	0.230	0.270	2.87	0.91
pH	SU	Intrawell Background Value (UPL)	8.8	8.8	8.8	9.3	8.9	8.4	7.3	9.3	9.8	11.4
		Intrawell Background Value (LPL)	7.7	5.9	6.8	7.2	8.0	7.8	6.3	8.0	7.0	6.1
		Detection Monitoring Result	8.2	7.5	7.9	8.8	8.7	8.0	6.9	8.9	8.5	9.0
Sulfate	mg/L	Intrawell Background Value (UPL)	55.9	61.2	53.9	61.4	26.7	0.20	48	33.6	36.5	36.2
		Detection Monitoring Result	31.6	41.7	34	32.9	1.8	0.08	39.8	32.5	27.4	24
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	536	518	599	485	1405	1976	424	458	798	640
		Detection Monitoring Result	458	306	411	430	1300	1930	390	385	716	463

Notes:
UPL: Upper prediction limit
LPL: Lower prediction limit
*: Designates results for a duplicate sample
-: Not Sampled
Bold values exceed the background value.
Background values are shaded gray.
Based on a 1-of-2 resampling, a statistically significant increase (SSI) is only identified when both samples in the detection monitoring period are above the calculated background value.

ATTACHMENT A
Certification by Qualified Professional Engineer

CERTIFICATION BY QUALIFIED PROFESSIONAL ENGINEER

I certify that the selected statistical method, described above and in the January 15, 2018 *Statistical Analysis Summary* report, is appropriate for evaluating the groundwater monitoring data for the Amos FAP CCR management area and that the requirements of 40 CFR 257.93(f) have been met.



DAVID ANTHONY MILLER

Printed Name of Licensed Professional Engineer

David Anthony Miller

Signature

22663	WEST VIRGINIA	07.15.19
License Number	Licensing State	Date

Purpose of Statistical Analysis Summary Report

During the initial phase of ground water monitoring, the CCR rule requires AEP to collect at least eight independent samples from at least one up-gradient and three downgradient wells for 21 substances listed in the CCR rule. The CCR rule also requires us to select a statistical method that will be used to evaluate the samples in the later phases of the ground water monitoring program. The Statistical Plan, which has been posted to AEP's CCR website, describes the methods selected by AEP. *See* AEP's Statistical Analysis Plans.

Each **Statistical Analysis Summary Report** is based on the results of the 8 independent samples that were collected by April 17, 2019, and reported in the Annual Groundwater Monitoring Report. Using the statistical methods chosen by AEP, the samples were evaluated to eliminate outliers, determine variability and general trends in the data, and establish background values for: boron, calcium chloride, fluoride, pH, sulfate, and total dissolved solids. Appendix IV substances were evaluated for purposes of identifying outliers and understanding data trends.

A subsequent sample taken during the first detection monitoring sampling event was also compared using the proper statistical methods to the background values that were established for these seven substances from the eight independent samples. A second or third re-sampling event occurred, and the results compared using the same methods. This work is reported in the memorandum included in attachment A. If confirmed, AEP will be required to enter the next phase of monitoring. The results of future sampling will be further analyzed to target any specific substances for which ongoing monitoring or potential corrective action is required.

STATISTICAL ANALYSIS SUMMARY
FLY ASH POND
John E. Amos Plant
Winfield, West Virginia

Submitted to

1 Riverside Plaza
Columbus, Ohio 43215-2372

Submitted by

Geosyntec consultants

engineers | scientists | innovators

941 Chatham Lane, Suite 103
Columbus, Ohio 43221

July 15, 2019

CHA8474

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LIST OF ACRONYMS AND ABBREVIATIONS

AEP	American Electric Power
ANOVA	Analysis of Variance
CCR	Coal Combustion Residuals
CCV	Continuing Calibration Value
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
GWPS	Groundwater Protection Standard
FAP	Fly Ash Pond
LFB	Laboratory Fortified Blanks
LPL	Lower Prediction Limit
LRB	Laboratory Reagent Blanks
MCL	Maximum Contaminant Level
NELAP	National Environmental Laboratory Accreditation Program
PQL	Practical Quantitation Limit
QA	Quality Assurance
QC	Quality Control
RSL	Regional Screening Level
SSI	Statistically Significant Increase
SWFPR	Site-Wide False-Positive Rate
TDS	Total Dissolved Solids
UPL	Upper Prediction Limit
USEPA	United States Environmental Protection Agency
UTL	Upper Tolerance Limit

SECTION 1

EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency's (USEPA's) regulations regarding the disposal of coal combustion residuals (CCR) in landfills and surface impoundments (40 CFR 257 Subpart D, "CCR rule"), groundwater monitoring has been conducted at the Fly Ash Pond (FAP), an inactive CCR unit at the John E. Amos Power Plant located in Winfield, West Virginia.

Eight monitoring events were completed to establish background concentrations for Appendix III and Appendix IV parameters under the CCR rule. Groundwater data underwent several validation tests, including those for completeness, sample tracking accuracy, transcription errors, and consistent use of measurement units. No data quality issues were identified which would impact the usability of the data.

The monitoring data were submitted to Groundwater Stats Consulting, LLC for statistical analysis. The background data were reviewed for outliers, which were removed (when appropriate) prior to calculating upper prediction limits (UPLs) for each Appendix III parameter to represent background values.

Certification of the selected statistical methods by a qualified professional engineer is documented in Attachment A.

SECTION 2

FLY ASH POND EVALUATION

2.1 Data Validation & QA/QC

During the background monitoring program, eight sets of samples were collected for analysis from each background and compliance well. A summary of data collected during background monitoring sampling may be found in Table 1.

Chemical analysis was completed by an analytical laboratory certified by the National Environmental Laboratory Accreditation Program (NELAP). Quality assurance and quality control (QA/QC) samples completed by the analytical laboratory included the use of laboratory reagent blanks (LRBs), continuing calibration verification (CCV) samples, and laboratory fortified blanks (LFBs).

The analytical data were imported into a Microsoft Access database, where checks were completed to assess the accuracy of sample location identification and analyte identification. Where necessary, unit conversions were applied to standardize reported units across all sampling events. Exported data files were created for use with the Sanitas™ v.9.6.12 statistics software. The export was checked against the analytical data for transcription errors and completeness. No QA/QC issues were noted which would impact data usability.

2.2 Statistical Analysis

The background data used to conduct the statistical analyses and the detection monitoring data are summarized in Table 1. Statistical analyses for the FAP were conducted in accordance with the April 2019 *Statistical Analysis Plan* (AEP, 2019), except where noted below. Results for all completed statistical tests are provided in Attachment B.

Time series plots of Appendix III and IV parameters are included in Attachment B. Mann-Kendall analyses ($\alpha = 0.01$) were conducted to evaluate trends in the background data. The following statistically significant trends were observed:

- Chloride was found to be significantly decreasing at background well MW-1810A.
- Sulfate was found to be significantly increasing at background well MW-1807B.

No other significant increasing or decreasing trends were observed for other parameters or at other monitoring wells.

2.2.1 Background Outlier Evaluation

Potential outliers were identified using Tukey's outlier test; i.e., data points were considered potential outliers if they met one of the following criteria:

$$x_i < \tilde{x}_{0.25} - 3 \times IQR \quad (1)$$

or

$$x_i > \tilde{x}_{0.75} + 3 \times IQR \quad (2)$$

where:

$x_i =$ individual data point
$\tilde{x}_{0.25} =$ first quartile
$\tilde{x}_{0.75} =$ third quartile
$IQR =$ the interquartile range $= \tilde{x}_{0.75} - \tilde{x}_{0.25}$

Background well data were first pooled, and Tukey's outlier test was performed on the pooled dataset. For the compliance wells, Tukey's outlier test was applied individually to each compliance well.

Data that were evaluated as potential outliers are summarized in Attachment B. Tukey's outlier test indicated eleven potential outliers, which are summarized in Table 2. Next, the data were reviewed to identify possible sources of errors or discrepancies, including data recording errors, unusual sampling conditions, laboratory quality, or inconsistent sample turbidity. The findings of this data review are summarized below.

The following values were identified as potential outliers:

- The antimony concentration of 0.0005 mg/L from the February 22, 2019 sample at MW-1810A;
- The antimony concentration of 0.00087 mg/L from the August 28, 2018 sample at MW-1807A;
- The barium concentration of 0.124 mg/L from the July 26, 2018 sample at MW-1810A;
- The boron concentration of 0.213 mg/L from the November 13, 2018 sample at MW-1806A;
- The calcium concentration of 47.4 mg/L from the January 25, 2019 sample at MW-1808A;
- The chloride concentration of 14.6 mg/L from the January 23, 2019 sample at MW-1;

- The chromium concentration of 0.000583 mg/L from the November 13, 2018 sample at MW-1;
- The pH value of 5.12 SU from the January 25, 2019 sample at FAP-MW-1809A;
- The selenium concentration of 0.001 mg/L from the February 22, 2019 sample at MW-1810A;
- The sulfate concentration of 55.9 mg/L from the January 23,2019 sample at MW-1; and,
- The sulfate concentration of 33.2 mg/L from the November 13, 2018 sample at MW-7.

These values were similar to other observed concentrations within the wells or in neighboring wells, or otherwise represented non-detect results. Therefore, they were not removed from the dataset.

2.2.2 Establishment of Background Levels

Analysis of variance (ANOVA) was conducted to determine whether spatial variation was present among the five background wells (Attachment B). ANOVA indicated significant variation among the five background wells for all Appendix III parameters. Therefore, the appropriateness of using intrawell tests was evaluated for these parameters at the Amos FAP.

Intrawell tests presume that the groundwater quality in the compliance wells was not initially impacted by the CCR unit. To test this presumption, the data from the background wells were pooled, and the data from each compliance well were compared to a pooled background value. Tolerance limits were calculated using the pooled background data for each Appendix III parameter. Parametric tolerance limits with 99% confidence and 95% coverage were calculated for boron, chloride, pH, and TDS; non-parametric tolerance limits were calculated for calcium, fluoride, and sulfate, given that apparent non-normal distributions of data were observed for these three parameters. Confidence intervals were calculated for each of these seven parameters at each compliance monitoring well. If the lower confidence limit from a compliance well exceeded the upper tolerance limit for the pooled background data, it was concluded that groundwater concentrations at compliance wells were above background concentrations. In these instances, intrawell tests would not be appropriate.

Based on this statistical screening, intrawell methods would be recommended for calcium, pH, and sulfate and interwell methods would be recommended for boron, chloride, fluoride, and TDS. However, a review of site geochemistry identified differences in groundwater composition between upgradient and downgradient wells, which suggest differences in mineral make-up due to natural variation. These differences are illustrated in a Schoeller diagram (Figure 1), which compares the concentrations of major cations and anions at each well. The concentration units are milliequivalents per liter (meq/L), which allows the major ions to be compared on a charge-equivalent basis (the sum of the cations must equal the sum of the anions). Note that the concentrations are expressed in on a log scale, which moderates the fact that the concentrations

range over several orders of magnitude. The diagram shows that several of the upgradient wells have significantly different geochemistry, with higher proportions of calcium, magnesium, and sulfate than the downgradient monitoring locations. Conversely, many of the downgradient groundwaters are high in sodium but are lower in calcium and magnesium. However, bicarbonate (HCO_3^-) concentrations tend to be similar for all groundwater, indicating that carbonate minerals (particularly calcite) are present throughout the area. If interwell statistical methods were used without consideration for these wide ranges in groundwater composition, which appear due to natural geochemical variation, the net outcome could result in false negatives or false positives. Therefore, intrawell tests were used to evaluate potential statistically significant increases (SSIs) for all Appendix III parameters.

After equality of variance was tested and identified outliers were removed (where appropriate), a parametric or non-parametric analysis was selected based on the distribution of the data and the frequency of non-detect data. Estimated results less than the practical quantitation limit (PQL) – i.e., "J-flagged" data – were considered detections and the estimated results were used in the statistical analyses. Non-parametric analyses were selected for datasets with at least 50% non-detect data or datasets that could not be normalized. Parametric analyses were selected for datasets (either transformed or untransformed) that passed the Shapiro-Wilk / Shapiro-Francía test for normality. The Kaplan-Meier non-detect adjustment was applied to datasets with between 15% and 50% non-detect data. For datasets with fewer than 15% non-detect data, non-detect data were replaced with one half of the PQL. The selected analysis (i.e., parametric or non-parametric) and transformation (where applicable) for each background dataset are shown in Attachment B.

Upper prediction limits (UPLs) were calculated for each Appendix III parameter to represent background values. A lower prediction limit (LPL) was also calculated for pH. To conduct the intrawell tests for the Appendix III parameters, a separate UPL was calculated for each compliance well for each of these parameters. The background data used for the UPL calculations are summarized in Table 1; the calculated UPLs are summarized in Table 3.

Although a significant decreasing trend in chloride concentrations was observed at background well MW-1810A and a significant increasing trend in sulfate concentrations was observed at background well MW-1807B, the UPLs were calculated as if no trend were present; i.e., the data were not limited to more recent data and were pooled with other background wells. This was done because the magnitudes of the trends are low relative to absolute concentrations, and the concentrations of chloride and sulfate at MW-1810A and MW-1807B, respectively, are similar to concentrations at other background wells. The possibility of an ongoing trend and the need for truncating the datasets for chloride at MW-1810A and sulfate at MW-1807B will be reevaluated after additional data are collected.

UPLs were calculated for a one-of-three retesting procedure; i.e., if at least one sample in a series of three does not exceed the UPL, then it can be concluded that an SSI has not occurred. In practice, where initial or secondary results did not exceed the UPL, a subsequent sample was not collected. The one-of-three retesting procedure allowed achieving an acceptably high statistical power while maintaining a site-wide false-positive rate (SWFPR) of 10% per year or less. Power

curves were constructed for the intrawell parametric tests and are compared with the EPA Reference Power Curve in Attachment B. The power curve associated with the intrawell tests for the FAP exceeds the EPA Reference Power Curve at 3 and 4 standard deviations; this is considered a "good" level of statistical power according to USEPA's *Unified Guidance* (USEPA, 2009).

2.3 Conclusions

Eight background monitoring events were completed in accordance with the CCR Rule. The laboratory and field data were reviewed prior to statistical analysis, with no QA/QC issues identified that impacted data usability. A review of outliers identified eleven potential outliers; however, no values were removed from the dataset. Prediction intervals were constructed based on the background data and a one-of-three retesting procedure. Intrawell tests were selected for all Appendix III parameters based on a review of site geochemistry.

SECTION 3

REFERENCES

American Electric Power (AEP). 2019. Statistical Analysis Plan – Amos Plant. April 2019.

United States Environmental Protection Agency (USEPA). 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance. EPA 530/R-09-007. March 2009.

TABLES

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1							
		7/24/2018	8/28/2018	10/3/2018	10/22/2018	11/13/2018	12/19/2018	1/23/2019	2/19/2019
Antimony	ug/L	0.0200 J	0.0200 J	0.02 U	0.02 U	0.02 U	0.0300 J	0.0600 J	0.0500 J
Arsenic	ug/L	7.65	7.90	7.98	6.84	8.04	7.65	7.64	7.83
Barium	ug/L	52.9	49.5	51.5	44.7	51.9	48.6	43.7	44.7
Beryllium	ug/L	0.004 U	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Boron	mg/L	0.182	0.135	0.138	0.180	0.209	0.117	0.115	0.126
Cadmium	ug/L	0.00800 J	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Calcium	mg/L	2.83	2.80	2.95	2.36	3.03	2.71	2.29	2.36
Chloride	mg/L	11.7	11.3	11.1	11.4	11.5	10.7	14.6	10.9
Chromium	ug/L	0.0750	0.0920	0.100 J	0.100 J	0.583	0.0800 J	0.0900 J	0.100 J
Cobalt	ug/L	0.0310	0.0390	0.0300 J	0.0500 J	0.0300 J	0.0300 J	0.0300 J	0.0300 J
Combined Radium	pCi/L	1.09	0.261	1.78	0.608	0.456	0.316	0.688	0.00538
Fluoride	mg/L	0.420	0.450	0.400	0.420	0.450	0.430	0.410	0.440
Lead	ug/L	0.0410	0.0470	0.0200 J	0.0700 J	0.0600 J	0.0200 J	0.0300 J	0.111
Lithium	mg/L	0.0120	0.00900	0.009 U	0.009 U	0.009 U	0.0200 J	0.009 U	0.0100 J
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	1.94	1.48	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J
Selenium	ug/L	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.0500 J
Total Dissolved Solids	mg/L	473	435	457	434	444	428	453	457
Sulfate	mg/L	30.6	31.6	30.8	30.7	32.2	30.9	55.9	31.3
Thallium	ug/L	0.0300 J	0.0100 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	8.15	8.50	8.29	8.33	8.03	8.12	8.17	8.45

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1801A							
		7/24/2018	8/29/2018	10/2/2018	10/24/2018	11/14/2018	12/19/2018	1/24/2019	2/20/2019
Antimony	ug/L	0.130	0.0500 J	0.140	0.0600 J	0.0800 J	0.0400 J	0.0600 J	0.0900 J
Arsenic	ug/L	0.360	0.570	0.820	0.720	1.01	1.11	1.57	1.52
Barium	ug/L	54.4	56.5	47.1	51.3	51.3	56.0	55.3	56.6
Beryllium	ug/L	0.004 U	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Boron	mg/L	0.274	0.288	0.137	0.105	0.236	0.289	0.168	0.0900 J
Cadmium	ug/L	0.0100 J	0.005 U	0.01 U	0.01 U	0.0300 J	0.0200 J	0.01 U	0.01 U
Calcium	mg/L	62.5	64.0	61.0	63.1	65.4	62.8	53.4	53.3
Chloride	mg/L	9.64	10.8	7.48	8.14	9.86	9.08	9.18	8.96
Chromium	ug/L	0.113	0.143	0.0900 J	0.0800 J	0.0800 J	0.100 J	0.0700 J	0.100 J
Cobalt	ug/L	0.194	0.260	0.422	0.380	0.414	0.349	0.326	0.290
Combined Radium	pCi/L	0.602	1.22	0.254	0.654	0.690	0.836	0.595	0.588
Fluoride	mg/L	0.100 J	0.110	0.100 J	0.100 J	0.100 J	0.120	0.140	0.130
Lead	ug/L	0.0420	0.0240	0.0400 J	0.0200 J	0.0500 J	0.0300 J	0.02 U	0.02 U
Lithium	mg/L	0.00900	0.00700	0.0200 J	0.00900 J	0.009 U	0.0100 J	0.009 U	0.009 U
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	4.97	3.07	4.79	2.08	2.34	2.77	2.22	3.57
Selenium	ug/L	0.0900 J	0.0500 J	0.100 J	0.200 J	0.100 J	0.0900 J	0.100 J	0.200 J
Total Dissolved Solids	mg/L	372	420	356	357	386	361	365	343
Sulfate	mg/L	49.4	54.8	46.7	41.8	49.3	45.5	46.3	40.0
Thallium	ug/L	0.0400 J	0.0400 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	7.56	7.43	7.42	7.45	7.29	7.27	6.33	8.01

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1804A								
		7/27/2018	8/1/2018	8/28/2018	10/2/2018	10/23/2018	11/13/2018	12/19/2018	1/24/2019	2/21/2019
Antimony	ug/L	0.540	-	0.150	0.530	0.180	0.0900 J	0.130	0.300	0.190
Arsenic	ug/L	2.48	-	3.59	2.35	3.36	4.16	4.00	3.32	4.48
Barium	ug/L	245	-	204	390	131	135	169	183	116
Beryllium	ug/L	0.00800 J	-	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Boron	mg/L	0.672	-	0.779	0.629	0.675	0.846	0.772	0.673	0.611
Cadmium	ug/L	0.005 U	-	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Calcium	mg/L	28.1	-	15.9	38.8	12.9	8.90	10.1	12.1	7.43
Chloride	mg/L	-	3.87	5.27	3.63	4.79	5.32	4.51	3.14	3.29
Chromium	ug/L	0.185	-	0.304	0.100 J	0.100 J	0.200 J	0.100 J	0.200 J	0.200 J
Cobalt	ug/L	0.458	-	0.314	0.693	0.137	0.160	0.176	0.137	0.0960
Combined Radium	pCi/L	1.81	-	1.56	1.66	0.444	0.523	1.09	1.42	0.894
Fluoride	mg/L	-	0.700	0.840	0.610	0.780	0.910	0.780	0.710	0.890
Lead	ug/L	0.445	-	0.0310	0.0500 J	0.114	0.133	0.111	0.140	0.219
Lithium	mg/L	0.0180	-	0.0150	0.0320	0.0100 J	0.0200 J	0.0100 J	0.009 U	0.009 U
Mercury	ug/L	0.002 U	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	136	-	136	111	116	129	130	110	115
Selenium	ug/L	1.80	-	0.200	3.10	0.700	0.200	0.500	1.70	0.600
Total Dissolved Solids	mg/L	-	423	452	458	452	498	433	414	461
Sulfate	mg/L	-	35.2	44.7	35.7	36.9	46.0	40.1	32.3	33.8
Thallium	ug/L	0.0690	-	0.0500 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	-	7.39	8.28	7.90	7.61	7.84	7.90	7.37	8.03

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1806A								
		7/27/2018	8/1/2018	8/29/2018	10/2/2018	10/23/2018	11/13/2018	12/19/2018	1/24/2019	2/18/2019
Antimony	ug/L	1.16	-	0.890	0.280	0.190	0.110	0.170	0.150	0.100 J
Arsenic	ug/L	2.65	-	3.29	5.30	5.16	5.91	5.65	3.97	4.21
Barium	ug/L	163	-	148	65.4	88.3	98.7	65.6	168	78.8
Beryllium	ug/L	0.0100 J	-	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Boron	mg/L	0.164	-	0.162	0.150	0.158	0.213	0.162	0.168	0.133
Cadmium	ug/L	0.0100 J	-	0.00800 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Calcium	mg/L	12.9	-	12.0	5.81	7.43	7.51	5.14	12.2	5.67
Chloride	mg/L	-	17.7	16.2	7.21	8.62	8.15	5.29	11.7	6.24
Chromium	ug/L	0.416	-	1.54	0.100 J	0.252	0.100 J	0.100 J	0.0800 J	0.200 J
Cobalt	ug/L	0.240	-	0.161	0.0800	0.152	0.163	0.0710	0.159	0.0500
Combined Radium	pCi/L	0.998	-	1.53	0.900	0.469	0.344	0.861	1.16	0.419
Fluoride	mg/L	-	0.560	0.550	0.800	0.770	0.850	0.850	0.590	0.810
Lead	ug/L	0.368	-	0.154	0.158	0.195	0.137	0.122	0.0600 J	0.110
Lithium	mg/L	0.0120	-	0.0100	0.0200 J	0.0200 J	0.009 U	0.009 U	0.0200 J	0.0100 J
Mercury	ug/L	0.002 U	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	17.0	-	14.2	7.73	6.66	7.44	6.02	5.62	4.74
Selenium	ug/L	0.100	-	0.0900 J	0.0700 J	0.0700 J	0.0500 J	0.0600 J	0.0400 J	0.0300 J
Total Dissolved Solids	mg/L	-	426	445	435	423	442	409	445	460
Sulfate	mg/L	-	48.4	45.6	36.2	40.8	40.1	30.9	48.1	33.0
Thallium	ug/L	0.0300 J	-	0.0200 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	-	7.55	8.02	8.50	8.42	8.12	8.47	8.11	8.56

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1807A							
		7/26/2018	8/28/2018	10/4/2018	10/24/2018	11/14/2018	12/20/2018	1/25/2019	2/21/2019
Antimony	ug/L	0.130	0.870	0.140	0.180	0.170	0.170	0.120	0.0800 J
Arsenic	ug/L	0.990	1.13	1.10	0.840	0.960	0.940	0.920	0.820
Barium	ug/L	32.6	32.6	30.1	27.8	28.8	29.5	27.4	24.1
Beryllium	ug/L	0.00600 J	0.00500 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Boron	mg/L	0.170	0.137	0.129	0.199	0.175	0.208	0.183	0.0800 J
Cadmium	ug/L	0.0200	0.0600	0.0500 J	0.0300 J	0.0300 J	0.0300 J	0.0300 J	0.0300 J
Calcium	mg/L	146	136	166	144	155	151	156	150
Chloride	mg/L	9.57	11.8	12.5	10.3	10.5	9.68	11.3	12.0
Chromium	ug/L	0.0980	0.253	0.205	0.200 J	0.0900 J	0.403	0.100 J	0.100 J
Cobalt	ug/L	0.629	0.565	0.918	0.579	0.614	0.616	0.733	0.811
Combined Radium	pCi/L	1.37	1.51	1.13	0.389	0.985	1.02	1.27	0.735
Fluoride	mg/L	0.210	0.210	0.160	0.200	0.210	0.190	0.150	0.140
Lead	ug/L	0.0460	0.300	0.142	0.105	0.0900 J	0.251	0.126	0.118
Lithium	mg/L	0.0200	0.0180	0.009 U	0.0200 J	0.0100 J	0.0200 J	0.0300	0.0100 J
Mercury	ug/L	0.002 U	0.00200 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	1.65	9.07	11.1	2.00 J	2.00 J	1.00 J	1.00 J	0.600 J
Selenium	ug/L	0.300	0.600	0.200 J	0.200 J	0.200	0.300	0.100 J	0.100 J
Total Dissolved Solids	mg/L	929	953	985	838	904	931	876	1050
Sulfate	mg/L	334	356	367	308	326	315	361	396
Thallium	ug/L	0.0300 J	0.0540	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	7.51	6.94	6.68	6.92	6.82	7.16	8.24	7.18

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1807B							
		7/26/2018	8/28/2018	10/5/2018	10/24/2018	11/14/2018	12/20/2018	1/25/2019	2/21/2019
Antimony	ug/L	0.270	0.230	0.150	0.250	0.160	0.430	0.0900 J	0.350
Arsenic	ug/L	1.93	1.94	1.70	1.26	1.28	1.75	1.23	1.48
Barium	ug/L	49.6	56.3	59.6	42.3	41.4	73.7	43.0	66.9
Beryllium	ug/L	0.0490	0.004 U	0.0300 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Boron	mg/L	0.195	0.178	0.201	0.176	0.211	0.164	0.277	0.168
Cadmium	ug/L	0.0100 J	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Calcium	mg/L	8.76	8.39	9.21	8.92	8.87	11.6	9.33	11.0
Chloride	mg/L	8.46	10.8	9.94	7.93	8.52	9.88	7.68	9.53
Chromium	ug/L	1.40	0.134	0.263	0.381	0.247	0.335	0.0800 J	0.100 J
Cobalt	ug/L	0.525	0.0460	0.179	0.139	0.0730	0.114	0.0500 J	0.0510
Combined Radium	pCi/L	0.719	1.31	2.08	0.305	0.348	0.267	1.00	0.291
Fluoride	mg/L	0.750	1.13	1.01	0.810	0.910	1.16	0.790	1.06
Lead	ug/L	0.756	0.0350	0.310	0.203	0.0800 J	0.145	0.0400 J	0.0400 J
Lithium	mg/L	0.0210	0.0100	0.009 U	0.0200 J	0.0200 J	0.0200 J	0.0200 J	0.009 U
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	4.22	23.9	12.5	5.59	5.62	13.5	4.21	9.27
Selenium	ug/L	0.300	0.0800 J	0.200 J	0.0700 J	0.0500 J	0.100 J	0.0600 J	0.0800 J
Total Dissolved Solids	mg/L	732	706	752	735	732	738	742	791
Sulfate	mg/L	218	219	219	220	230	230	227	238
Thallium	ug/L	0.0300 J	0.0100 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	8.29	8.07	7.87	8.34	7.73	8.18	6.91	8.35

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1808A							
		7/25/2018	8/28/2018	10/4/2018	10/24/2018	11/13/2018	12/20/2018	1/25/2019	2/21/2019
Antimony	ug/L	0.290	0.140	0.140	0.0300 J	0.0400 J	0.0500 J	0.0600 J	0.0200 J
Arsenic	ug/L	2.47	5.34	2.84	1.86	3.83	4.37	2.27	1.99
Barium	ug/L	86.2	105	78.1	86.2	74.1	71.0	80.3	78.9
Beryllium	ug/L	0.299	0.251	0.0500 J	0.0500 J	0.0300 J	0.0400 J	0.102	0.0500 J
Boron	mg/L	0.182	0.142	0.135	0.103	0.152	0.172	0.173	0.122
Cadmium	ug/L	0.00700 J	0.0100 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Calcium	mg/L	40.4	38.5	38.6	41.5	40.2	40.3	47.4	39.4
Chloride	mg/L	19.6	19.4	16.7	17.1	18.4	21.6	18.3	17.4
Chromium	ug/L	0.831	1.25	0.500	0.443	0.381	0.293	0.415	0.213
Cobalt	ug/L	0.544	0.821	0.231	0.117	0.160	0.119	0.149	0.0760
Combined Radium	pCi/L	1.89	4.96	2.08	1.04	0.470	1.05	2.76	0.535
Fluoride	mg/L	0.520	0.570	0.410	0.550	0.510	0.470	0.400	0.400
Lead	ug/L	2.28	2.06	0.392	0.397	0.245	0.227	0.717	0.316
Lithium	mg/L	0.0240	0.0250	0.009 U	0.0200 J	0.0200 J	0.0300 J	0.0350	0.0100 J
Mercury	ug/L	0.00600	0.00500 J	0.002 U	0.002 U	0.00200 J	0.00300 J	0.002 U	0.002 U
Molybdenum	ug/L	6.46	11.7	4.56	3.06	2.75	2.00 J	1.00 J	1.00 J
Selenium	ug/L	0.500	0.400	0.0700 J	0.0700 J	0.0500 J	0.0800 J	0.200 J	0.0900 J
Total Dissolved Solids	mg/L	734	740	790	614	770	834	840	821
Sulfate	mg/L	184	227	216	126	210	242	231	213
Thallium	ug/L	0.0400 J	0.0830	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	7.70	7.56	7.43	7.72	7.43	7.58	6.11	7.21

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1809A							
		7/26/2018	8/28/2018	10/3/2018	10/23/2018	11/14/2018	12/19/2018	1/25/2019	2/22/2019
Antimony	ug/L	0.0500	0.0300 J	0.0300 J	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U
Arsenic	ug/L	2.30	2.83	2.87	2.59	3.10	3.51	3.39	4.57
Barium	ug/L	60.2	67.3	61.4	53.0	58.0	63.4	57.2	64.5
Beryllium	ug/L	0.00400 J	0.00400 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U
Boron	mg/L	0.0850	0.0910	0.0900 J	0.114	0.0900 J	0.0600 J	0.0800 J	0.0800 J
Cadmium	ug/L	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Calcium	mg/L	173	179	191	181	188	182	188	184
Chloride	mg/L	26.1	28.8	26.8	26.6	28.4	27.7	28.1	30.2
Chromium	ug/L	0.119	0.200	0.100 J	0.0900 J	0.0800 J	0.212	0.0600 J	0.2 U
Cobalt	ug/L	0.555	0.754	0.533	0.424	0.447	0.504	0.375	0.559
Combined Radium	pCi/L	1.56	1.19	4.22	1.50	1.72	1.42	2.99	1.56
Fluoride	mg/L	0.160	0.170	0.140	0.140	0.160	0.150	0.140	0.140
Lead	ug/L	0.0350	0.0100 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U
Lithium	mg/L	0.0200	0.0240	0.009 U	0.0430	0.0100 J	0.0320	0.0460	0.0380
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	7.18	3.01	2.27	2.00 J	2.00 J	2.88	2.00 J	2.00 J
Selenium	ug/L	0.0400 J	0.0600 J	0.0500 J	0.0300 J	0.03 U	0.03 U	0.03 U	0.2 U
Total Dissolved Solids	mg/L	1020	1020	1070	1050	1050	1040	1080	1080
Sulfate	mg/L	386	386	388	390	403	384	390	403
Thallium	ug/L	0.0100 J	0.0200 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
pH	SU	7.22	7.14	7.14	7.11	7.18	6.97	5.12	7.20

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-1810A								
		7/26/2018	8/2/2018	8/27/2018	10/3/2018	10/24/2018	11/13/2018	12/20/2018	1/23/2019	2/22/2019
Antimony	ug/L	0.130	-	0.100	0.110	0.0700 J	0.0900 J	0.0800 J	0.0700 J	0.1 U
Arsenic	ug/L	0.880	-	0.510	0.490	0.540	0.400	0.430	0.450	0.400 J
Barium	ug/L	124	-	83.4	83.0	88.5	83.5	87.9	84.2	87.8
Beryllium	ug/L	0.00900 J	-	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U
Boron	mg/L	0.220	-	0.271	0.245	0.211	0.238	0.210	0.319	0.245
Cadmium	ug/L	0.005 U	-	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Calcium	mg/L	23.0	-	25.9	28.0	23.7	30.2	30.1	24.8	32.3
Chloride	mg/L	-	23.4	21.6	19.0	18.6	19.5	17.0	16.3	15.4
Chromium	ug/L	0.442	-	0.229	0.200 J	0.100 J	0.100 J	0.100 J	0.0800 J	0.300 J
Cobalt	ug/L	0.150	-	0.0480	0.0300 J	0.0200 J	0.0200 J	0.0300 J	0.0200 J	0.1 U
Combined Radium	pCi/L	0.382	-	0.842	1.22	0.992	0.240	0.565	0.768	0.650
Fluoride	mg/L	-	0.930	0.930	0.890	0.860	1.04	0.980	0.900	1.01
Lead	ug/L	0.149	-	0.0570	0.0900 J	0.0300 J	0.0400 J	0.0500 J	0.0300 J	0.100 J
Lithium	mg/L	0.0180	-	0.0150	0.009 U	0.0200 J	0.009 U	0.0200 J	0.0100 J	0.0200 J
Mercury	ug/L	0.002 U	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	9.26	-	8.52	7.06	6.28	6.03	5.24	5.94	4.00 J
Selenium	ug/L	0.0600 J	-	0.0400 J	0.0500 J	0.0400 J	0.0300 J	0.0300 J	0.0300 J	0.2 U
Total Dissolved Solids	mg/L	-	565	525	542	473	544	548	494	580
Sulfate	mg/L	-	170	129	114	93.1	160	160	112	170
Thallium	ug/L	0.0510	-	0.0200 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
pH	SU	-	7.43	7.49	7.27	7.70	7.28	7.06	7.52	7.37

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-2							
		7/27/2018	8/29/2018	10/4/2018	10/23/2018	11/15/2018	12/19/2018	1/23/2019	2/22/2019
Antimony	ug/L	0.0600	0.0200 J	0.02 U	0.02 U	0.02 U	0.0300 J	0.02 U	0.1 U
Arsenic	ug/L	1.68	1.62	1.76	1.24	1.66	1.33	1.55	1.35
Barium	ug/L	202	178	192	181	185	182	178	169
Beryllium	ug/L	0.00800 J	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U
Boron	mg/L	0.259	0.249	0.256	0.262	0.328	0.225	0.318	0.237
Cadmium	ug/L	0.0200 J	0.005 U	0.01 U	0.01 U	0.01 U	0.0300 J	0.01 U	0.05 U
Calcium	mg/L	4.24	3.98	4.31	3.95	4.07	3.81	3.67	3.95
Chloride	mg/L	471	443	435	438	469	430	441	447
Chromium	ug/L	0.312	0.129	0.200 J	0.200 J	0.200 J	0.967	0.382	0.2 U
Cobalt	ug/L	0.102	0.0340	0.0500 J	0.0550	0.0400 J	0.0400 J	0.0500	0.1 U
Combined Radium	pCi/L	1.35	1.70	1.29	0.594	0.953	1.06	0.725	0.275
Fluoride	mg/L	3.08	2.99	2.99	3.08	3.30	3.03	3.00	3.06
Lead	ug/L	0.406	0.0330	0.100 J	0.214	0.110	0.290	0.166	0.1 U
Lithium	mg/L	0.0190	0.0230	0.009 U	0.0300 J	0.0200 J	0.0200 J	0.0100 J	0.0200 J
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	27.2	34.5	30.8	26.1	29.2	25.5	29.2	21.9
Selenium	ug/L	0.0400 J	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.0400 J	0.2 U
Total Dissolved Solids	mg/L	1260	1310	1280	1250	1250	1250	1310	1310
Sulfate	mg/L	2.40	17.4	14.8	7.40	13.5	6.40	6.40	2.30
Thallium	ug/L	0.0200 J	0.0200 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
pH	SU	8.36	8.60	8.51	8.54	8.45	8.52	8.21	8.69

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-5							
		7/24/2018	8/29/2018	10/3/2018	10/24/2018	11/13/2018	12/19/2018	1/23/2019	2/19/2019
Antimony	ug/L	0.0600	0.180	0.02 U	0.0200 J	0.02 U	0.02 U	0.04 U	0.06 U
Arsenic	ug/L	4.89	5.08	4.86	4.34	4.37	4.39	4.35	5.25
Barium	ug/L	356	359	373	363	353	364	351	349
Beryllium	ug/L	0.00400 J	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	0.06 U
Boron	mg/L	0.252	0.240	0.276	0.249	0.264	0.221	0.323	0.239
Cadmium	ug/L	0.00600 J	0.0100 J	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.03 U
Calcium	mg/L	6.75	6.71	7.03	7.09	6.79	6.48	5.98	6.79
Chloride	mg/L	793	780	776	811	832	783	782	793
Chromium	ug/L	0.152	0.278	0.626	0.219	0.100 J	0.0700 J	0.532	0.200 J
Cobalt	ug/L	0.0460	0.0850	0.0530	0.516	0.0400 J	0.0400 J	0.04 U	0.06 U
Combined Radium	pCi/L	1.37	1.81	1.63	0.731	1.82	1.51	1.05	1.45
Fluoride	mg/L	3.32	3.33	3.33	3.44	3.63	3.43	3.36	3.38
Lead	ug/L	0.222	0.284	0.0300 J	0.0600 J	0.0300 J	0.02 U	0.04 U	0.06 U
Lithium	mg/L	0.0320	0.0300	0.009 U	0.0300 J	0.0200 J	0.0300 J	0.0200 J	0.0340
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	36.5	38.4	35.7	35.1	34.7	34.8	35.0	33.6
Selenium	ug/L	0.03 U	0.03 U	0.03 U	0.0400 J	0.03 U	0.03 U	0.06 U	0.09 U
Total Dissolved Solids	mg/L	1890	1880	1860	1840	1880	1890	1910	1920
Sulfate	mg/L	0.200	0.200	0.100 J	0.06 U	0.100 J	0.06 U	0.06 U	0.06 U
Thallium	ug/L	0.0500 J	0.0200 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U
pH	SU	8.13	8.16	8.12	8.06	7.97	7.94	8.08	8.19

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-6							
		7/24/2018	8/28/2018	10/3/2018	10/24/2018	11/13/2018	12/19/2018	1/23/2019	2/19/2019
Antimony	ug/L	0.0100 J	0.0200 J	0.02 U	0.02 U	0.02 U	0.02 U	0.0400 J	0.02 U
Arsenic	ug/L	1.81	1.82	1.91	1.72	2.12	1.88	1.89	1.53
Barium	ug/L	536	527	523	494	524	510	486	482
Beryllium	ug/L	0.00900 J	0.00800 J	0.02 U	0.0300 J	0.02 U	0.02 U	0.02 U	0.02 U
Boron	mg/L	0.120	0.0960	0.125	0.100 J	0.111	0.0700 J	0.0800 J	0.0900 J
Cadmium	ug/L	0.0100 J	0.0200	0.0100 J	0.01 U	0.01 U	0.0100 J	0.01 U	0.01 U
Calcium	mg/L	61.0	59.7	60.7	61.5	64.9	55.8	54.1	55.8
Chloride	mg/L	19.3	19.4	18.9	18.4	19.8	17.7	17.8	17.3
Chromium	ug/L	0.0940	0.663	0.0900 J	0.0700 J	0.0800 J	0.0600 J	0.0400 J	0.277
Cobalt	ug/L	0.242	0.323	0.260	0.258	0.233	0.234	0.220	0.219
Combined Radium	pCi/L	2.73	2.44	4.59	2.20	2.33	2.53	1.82	2.14
Fluoride	mg/L	0.220	0.240	0.210	0.230	0.240	0.230	0.220	0.240
Lead	ug/L	0.0200 J	0.167	0.02 U	0.0300 J	0.0300 J	0.0200 J	0.02 U	0.02 U
Lithium	mg/L	0.0120	0.00900	0.009 U	0.0100 J	0.009 U	0.0100 J	0.009 U	0.0200 J
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	0.580	0.600	0.500 J	0.600 J	0.700 J	0.700 J	0.600 J	0.600 J
Selenium	ug/L	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.0400 J
Total Dissolved Solids	mg/L	392	398	402	400	390	376	411	406
Sulfate	mg/L	44.4	44.6	43.4	42.0	44.6	41.7	41.3	40.4
Thallium	ug/L	0.0300 J	0.0200 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	6.91	6.93	6.82	6.85	6.67	6.67	6.59	7.00

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-7							
		7/26/2018	8/29/2018	10/3/2018	10/24/2018	11/13/2018	12/17/2018	1/23/2019	2/18/2019
Antimony	ug/L	0.0400 J	0.0500 J	0.0700 J	0.180	0.120	0.0600 J	0.440	0.270
Arsenic	ug/L	5.31	5.51	5.65	5.13	5.24	5.21	5.86	5.33
Barium	ug/L	34.0	32.3	33.9	37.0	32.7	33.5	36.8	34.3
Beryllium	ug/L	0.004 U	0.004 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0300 J
Boron	mg/L	0.0870	0.112	0.156	0.0900 J	0.192	0.100 J	0.127	0.0600 J
Cadmium	ug/L	0.0100 J	0.0100 J	0.01 U	0.0200 J	0.01 U	0.01 U	0.0200 J	0.0200 J
Calcium	mg/L	1.33	1.29	1.44	1.40	1.49	1.24	1.41	1.37
Chloride	mg/L	5.41	5.32	5.23	5.37	5.65	5.29	5.18	5.39
Chromium	ug/L	0.0820	0.190	0.0700 J	0.296	0.100 J	0.100 J	0.221	0.100 J
Cobalt	ug/L	0.0380	0.0230	0.02 U	0.134	0.0300 J	0.02 U	0.0680	0.0570
Combined Radium	pCi/L	1.96	0.745	2.39	0.113	0.954	1.24	0.558	0.543
Fluoride	mg/L	0.270	0.270	0.260	0.270	0.290	0.270	0.250	0.260
Lead	ug/L	0.211	0.121	0.111	0.476	0.146	0.100 J	0.420	0.230
Lithium	mg/L	0.00900	0.0100	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.0100 J
Mercury	ug/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	1.12	1.06	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J	1.00 J
Selenium	ug/L	0.03 U	0.03 U	0.0300 J	0.0500 J	0.03 U	0.0400 J	0.0500 J	0.03 U
Total Dissolved Solids	mg/L	368	387	376	344	379	387	389	401
Sulfate	mg/L	32.0	31.5	31.8	31.7	33.2	32.0	32.0	32.1
Thallium	ug/L	0.0100 J	0.0200 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
pH	SU	8.53	8.75	8.75	8.82	8.36	8.62	8.44	8.96

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-8								
		7/26/2018	8/2/2018	8/30/2018	10/3/2018	10/23/2018	11/13/2018	12/19/2018	1/23/2019	2/20/2019
Antimony	ug/L	0.0400 J	-	0.850	0.200	0.150	0.140	0.260	0.270	0.400 J
Arsenic	ug/L	3.02	-	5.71	5.18	4.26	3.49	2.91	3.49	2.41
Barium	ug/L	63.7	-	58.2	86.2	70.9	71.5	73.3	76.8	71.9
Beryllium	ug/L	0.00500 J	-	0.0490	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U
Boron	mg/L	0.233	-	0.225	0.259	0.278	0.254	0.224	0.213	0.195
Cadmium	ug/L	0.005 U	-	0.0500	0.0200 J	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Calcium	mg/L	2.15	-	1.99	2.74	2.32	2.46	2.28	2.39	2.49
Chloride	mg/L	-	105	109	108	108	116	110	111	111
Chromium	ug/L	0.114	-	1.89	0.200 J	0.229	0.200 J	0.264	0.463	0.400 J
Cobalt	ug/L	0.210	-	1.69	0.270	0.284	0.253	0.231	0.513	0.538
Combined Radium	pCi/L	1.56	-	0.655	3.98	0.294	0.691	0.956	0.386	0.736
Fluoride	mg/L	-	2.70	2.66	2.58	2.74	2.93	2.78	2.62	2.87
Lead	ug/L	0.237	-	2.78	0.427	0.491	0.352	0.357	0.990	0.770
Lithium	mg/L	0.0130	-	0.0120	0.009 U	0.0200 J	0.009 U	0.0200 J	0.009 U	0.00900 J
Mercury	ug/L	0.002 U	-	0.00400 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Molybdenum	ug/L	11.7	-	20.6	8.76	10.2	7.64	6.93	11.0	8.00 J
Selenium	ug/L	0.0500 J	-	0.200	0.0800 J	0.0800 J	0.0800 J	0.100 J	0.0900 J	0.400 J
Total Dissolved Solids	mg/L	-	690	727	729	717	711	696	739	740
Sulfate	mg/L	-	21.6	24.2	31.6	26.3	27.2	26.4	30.1	26.4
Thallium	ug/L	0.0200 J	-	0.0760	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
pH	SU	-	8.20	8.90	7.86	8.45	8.15	8.45	8.08	9.15

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 1 - Groundwater Data Summary
Amos - Fly Ash Pond

Parameter	Unit	FAP-MW-9								
		7/26/2018	8/2/2018	8/30/2018	10/2/2018	10/23/2018	11/13/2018	12/20/2018	1/23/2019	2/20/2019
Antimony	ug/L	0.210	-	0.910	0.590	1.28	0.350	0.330	1.08	0.400 J
Arsenic	ug/L	5.23	-	5.87	7.04	4.58	5.83	4.47	5.84	5.45
Barium	ug/L	46.8	-	46.8	66.0	45.4	51.1	35.8	44.6	41.5
Beryllium	ug/L	0.00400 J	-	0.0200 J	0.192	0.0800 J	0.115	0.02 U	0.0900 J	0.1 U
Boron	mg/L	0.157	-	0.128	0.145	0.141	0.166	0.114	0.134	0.128
Cadmium	ug/L	0.0100 J	-	0.350	0.0700	0.0200 J	0.0200 J	0.100	0.0300 J	0.05 U
Calcium	mg/L	1.03	-	1.04	1.44	1.07	1.24	1.03	1.01	1.26
Chloride	mg/L	-	7.22	7.21	7.60	7.26	7.29	7.11	7.45	7.70
Chromium	ug/L	0.218	-	1.17	4.52	1.90	2.54	0.725	2.46	0.700 J
Cobalt	ug/L	1.00	-	2.15	3.70	1.39	1.92	0.393	1.43	0.349
Combined Radium	pCi/L	0.912	-	1.16	0.543	0.658	0.635	0.847	1.46	0.251
Fluoride	mg/L	-	0.870	0.860	0.830	0.870	0.910	0.840	0.770	0.840
Lead	ug/L	1.12	-	5.23	8.66	2.68	3.44	1.03	2.45	0.955
Lithium	mg/L	0.0100	-	0.0100	0.00900 J	0.0100 J	0.009 U	0.009 U	0.009 U	0.0100 J
Mercury	ug/L	0.002 U	-	0.0120	0.0160	0.00800	0.00400 J	0.0100	0.00900	0.00600
Molybdenum	ug/L	7.31	-	6.28	6.07	5.93	6.06	6.51	6.49	6.00 J
Selenium	ug/L	0.0600 J	-	0.200	0.900	0.400	0.600	0.400	0.500	0.300 J
Total Dissolved Solids	mg/L	-	421	468	513	460	449	435	484	505
Sulfate	mg/L	-	12.9	12.2	12.6	12.8	11.9	15.7	20.1	28.5
Thallium	ug/L	0.0600	-	0.209	0.400 J	0.300 J	0.200 J	0.100 J	0.200 J	0.5 U
pH	SU	-	8.27	8.00	7.14	9.28	9.10	9.17	9.65	9.18

Notes:
µg/L: micrograms per liter
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
U: Non-detect value. Parameters which were not detected are shown as less than the method detection limit (MDL).
J: Estimated value. Parameter was detected in concentrations below the reporting limit.
-: Not sampled
For statistical analysis, parameters which were not detected were replaced with the reporting limit.

Table 2: Outlier Analysis Summary
Amos Plant - Fly Ash Pond

Geosyntec Consultants, Inc.

Location	Well ID	Sample Date	Parameter	Reported Value	Units	Conclusions
Background	MW-1810A	2/22/2019	Antimony	0.0005	mg/L	Antimony was not detected in this sample and was replaced with the reporting limit for the statistical evaluation. This value was similar to those reported nearby and was not removed from the dataset.
Background	MW-1807A	8/28/2018	Antimony	0.00087	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.
Background	MW-1810A	7/26/2018	Barium	0.124	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.
Compliance	MW-1806A	11/13/2018	Boron	0.213	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.
Background	FAP-MW-1808A	1/25/2019	Calcium	47.4	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.
Compliance	MW-1	1/23/2019	Chloride	14.6	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.
Compliance	MW-1	11/13/2019	Chromium	0.000583	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.
Background	MW-1809A	1/25/2019	pH	5.12	SU	This value was similar to those reported in nearby wells and was not removed from the dataset.
Background	MW-1810A	2/22/2019	Selenium	0.001	mg/L	Selenium was not detected in this sample and was replaced with the reporting limit for the statistical evaluation. This value was similar to those reported nearby and was not removed from the dataset.
Compliance	MW-1	1/23/2019	Sulfate	55.9	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.
Compliance	MW-7	11/13/2018	Sulfate	33.2	mg/L	This value was similar to those reported in nearby wells and was not removed from the dataset.

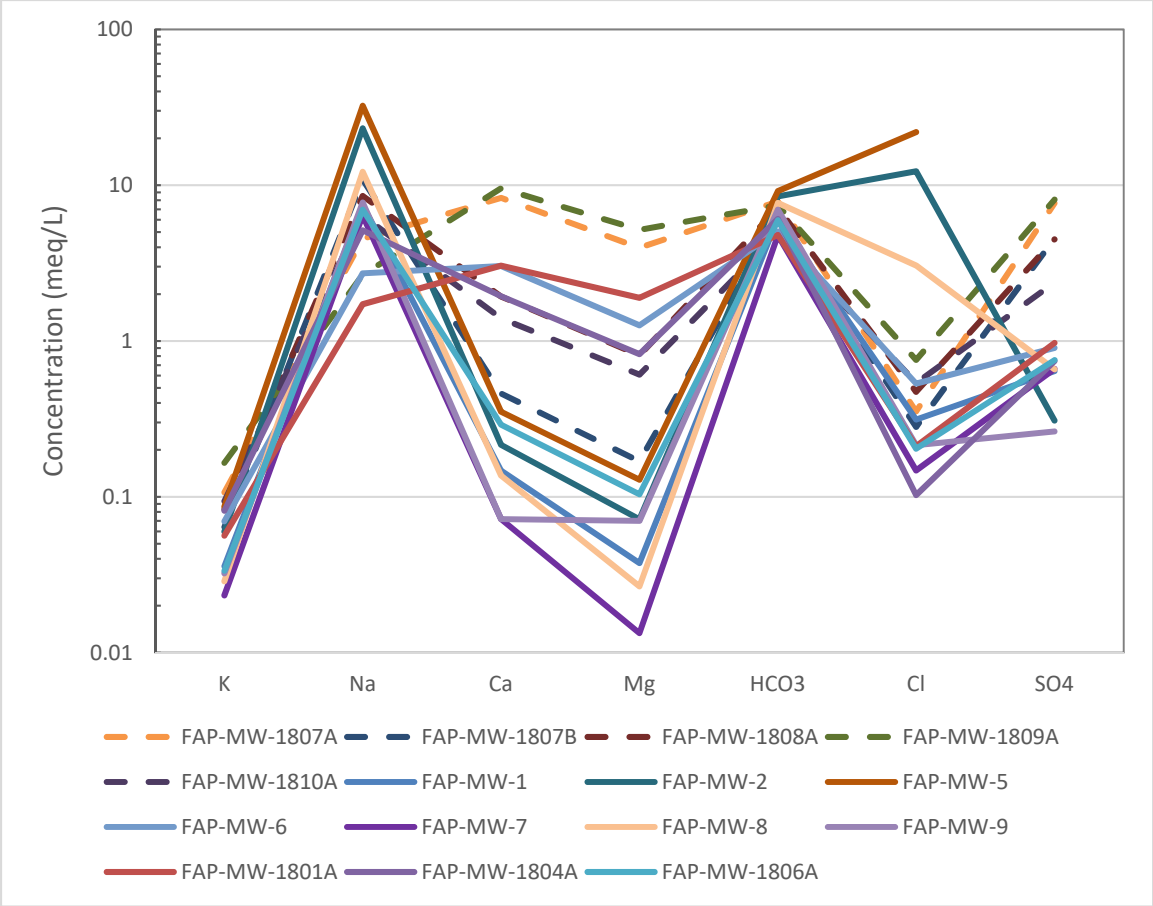
Table 3: Background Level Summary
Amos Plant - Fly Ash Pond

Geosyntec Consultants, Inc.

Parameter	Units	Description	MW-1801A	MW-1804A	MW-1806A	MW-1	MW-2	MW-5	MW-6	MW-7	MW-8	MW-9
			3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/13/2019	3/13/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019
Boron	mg/L	Intrawell Background Value (UPL)	0.459	0.965	0.235	0.261	0.382	0.355	0.159	0.248	0.320	0.192
Calcium	mg/L	Intrawell Background Value (UPL)	75.4	51.2	18.8	3.58	4.66	7.79	70.6	1.63	3.06	1.63
Chloride	mg/L	Intrawell Background Value (UPL)	12.4	6.93	24.6	14.6	495	853	21.4	5.80	120	8.00
Fluoride	mg/L	Intrawell Background Value (UPL)	0.162	1.10	1.14	0.485	3.39	3.72	0.264	0.304	3.11	0.976
pH	SU	Intrawell Background Value (UPL)	8.8	8.8	9.3	8.8	8.9	8.4	7.3	9.3	9.8	11.4
		Intrawell Background Value (LPL)	5.9	6.8	7.2	7.7	8.0	7.8	6.3	8.0	7.0	6.1
Sulfate	mg/L	Intrawell Background Value (UPL)	61.2	53.9	61.4	55.9	26.7	0.20	48	33.6	36.5	36.2
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	518	599	485	536	1405	1976	424	458	798	640

Notes:
UPL: Upper prediction limit
LPL: Lower prediction limit

FIGURES



Notes: Groundwater samples were collected on November 13-15, 2018 to represent groundwater quality at each monitoring location. Dashed lines represent background monitoring locations.

Schoeller Diagram
Amos Fly Ash Pond

Geosyntec consultants

AMERICAN ELECTRIC POWER

Figure **1**

Columbus, Ohio

31-May-2019

internal info: path, date revised, author

ATTACHMENT A
Certification by Qualified Professional Engineer

Certification by Qualified Professional Engineer

I certify that the selected and above described statistical method is appropriate for evaluating the groundwater monitoring data for the Amos Fly Ash Pond CCR management area and that the requirements of 40 CFR 257.93(f) have been met.

DAVID ANTHONY MILLER
Printed Name of Licensed Professional Engineer

David Anthony Miller
Signature

22663	WEST VIRGINIA	07.15.19
License Number	Licensing State	Date

ATTACHMENT B

Statistical Analysis Output

GROUNDWATER STATS CONSULTING

July 14, 2019

Geosyntec Consultants
Attn: Ms. Allison Kreinberg
941 Chatham Lane, #103
Columbus, OH 43221

Re: Amos Fly Ash Pond (FAP)
Background Screening

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the screening and statistical analysis of background groundwater data for American Electric Power Company's Amos Fly Ash Pond (FAP). The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

Sampling began for the CCR program in 2018, and 8 background samples have been collected at each of the groundwater monitoring wells. The monitoring well network, as provided by Geosyntec Consultants, consists of the following:

- Upgradient Wells: FAP-MW-1807A, FAP-MW-1807B, FAP-MW-1808A, FAP-MW-1809A, and FAP-MW-1810A
- Downgradient Wells: FAP-MW-1, FAP-MW-2, FAP-MW-5, FAP-MW-7, FAP-MW-8, FAP-MW-6, FAP-MW-9, FAP-MW-1801A, FAP-MW-1804A; and FAP-MW-1806A

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University, both Senior Advisors to Groundwater Stats Consulting.

The following constituents were evaluated: Appendix III parameters – boron, calcium, chloride, fluoride, pH, sulfate, and TDS; and Appendix IV parameters - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 & 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, box plots are included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

Data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance recommendations as discussed below.

Summary of Statistical Method:

1) Intrawell prediction limits, combined with a 1-of-3 resample plan for all Appendix III parameters.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Background Screening

Outlier Evaluation

Time series plots are used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits (Figure C).

Using the Tukey box plot method, several values were identified as possible outliers. A summary of those findings is included with the tests (Figure C). Typically, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. In this particular case, the values identified were reported nondetects requiring no further action. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, none of the values were flagged as all observations are similar to remaining measurements within a given well or neighboring wells, or were reported nondetects. If values are flagged as outliers in the future, a list of those values will be included with the Tukey test results in Figure C. Additionally, these values would be plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages will display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. When the reporting limit is higher than the CCR-rule specified levels (40 CFR 257.95(h)) for parameters without Maximum Contaminant Levels as discussed below, nondetects are substituted with one half the reporting limit.

No seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

While trends may be visually apparent, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends (Figure D). In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed a statistically significant decreasing trend for chloride and an increasing trend for sulfate as may be seen on the Trend Test Summary Table that accompanies the trend tests. Both of these trends are relatively low in magnitude when compared to average concentrations within these wells. Additionally, the short background period of record makes it difficult to separate trends from normal year-to-year variation. Therefore, no adjustments were made to the data sets.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach (Figure E). Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified variation among upgradient well data for all of the Appendix III parameters. Therefore, all other data were further evaluated as described for the appropriateness of intrawell testing to accommodate the groundwater quality. A summary table of the ANOVA results is included with the reports.

Appendix III - Statistical Limits

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are conservative (i.e. lower) from a regulatory perspective, and that will rapidly identify a change in more recent compliance data from within a given well. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Prior to performing intrawell prediction limits, several steps are required to reasonably demonstrate downgradient water quality does not have existing impacts from the practices of the facility.

Exploratory data analysis was used as a general comparison of concentrations in downgradient wells for all Appendix III parameters recommended for intrawell analyses to concentrations reported in upgradient wells. Upper tolerance limits are used in conjunction with confidence intervals to determine whether the estimated averages in downgradient wells are higher than observed levels upgradient of the facility. The upper tolerance limits were constructed to represent the extreme upper range of possible background levels at the site.

In cases where downgradient average concentrations are higher than observed concentrations upgradient for a given constituent, an independent study and hydrogeological investigation would be required to identify local geochemical conditions and expected groundwater quality for the region to justify an intrawell approach. Such an assessment is beyond the scope of services provided by Groundwater Stats Consulting. When there is not an obvious explanation for observed concentration differences in downgradient wells relative to reported concentrations in upgradient wells, interwell prediction limits are in most cases selected for the statistical method until further evidence shows that concentrations are due to natural variation rather than a result of the facility. A special situation occurs, however, at this site and is discussed below.

For normal or transformed normal data, parametric tolerance limits were constructed with a target of 99% confidence and 95% coverage using pooled upgradient well data for each

of the Appendix III parameters recommended for intrawell analyses (Figure F). In cases where transformations cannot achieve normality, nonparametric tolerance limits are used. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As more data are collected, the background population is better represented, and the confidence and coverage levels increase.

Confidence intervals were constructed on downgradient wells for each of the Appendix III parameters using the tolerance limits discussed above, to determine intrawell eligibility for those parameters exhibiting spatial variation (Figure G). When the entire confidence interval is above a background standard for a given parameter, interwell methods are initially recommended as the statistical method. Therefore, only parameters with confidence intervals which did not exceed background standards are eligible for intrawell prediction limits.

Confidence intervals for the Appendix III parameters (boron, calcium, chloride, fluoride, pH, sulfate and TDS) were found to be within their respective background limit for calcium, pH and sulfate; while the confidence intervals for boron, chloride, fluoride and TDS were above the background standards for one or more downgradient wells. Based on the statistical screening, intrawell methods would be recommended for calcium, pH and sulfate, and interwell methods would be recommended for boron, chloride, fluoride and TDS. However, supporting documentation provided by Geosyntec Consultants demonstrates that a review of the geochemistry at the site found two different types of groundwater chemistry between the upgradient and downgradient wells, indicating that interwell methods would lead to either false positive (identifying impacts when there are none) or false negative (not identifying impacts to groundwater when present in downgradient wells) results. Therefore, intrawell prediction limits are recommended presently for all Appendix III parameters.

In cases where downgradient average concentrations are higher than observed concentrations upgradient for a given constituent and in cases of unexplained increasing trends in downgradient concentrations, an independent study and hydrogeological investigation would be required to identify local geochemical conditions and expected groundwater quality for the region to conclusively validate an intrawell approach. This method assumes that practices at the site are not influencing background groundwater quality downgradient of the site. If background water quality has historically been affected by the facility, the intrawell limits will serve to detect changes from current, impacted conditions rather than to initially identify such impacts.

All available data through February 2019 for Appendix III parameters at each well were used to establish intrawell background limits based on a 1-of-3 resample plan that will be

used for future comparisons (Figure H). Intrawell methods construct statistical limits from historical data within a given well for comparison of future data at the same well.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits will be necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents are re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data are deselected prior to construction of limits in order to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. As more data are collected, the resample plan will be re-evaluated for appropriateness of the 1-of-2 plan for intrawell analyses.

In the event of an initial exceedance of compliance well data, the 1-of-3 resample plan allows for collection of up to two additional samples to determine whether the initial exceedance is confirmed. When both resamples confirm the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). In the 1-of-2 resample plan, one additional sample may be collected to confirm the initial exceedance. If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. A summary table of the background prediction limits follows this letter.

Appendix IV – Assessment Monitoring Program

During an Assessment Monitoring program, confidence intervals are constructed at all wells for detected Appendix IV parameters and compared to a Groundwater Protection Standard (GWPS). A minimum of 4 samples is required to construct confidence intervals; however, 8 samples are recommended for better representation of the true average population. The GWPS includes the established Maximum Contaminant Levels (MCLs), the CCR-rule specified levels for parameters without MCLs (cobalt, lead, lithium and molybdenum), or background as discussed below. Parametric confidence intervals are constructed with 99% confidence when data follow a normal or transformed-normal distribution. For all other cases, nonparametric confidence intervals are constructed, with the confidence level based on the number of samples available. The GWPS is exceeded only when the entire confidence interval exceeds its respective GWPS.

Background limits are established for the Appendix IV parameters using upper tolerance limits constructed with 95% confidence/95% coverage for normally distributed data, using all upgradient well data, for comparison against established MCLs. When background limits, or Alternate Contaminant Levels (ACLs), are higher than established MCLs or CCR-rule specified limits, the CCR Rule recommends using these ACLs as the GWPS for the confidence interval comparisons. Since the scope of this project included screening and development of background limits for Appendix III Detection Monitoring statistics, no confidence intervals were constructed in this report.

Recommendations

In summary, as a result of the background screening described in this letter, intrawell prediction limits combined with a 1-of-3 resample plan are recommended for all Appendix III parameters. The statistical analyses will be constructed according to the USEPA Unified Guidance, based on 7 Appendix III parameters and 10 downgradient wells.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for the Amos Fly Ash Pond. If you have any questions or comments, please feel free to contact me.

For Groundwater Stats Consulting,

Kristina L. Rayner
Groundwater Statistician

FIGURE A: TIME SERIES

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Hollow symbols indicate censored values.

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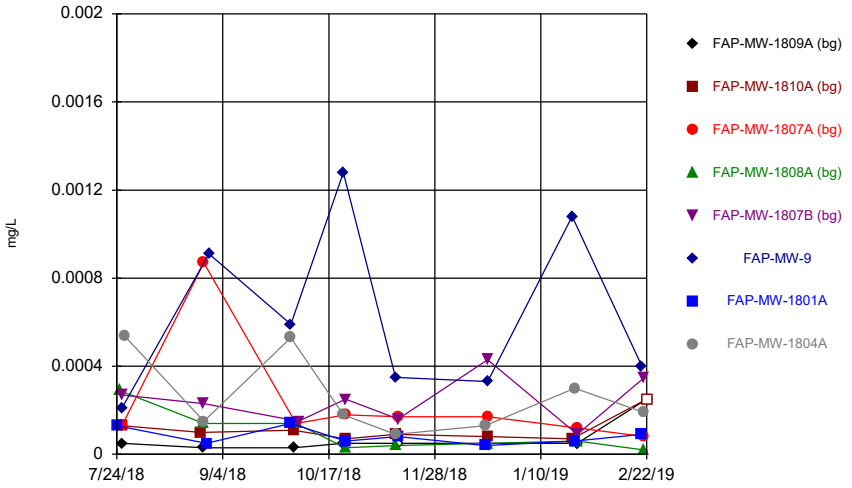

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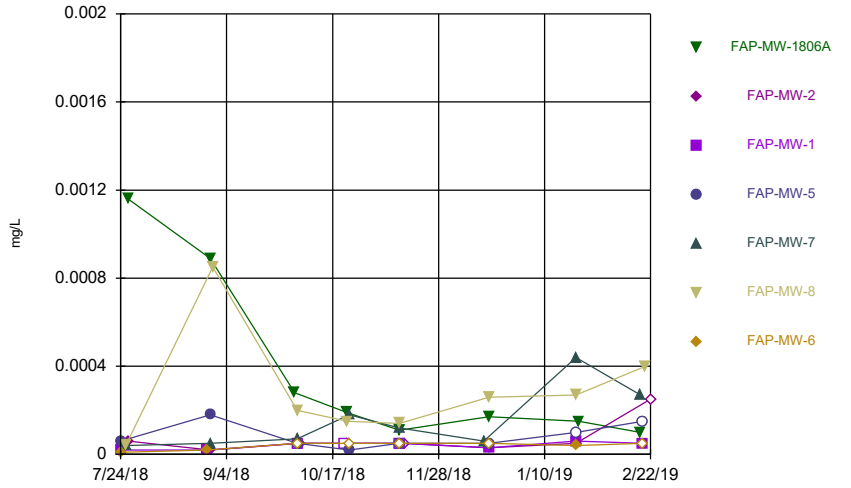

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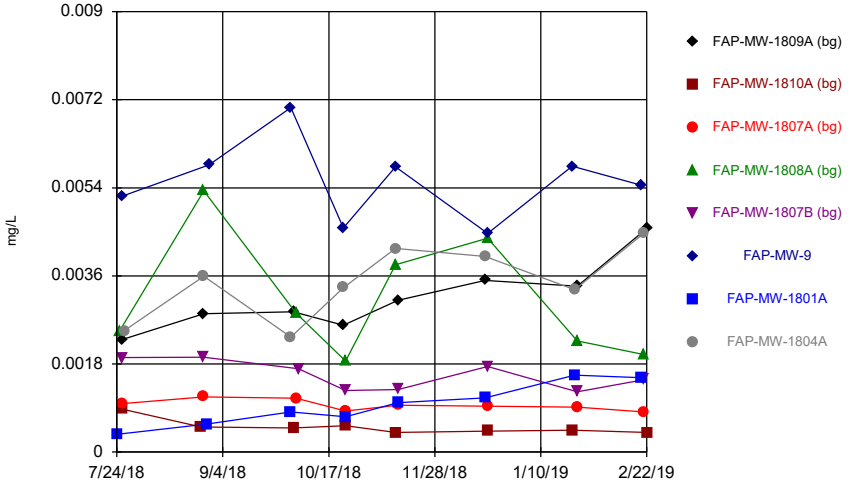

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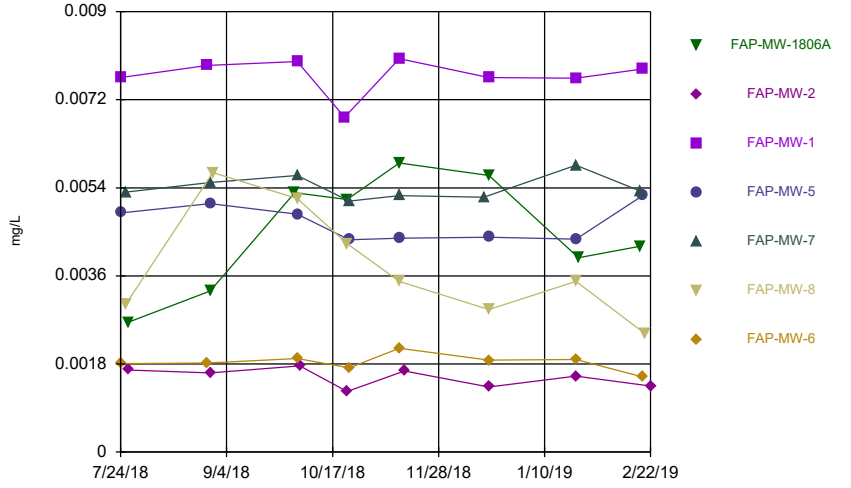

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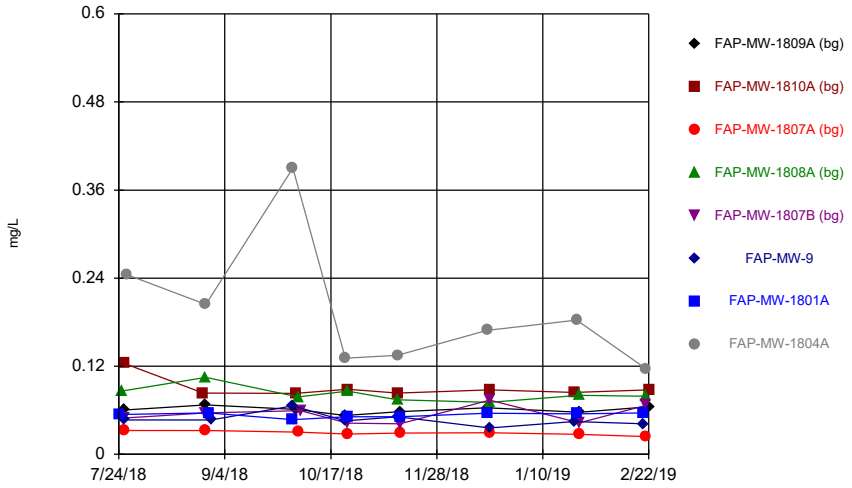

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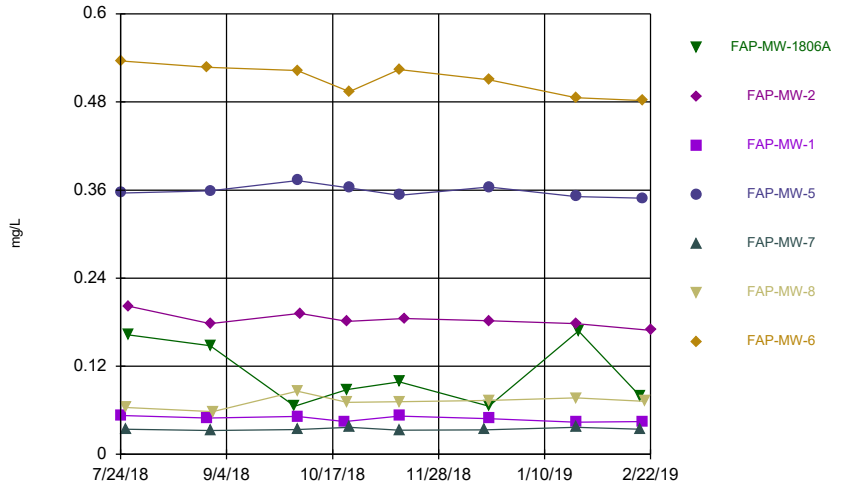

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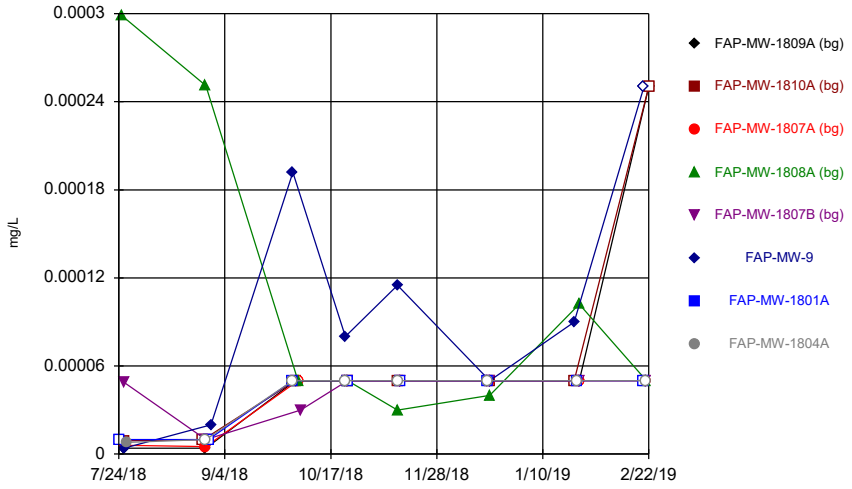

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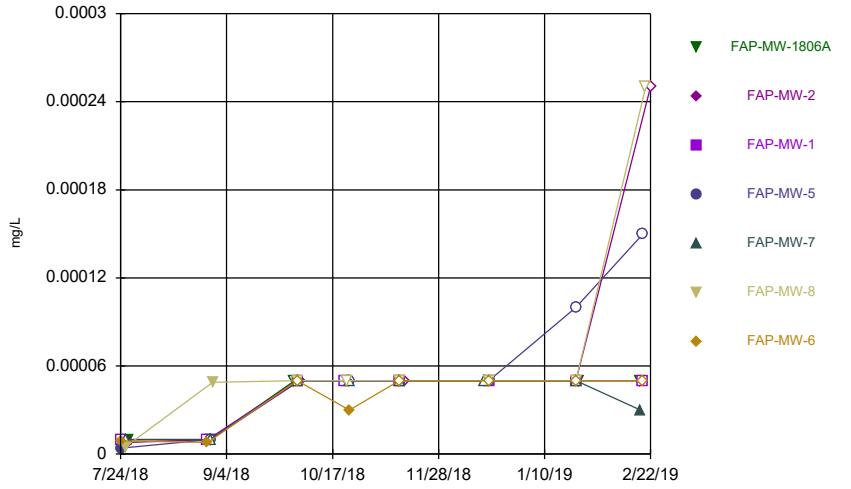

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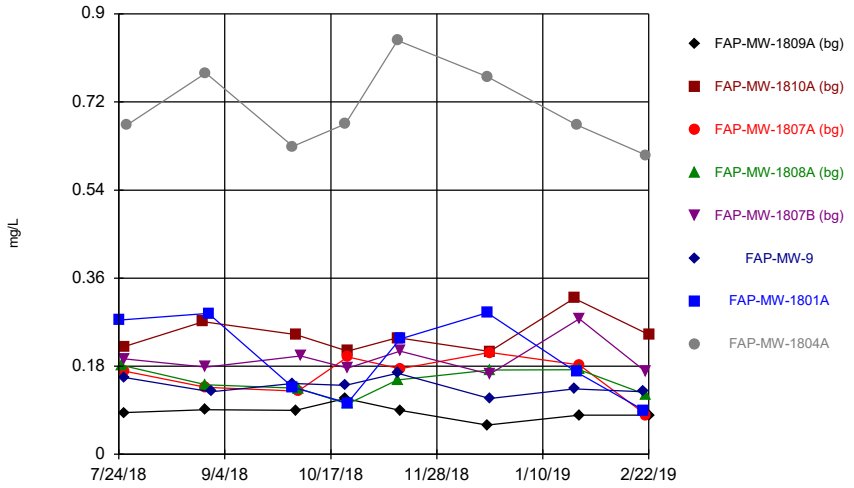

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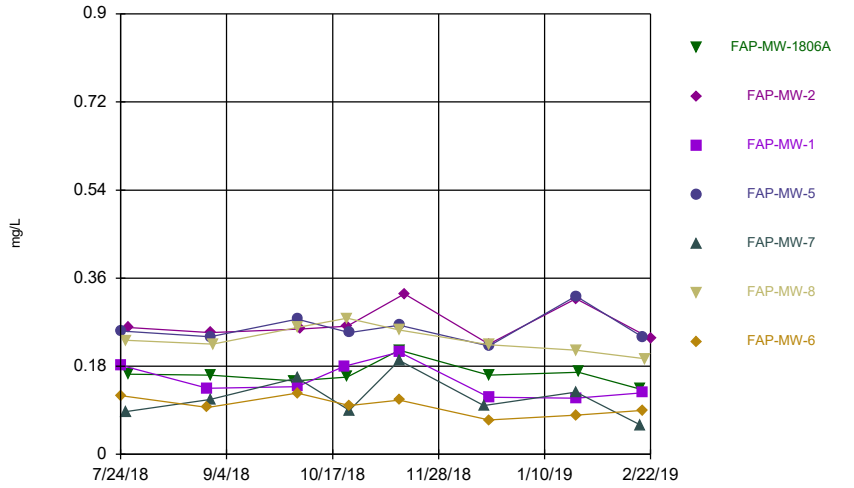

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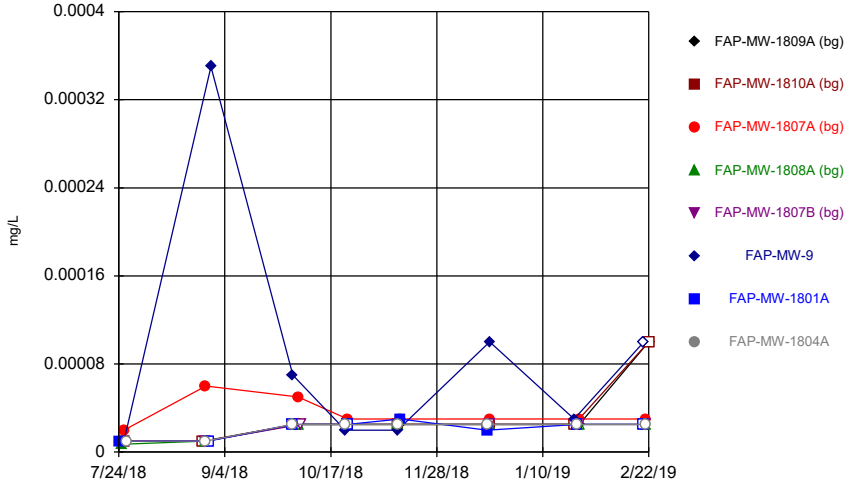

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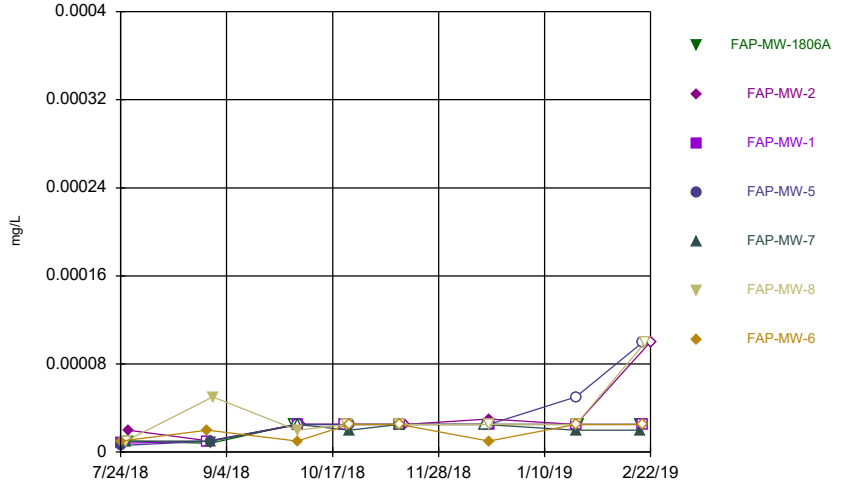

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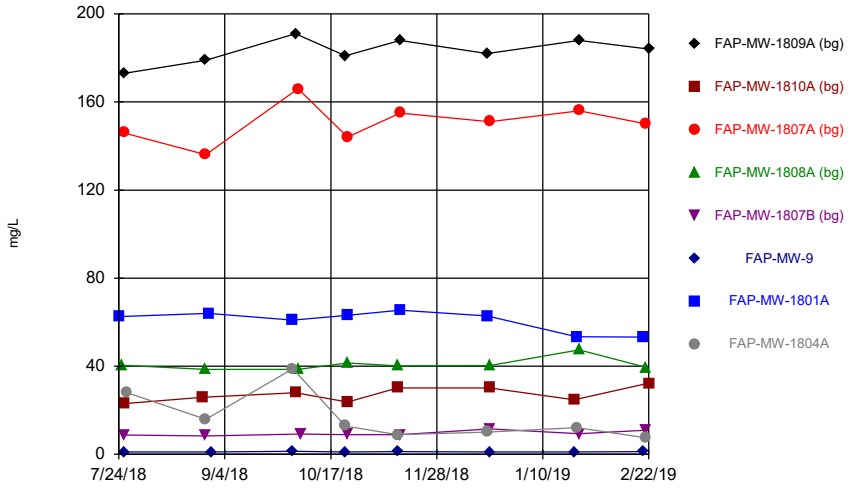

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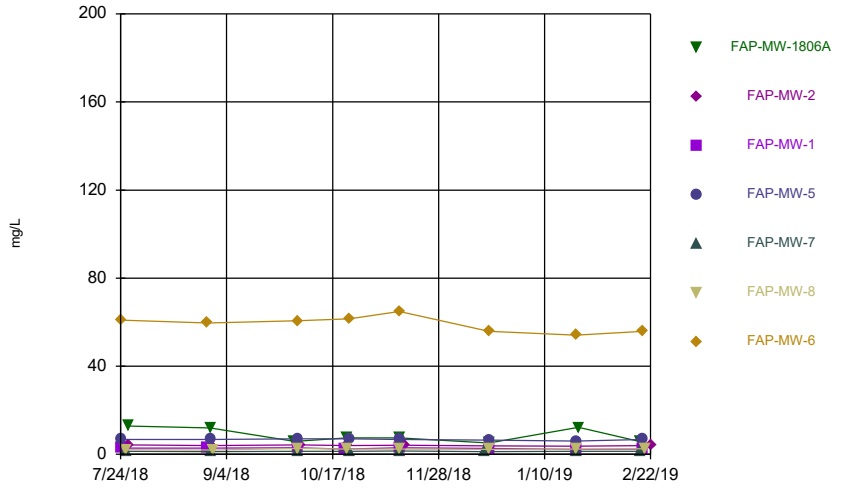

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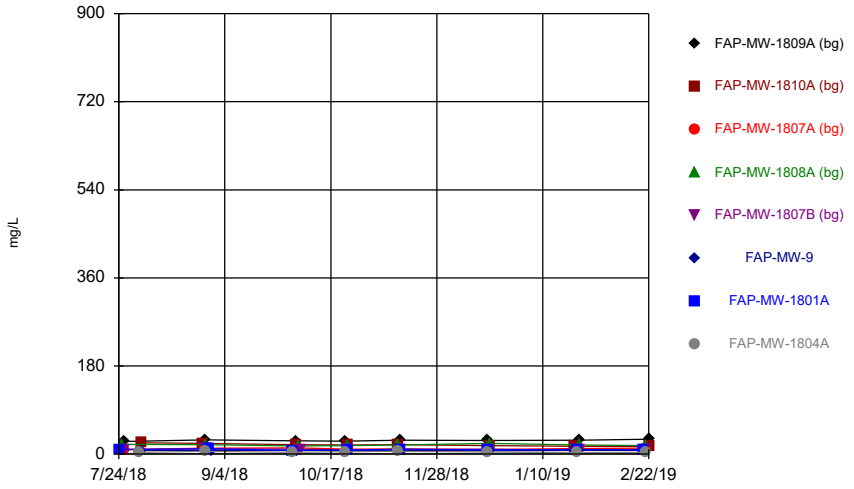

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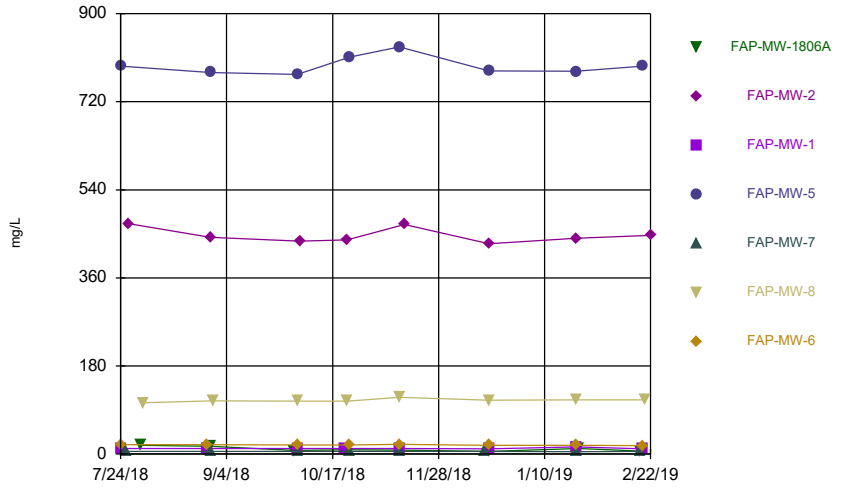
Time Series



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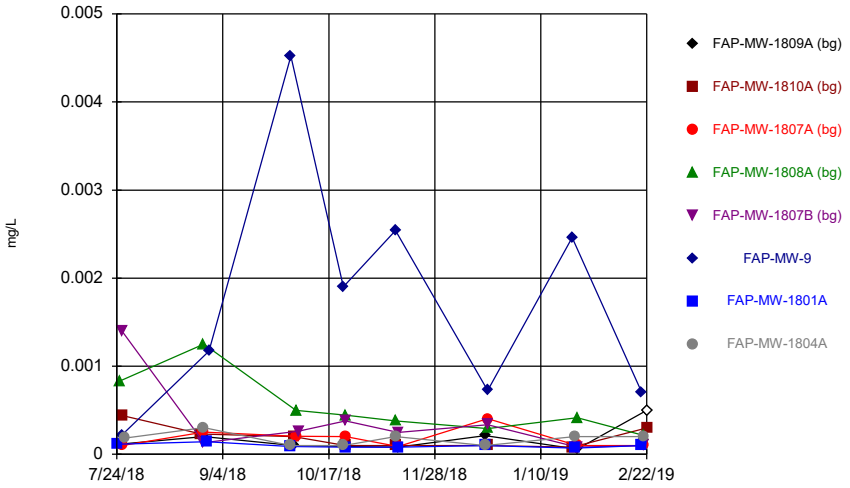

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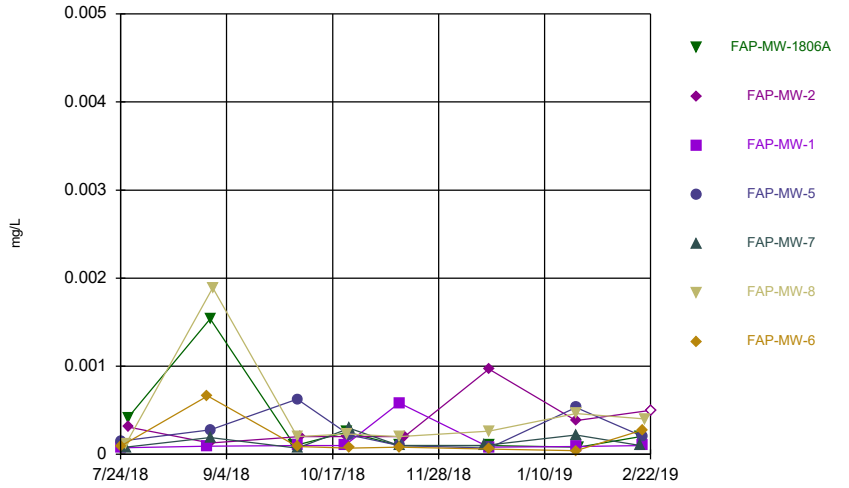

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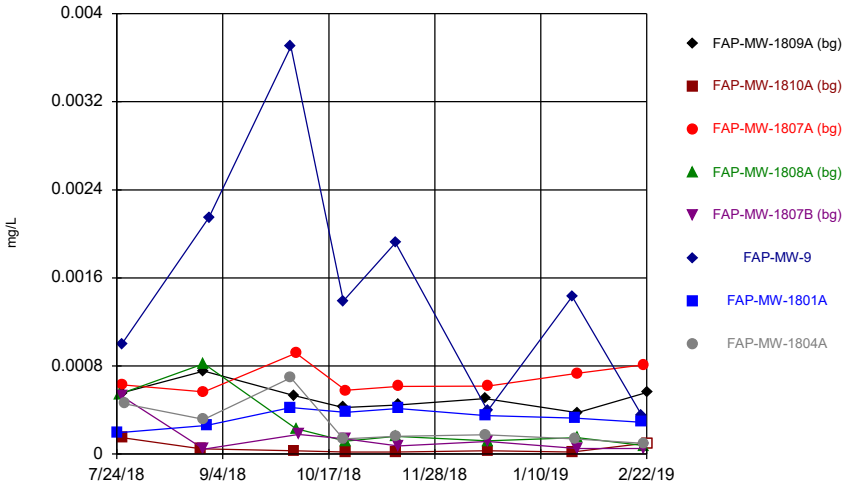
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

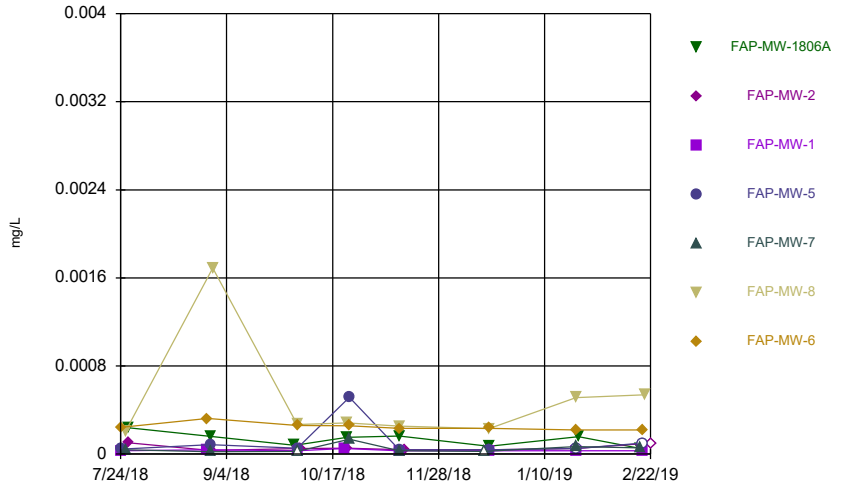
Time Series



Constituent: Cobalt Analysis Run 4/18/2019 10:04 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

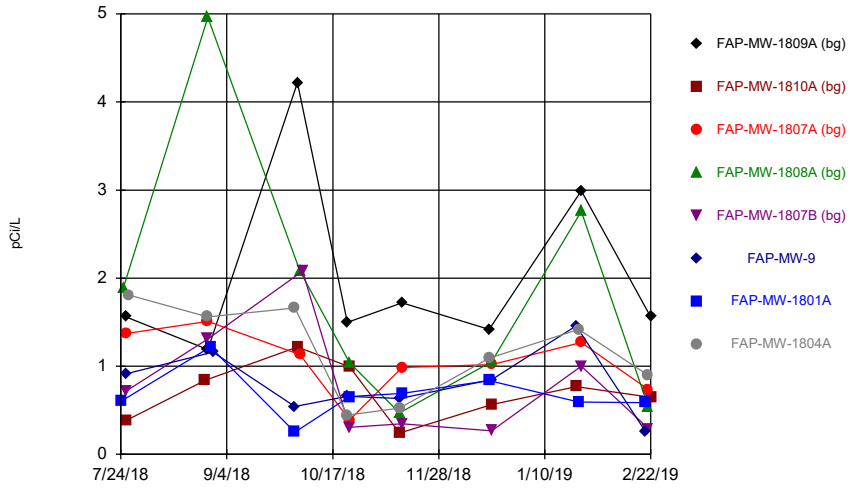
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 4/18/2019 10:04 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

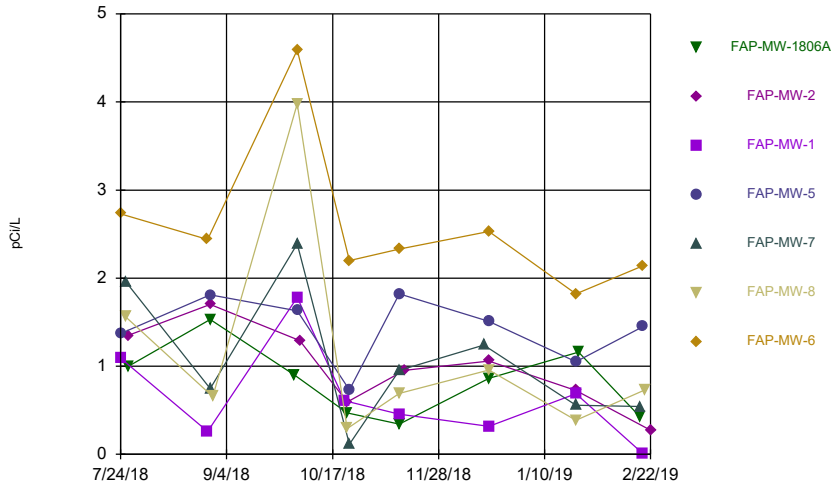
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

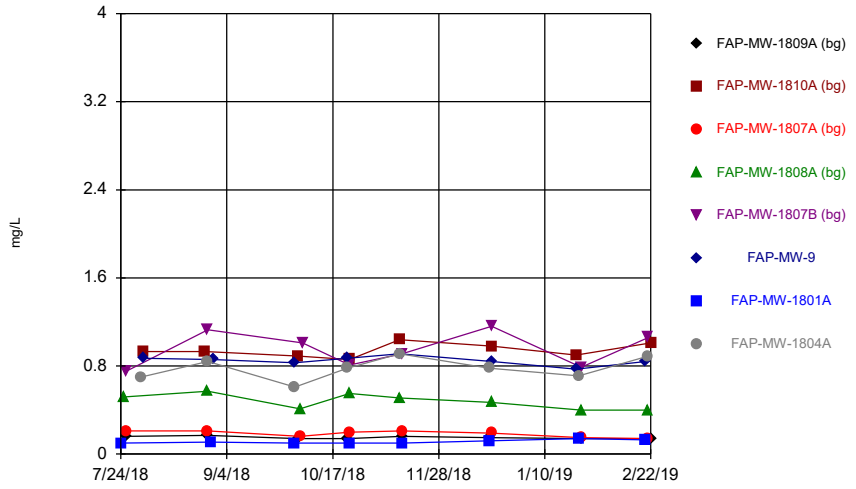
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

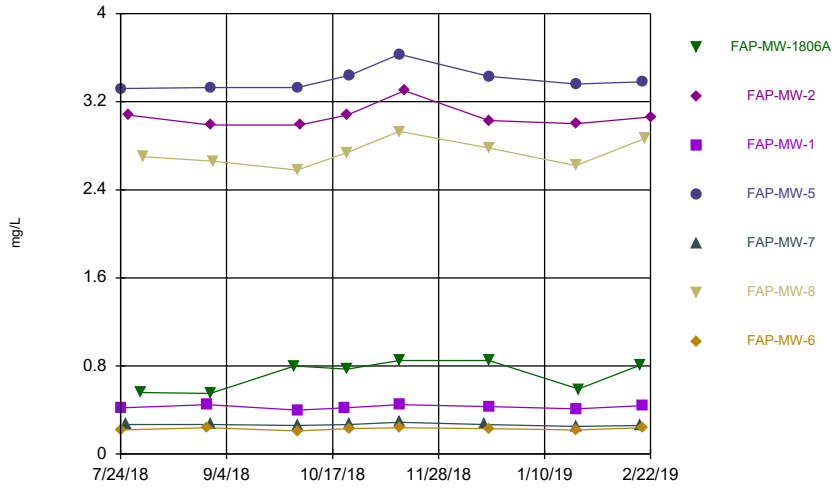
Time Series



Constituent: Fluoride Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

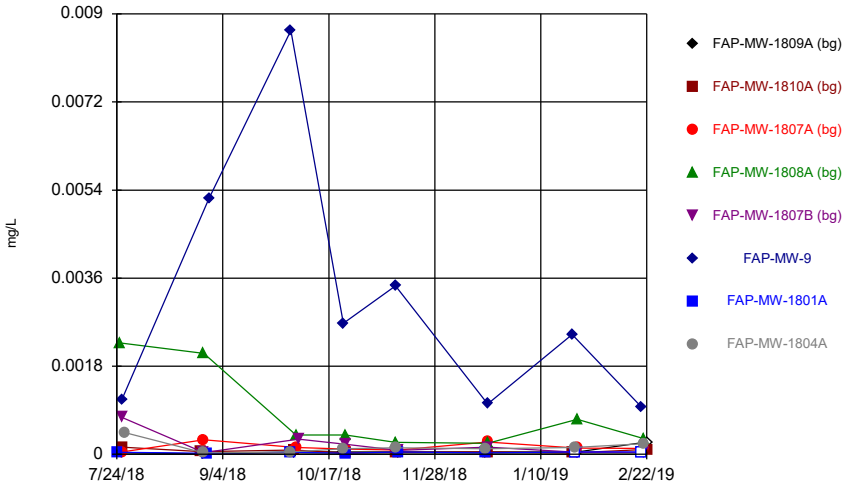
Time Series



Constituent: Fluoride Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

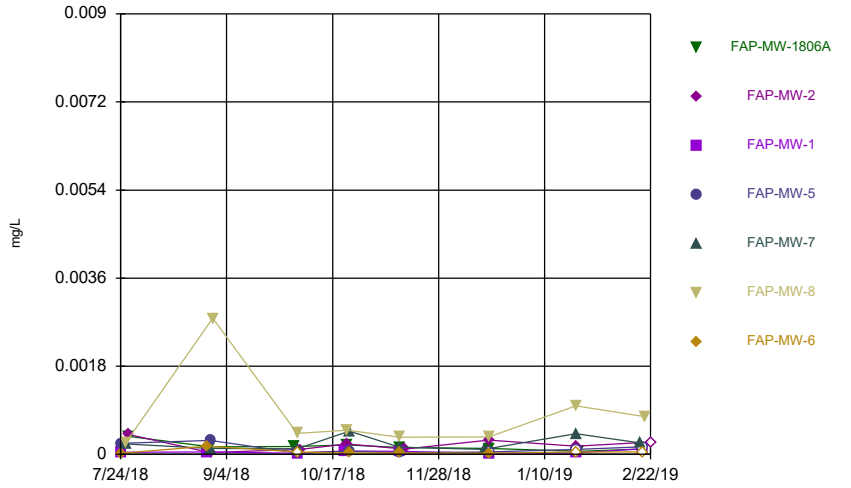
Time Series



Constituent: Lead Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

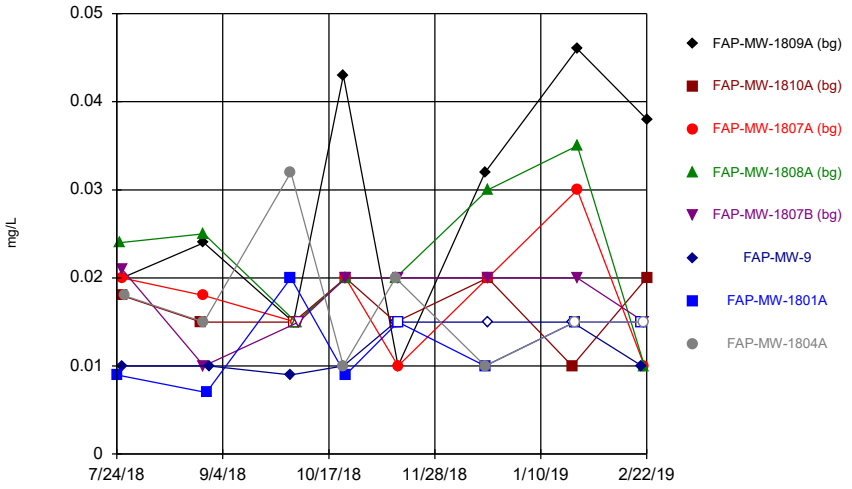
Time Series



Constituent: Lead Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

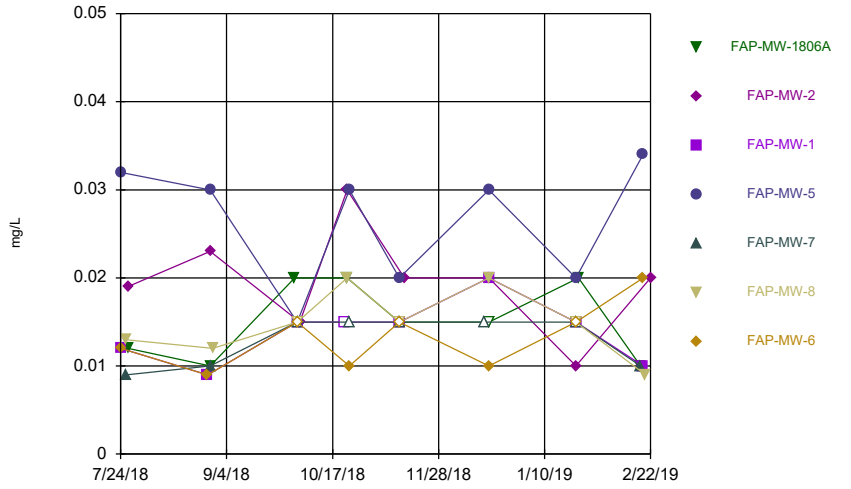
Time Series



Constituent: Lithium Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

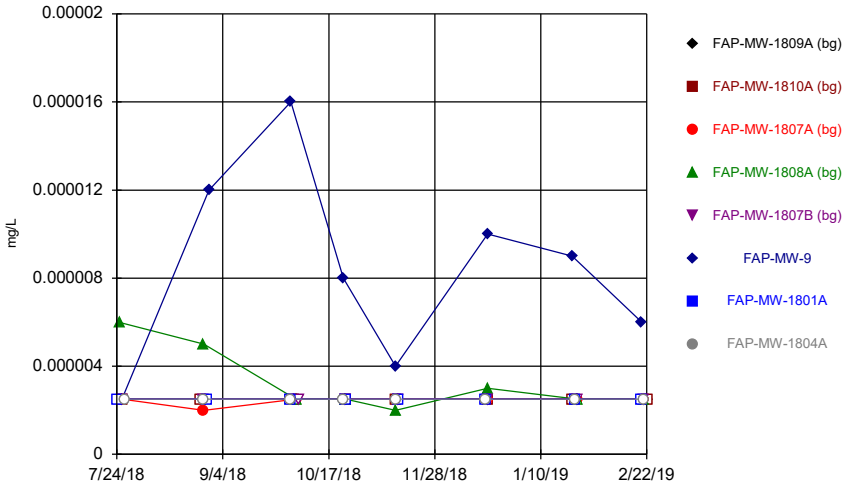
Time Series



Constituent: Lithium Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

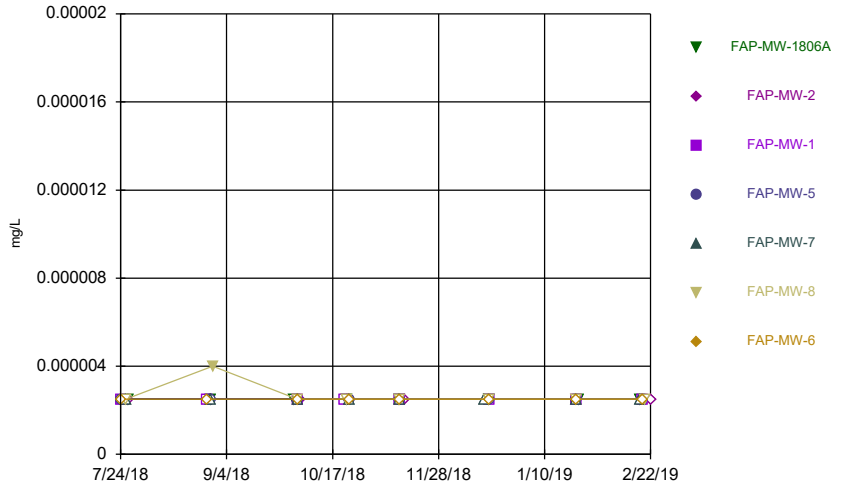
Time Series



Constituent: Mercury Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

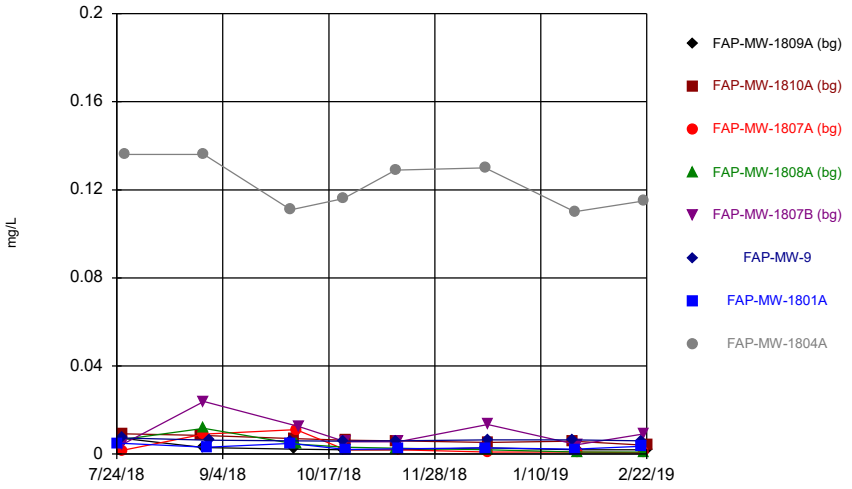
Time Series



Constituent: Mercury Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

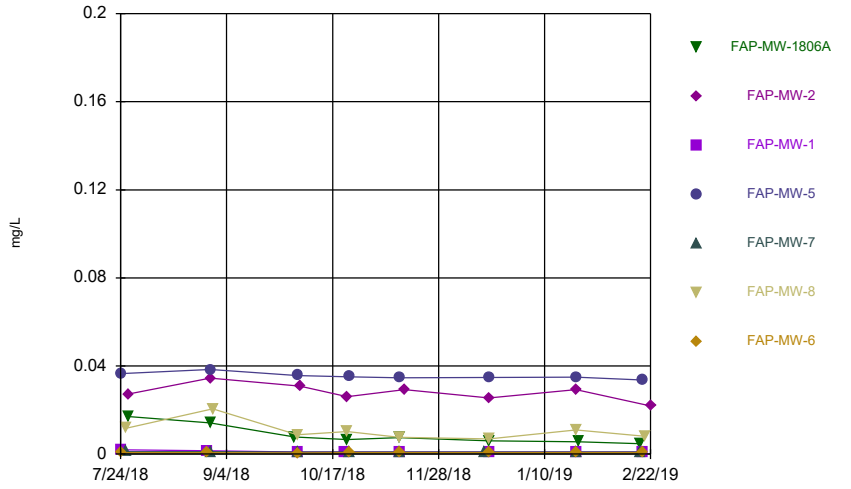
Time Series



Constituent: Molybdenum Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

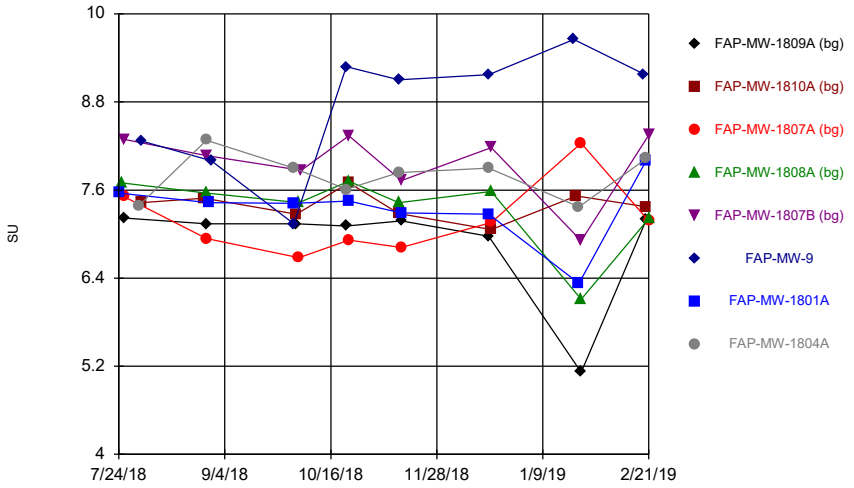
Time Series



Constituent: Molybdenum Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

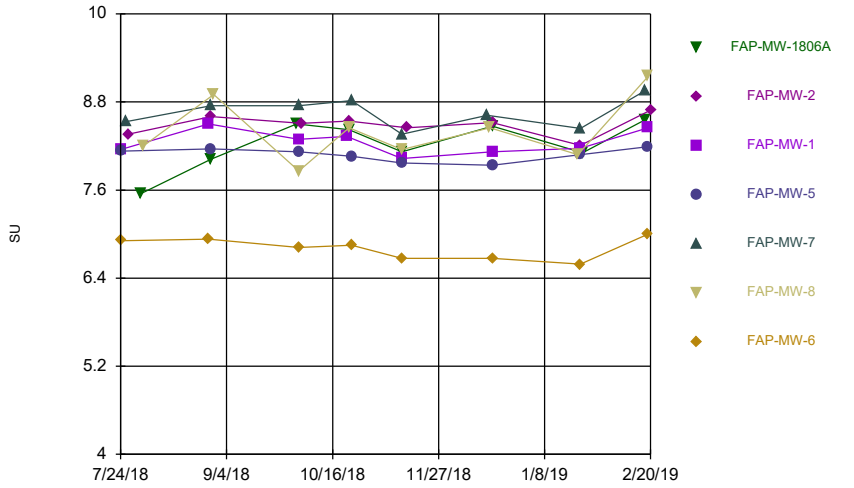
Time Series



Constituent: pH Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

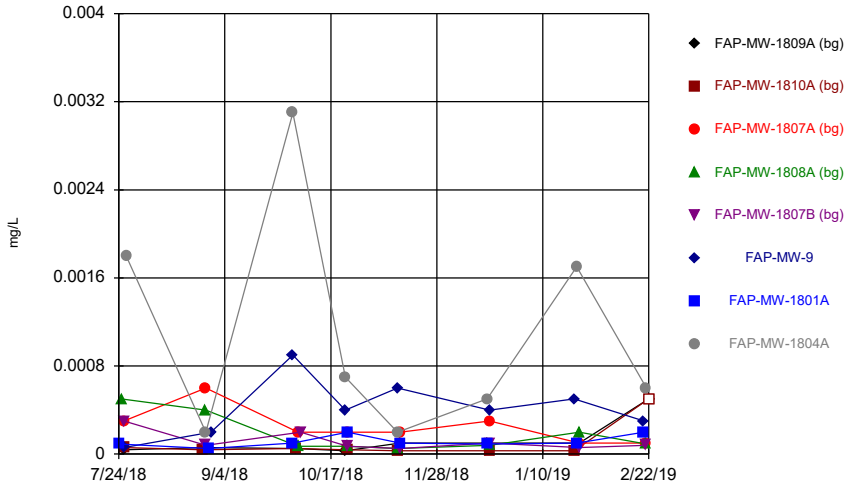
Time Series



Constituent: pH Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

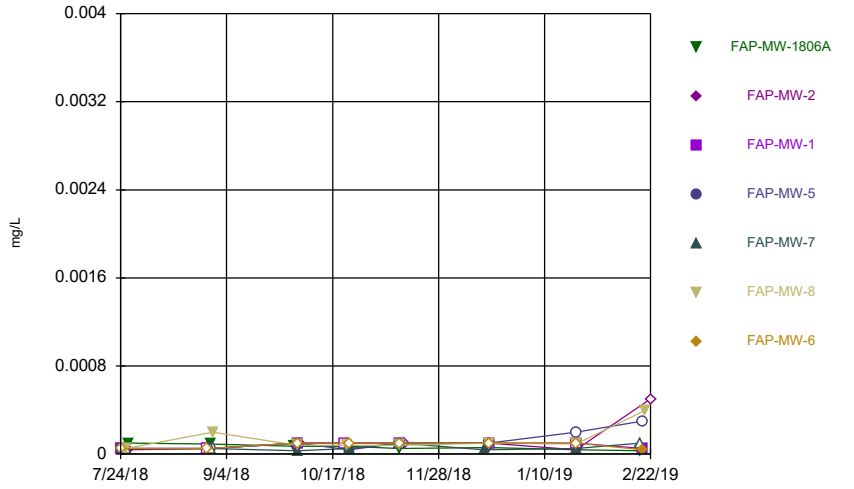
Time Series



Constituent: Selenium Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

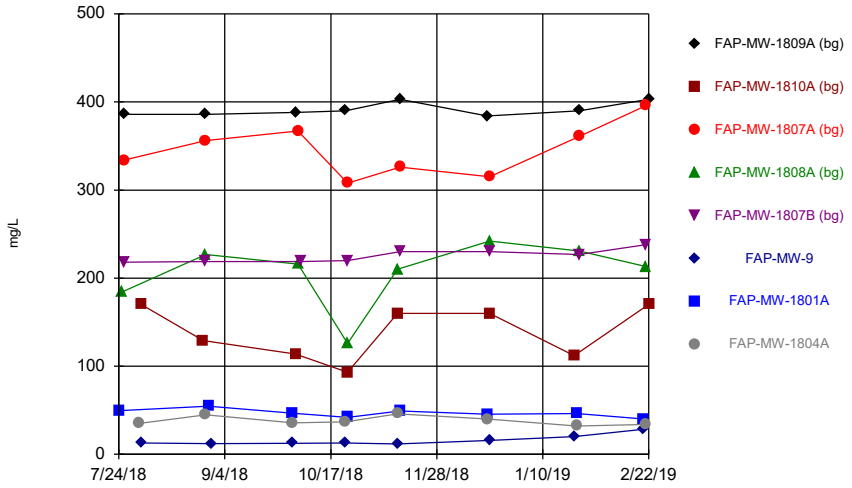
Time Series



Constituent: Selenium Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

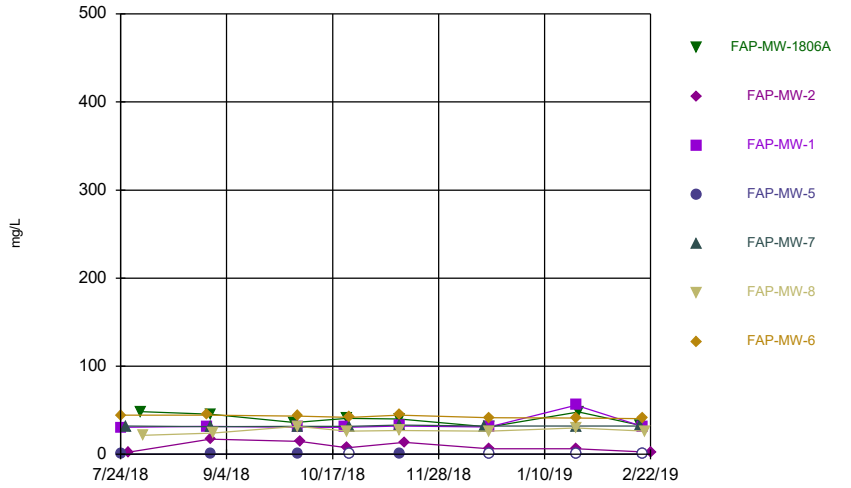
Time Series



Constituent: Sulfate Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

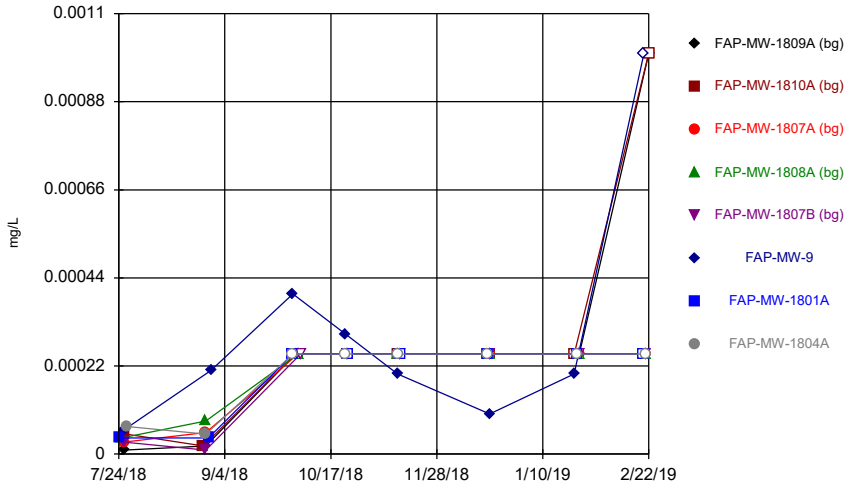
Time Series



Constituent: Sulfate Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

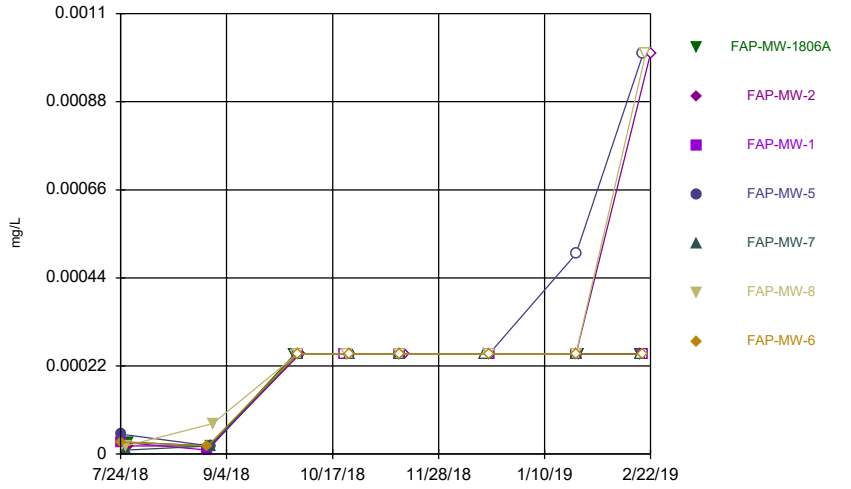
Time Series



Constituent: Thallium Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

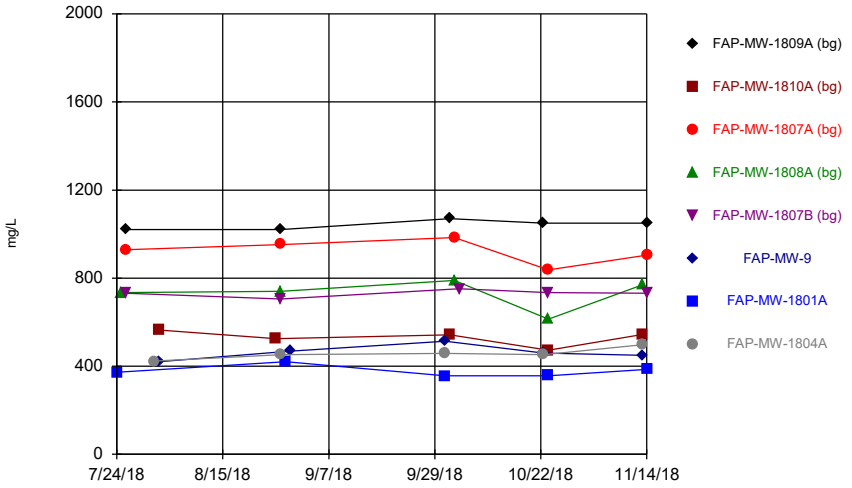
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

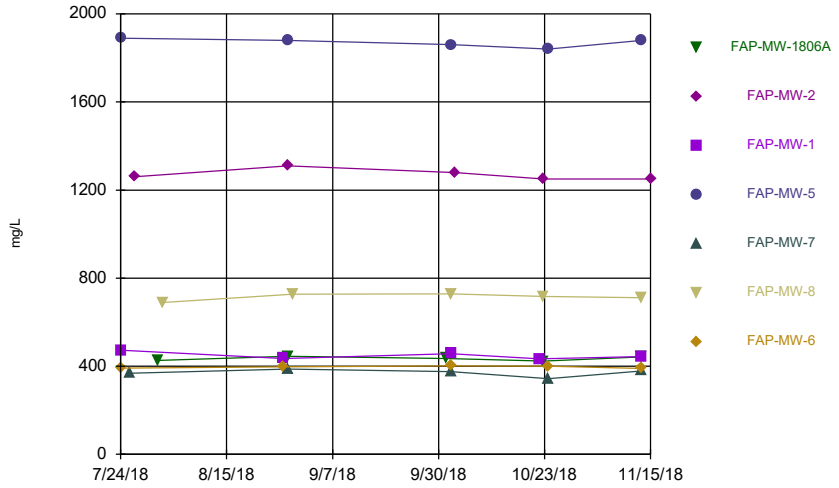
Time Series



Constituent: Total Dissolved Solids Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

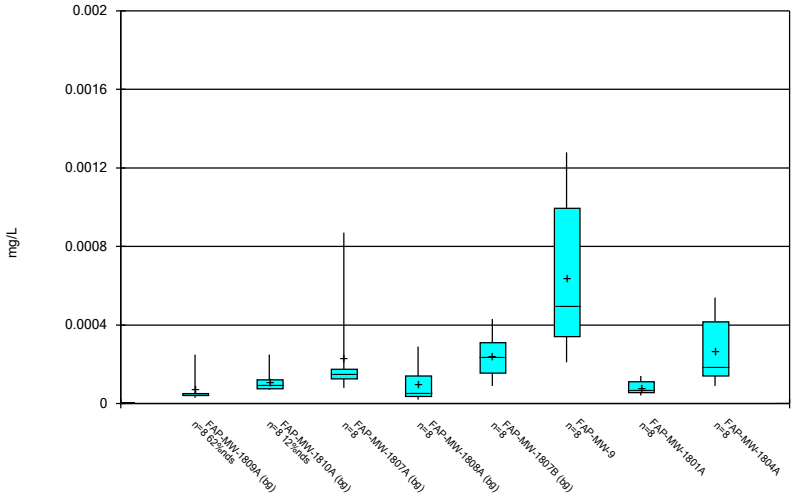
Time Series



Constituent: Total Dissolved Solids Analysis Run 4/18/2019 10:05 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

FIGURE B: BOX PLOTS

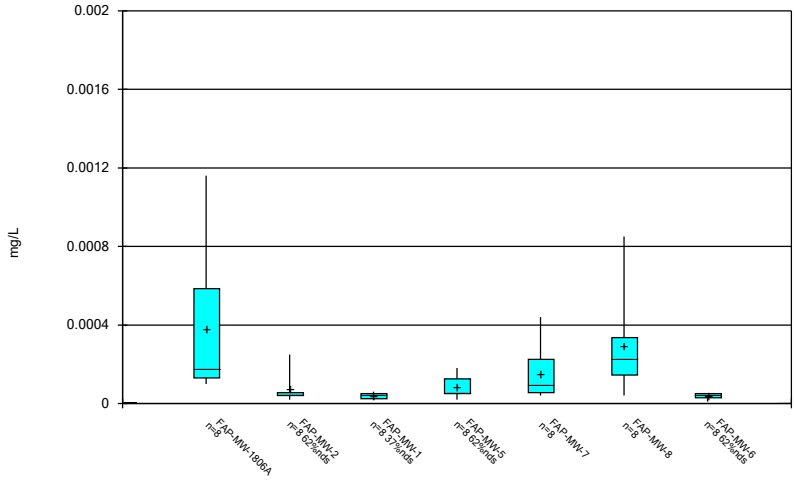
Box & Whiskers Plot



Constituent: Antimony Analysis Run 4/18/2019 10:19 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

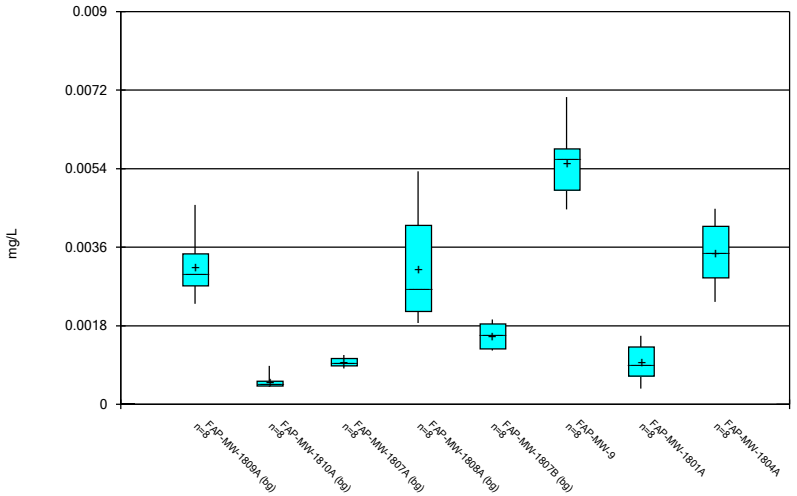
Box & Whiskers Plot



Constituent: Antimony Analysis Run 4/18/2019 10:19 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

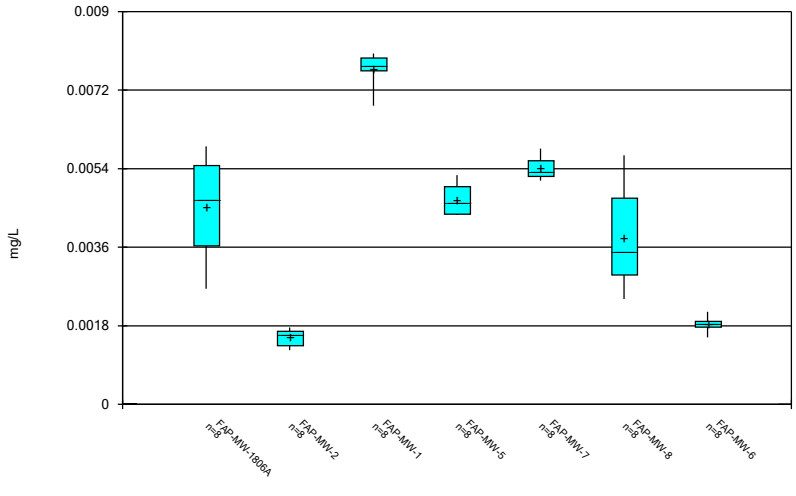
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 4/18/2019 10:19 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

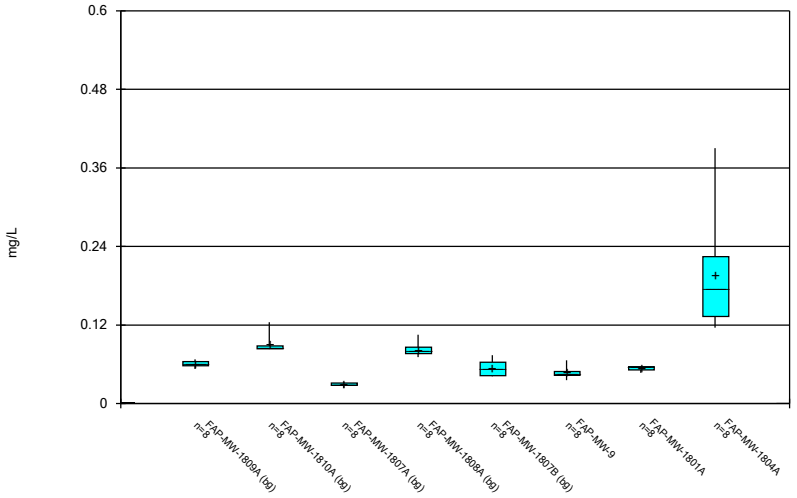
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 4/18/2019 10:19 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

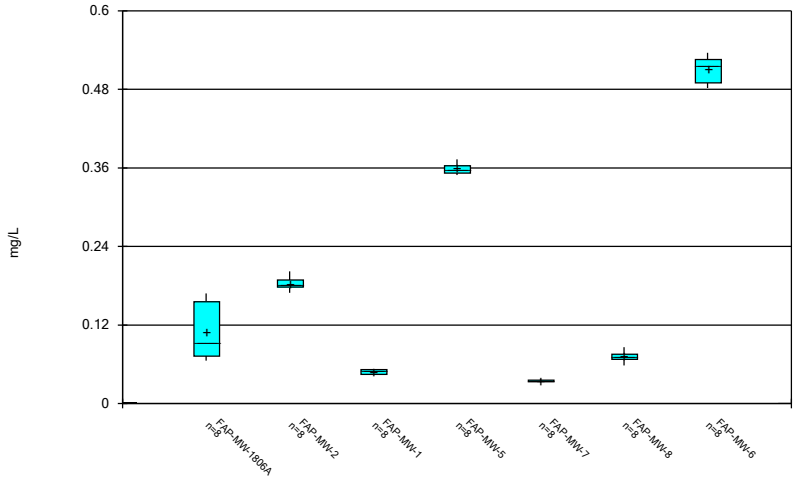
Box & Whiskers Plot



Constituent: Barium Analysis Run 4/18/2019 10:19 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

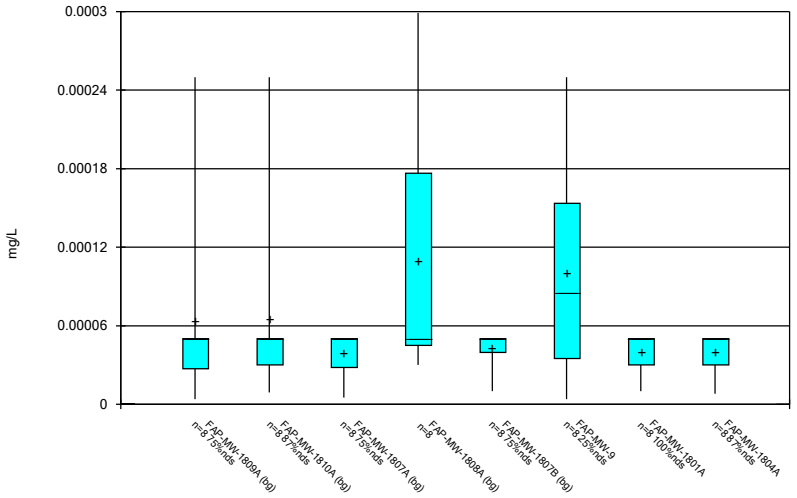
Box & Whiskers Plot



Constituent: Barium Analysis Run 4/18/2019 10:19 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

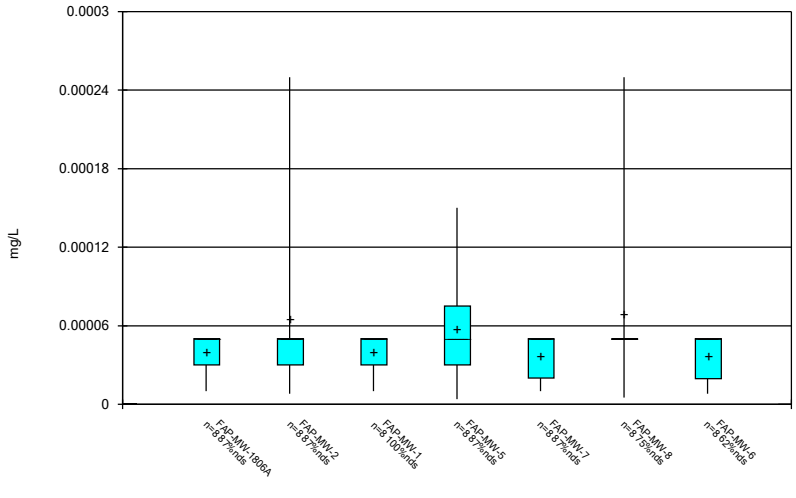
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 4/18/2019 10:19 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

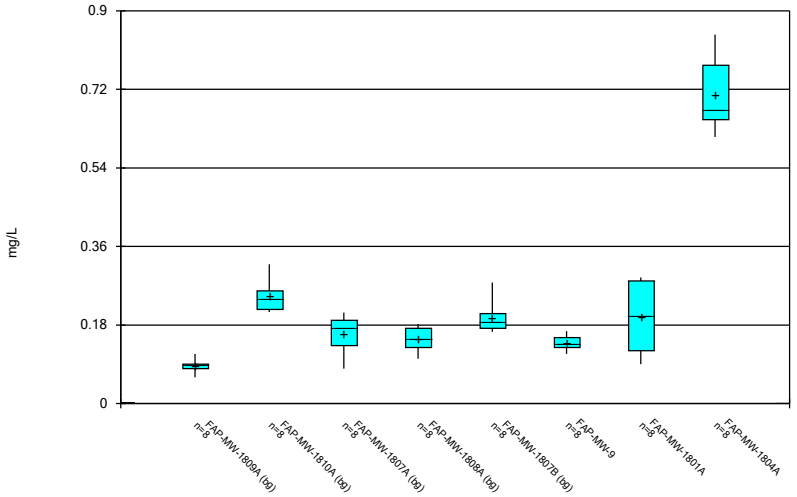
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

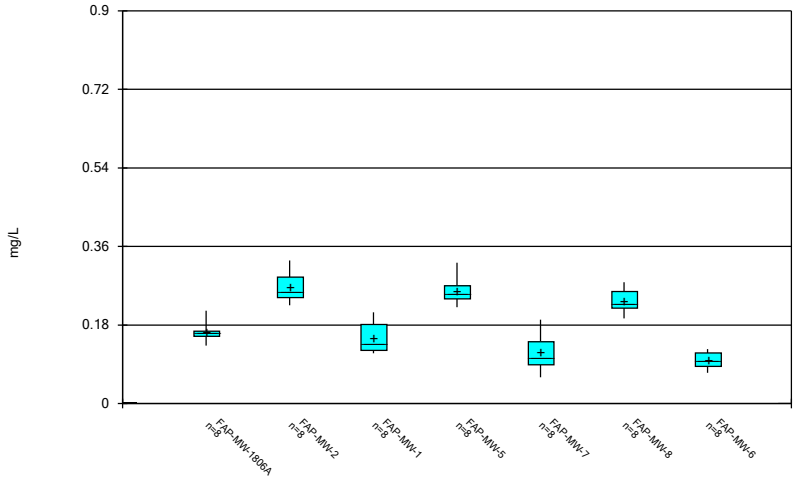
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

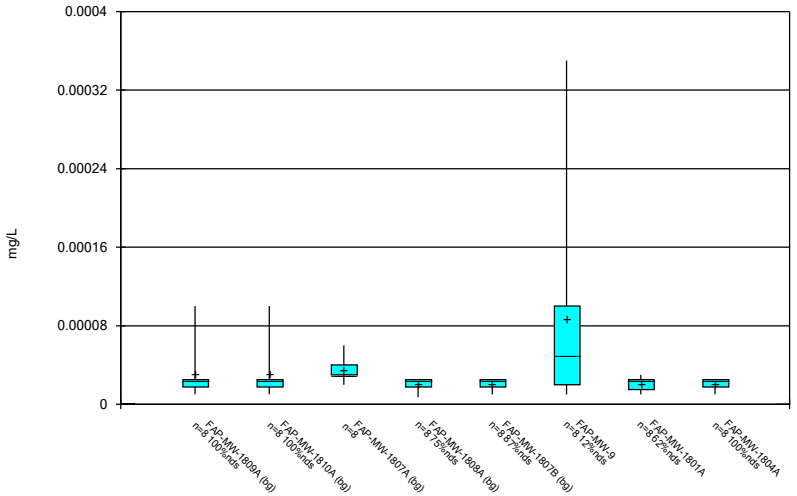
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

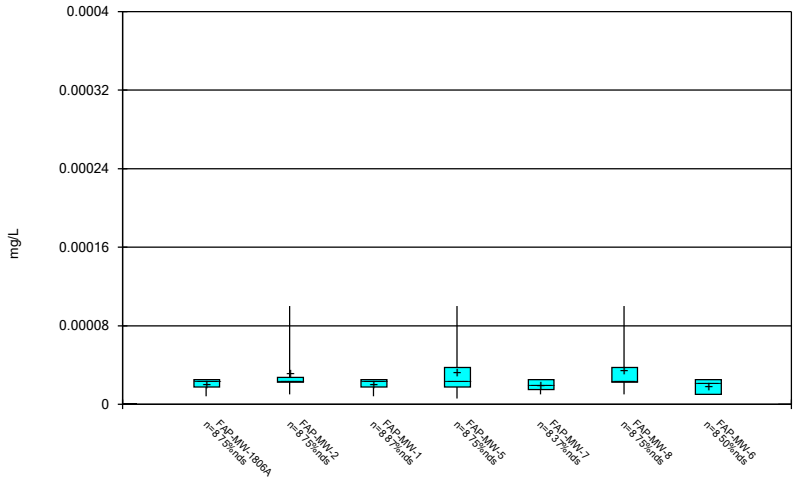
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

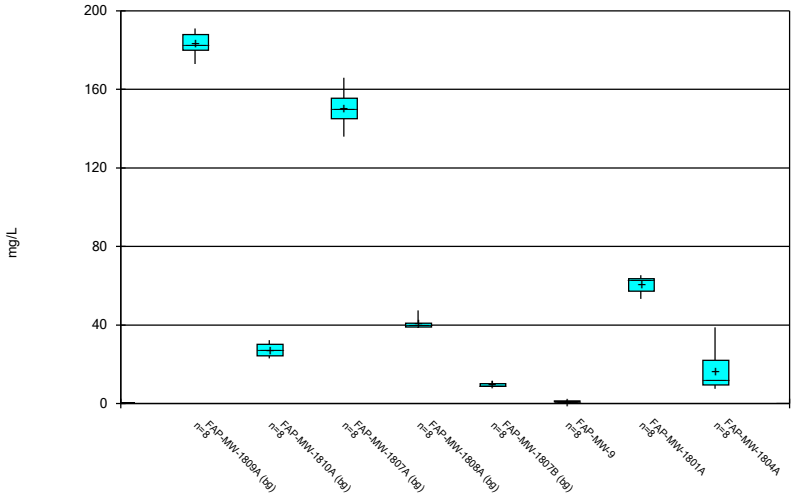
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

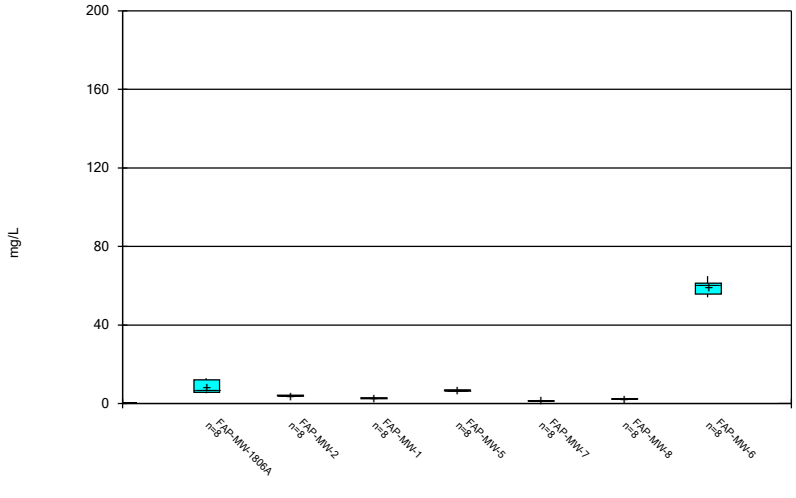
Box & Whiskers Plot



Constituent: Calcium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

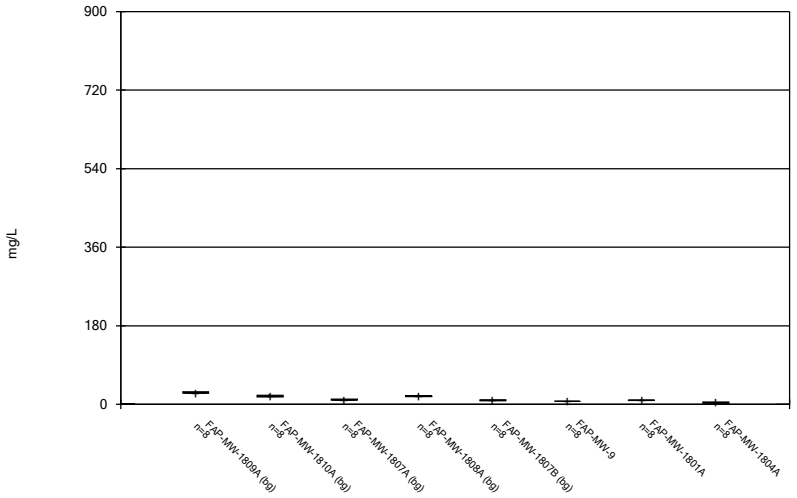
Box & Whiskers Plot



Constituent: Calcium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

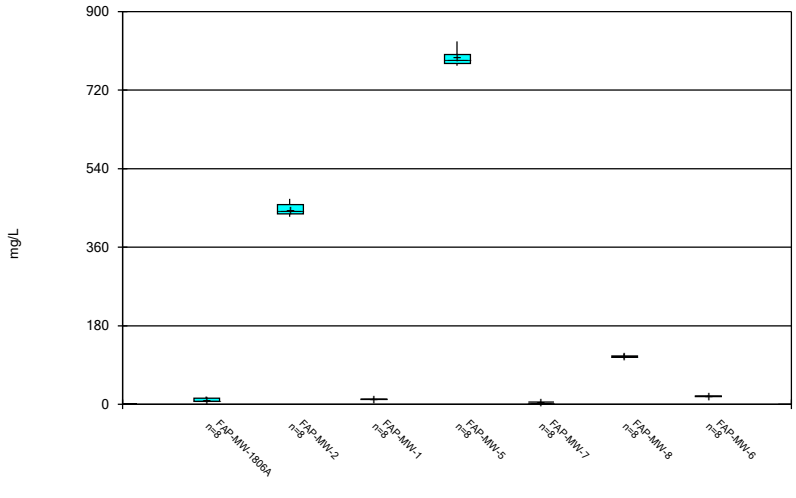
Box & Whiskers Plot



Constituent: Chloride Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

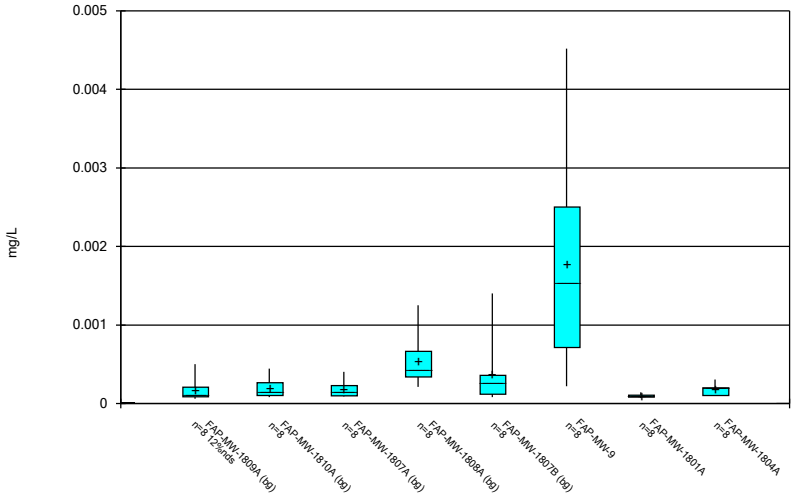
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

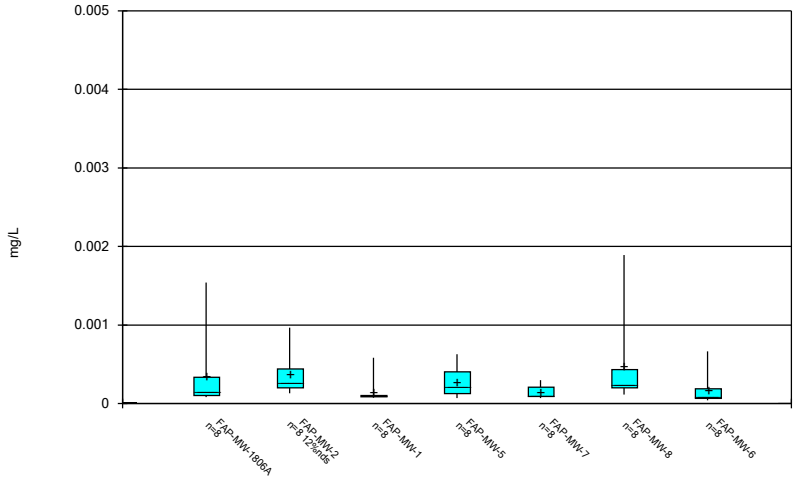
Box & Whiskers Plot



Constituent: Chromium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

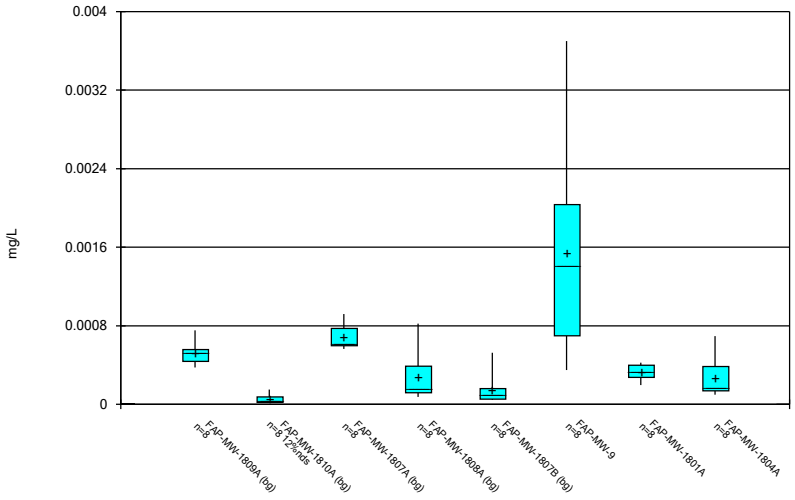
Box & Whiskers Plot



Constituent: Chromium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

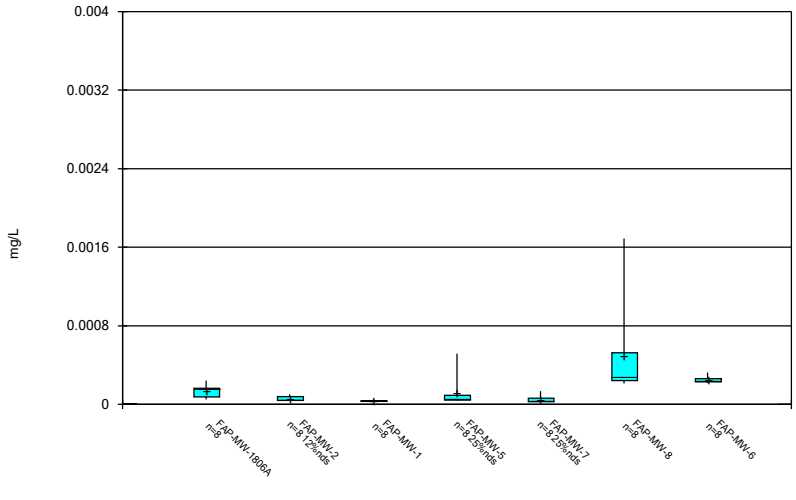
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

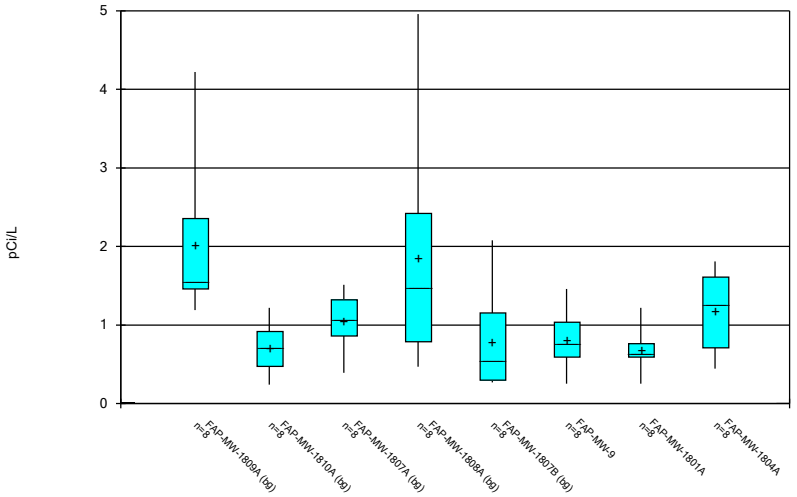
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

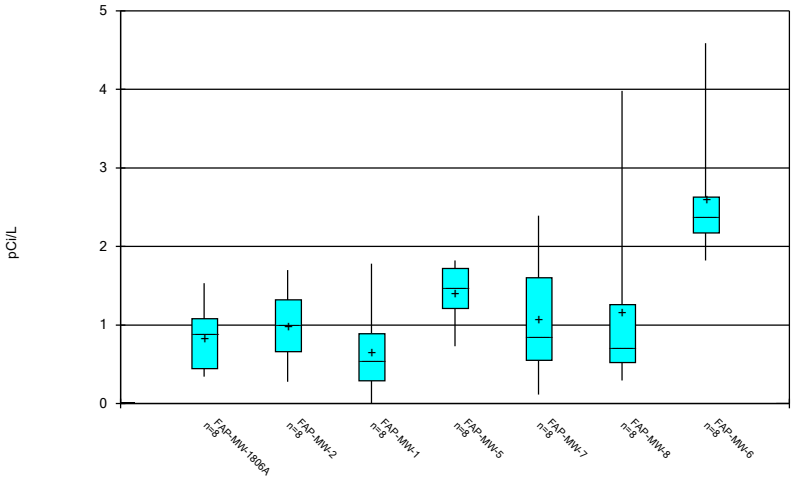
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

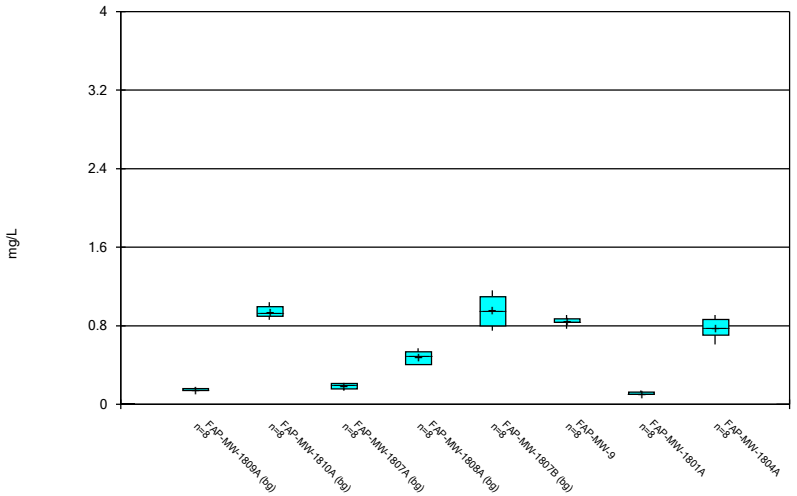
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

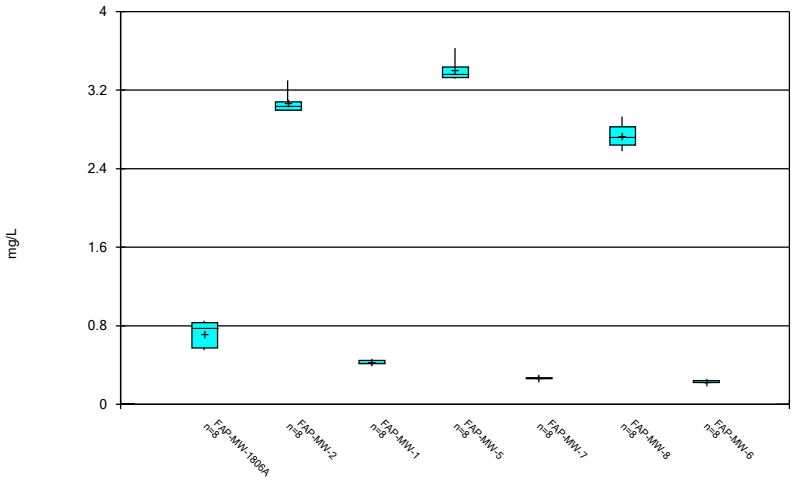
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

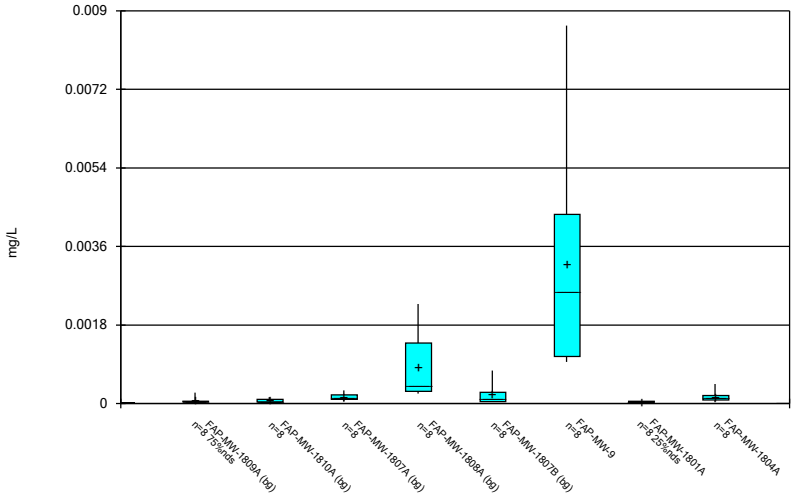
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

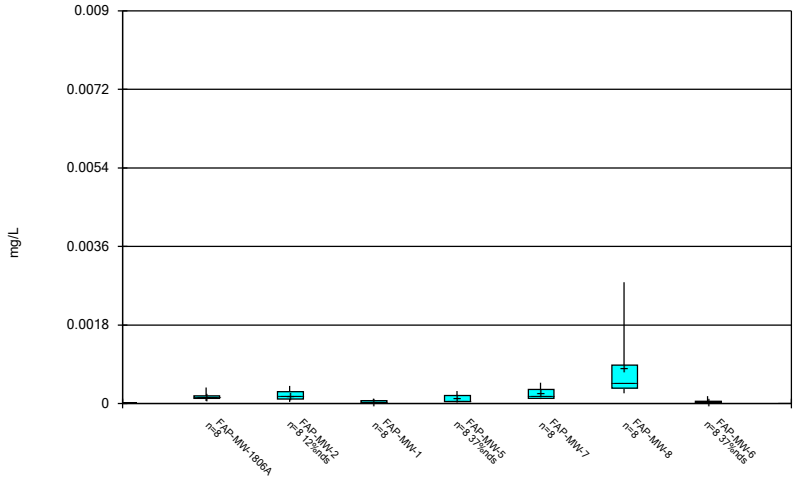
Box & Whiskers Plot



Constituent: Lead Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

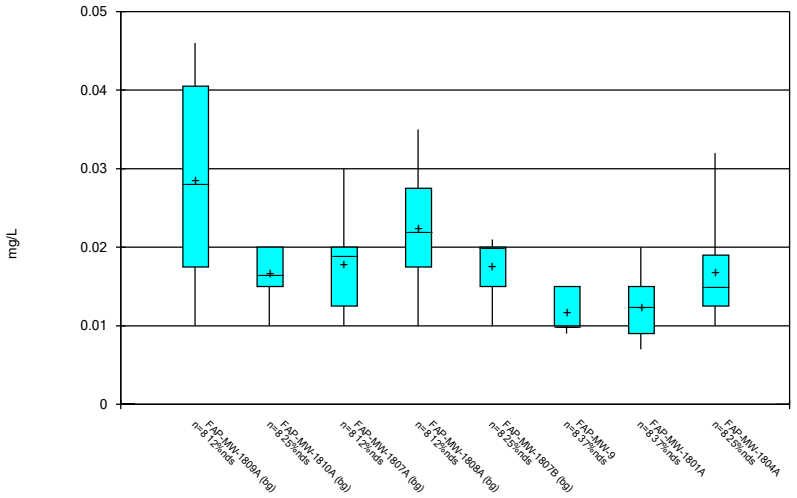
Box & Whiskers Plot



Constituent: Lead Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

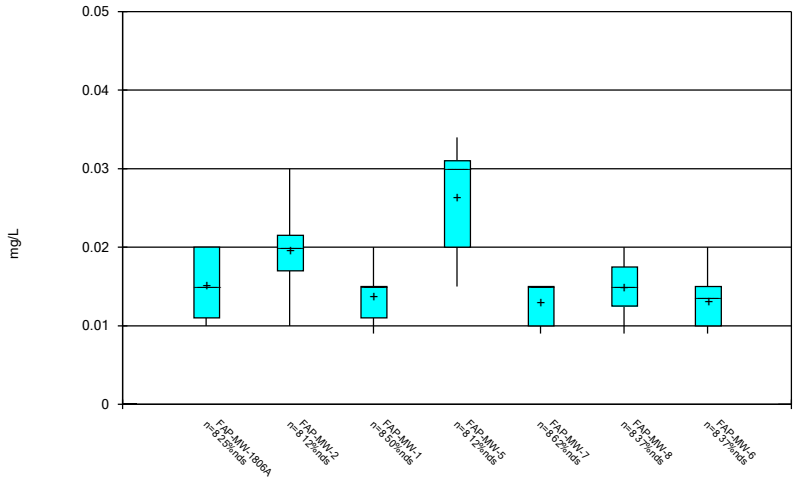
Box & Whiskers Plot



Constituent: Lithium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

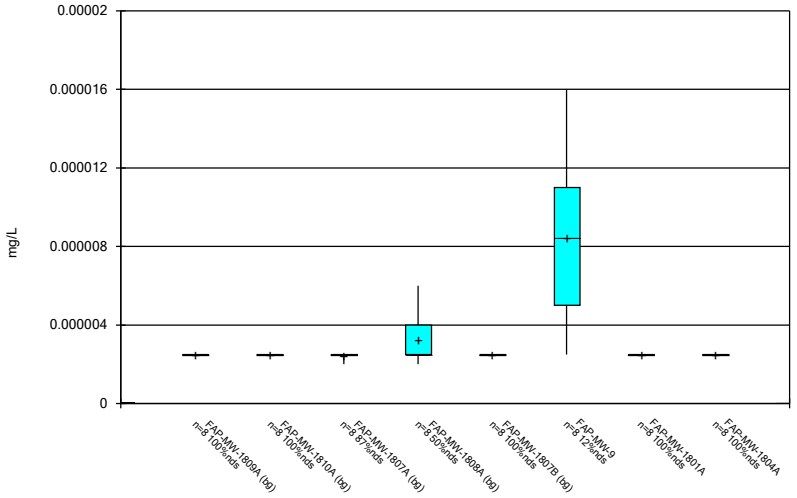
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lithium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

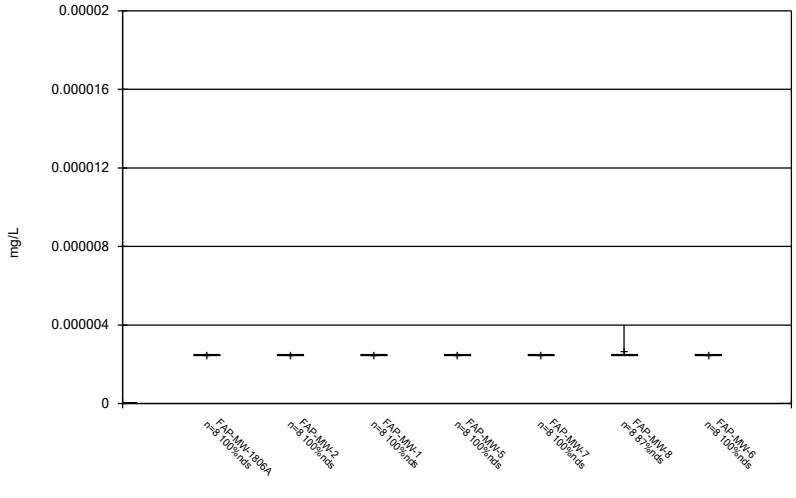
Box & Whiskers Plot



Constituent: Mercury Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

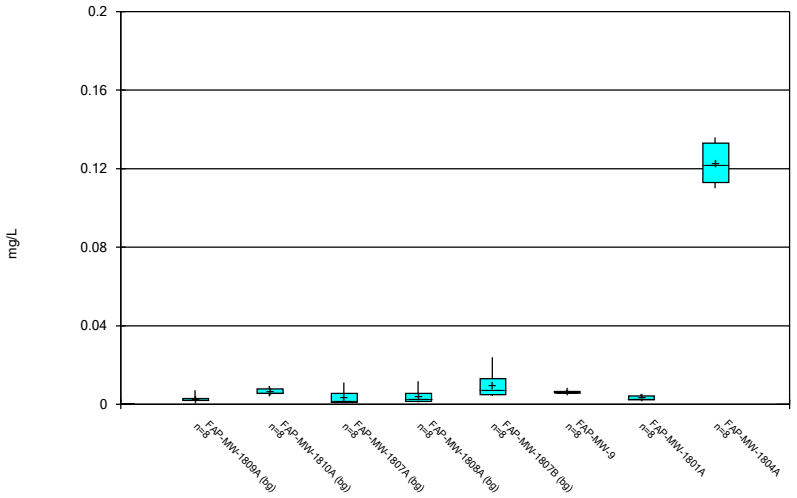
Box & Whiskers Plot



Constituent: Mercury Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

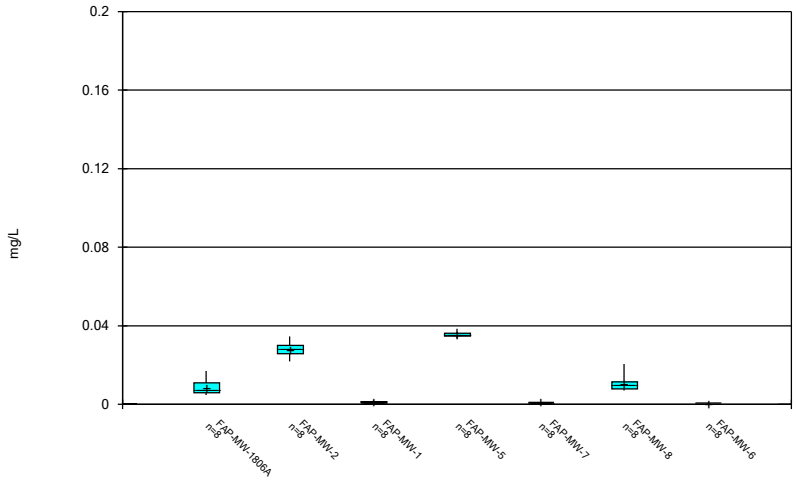
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

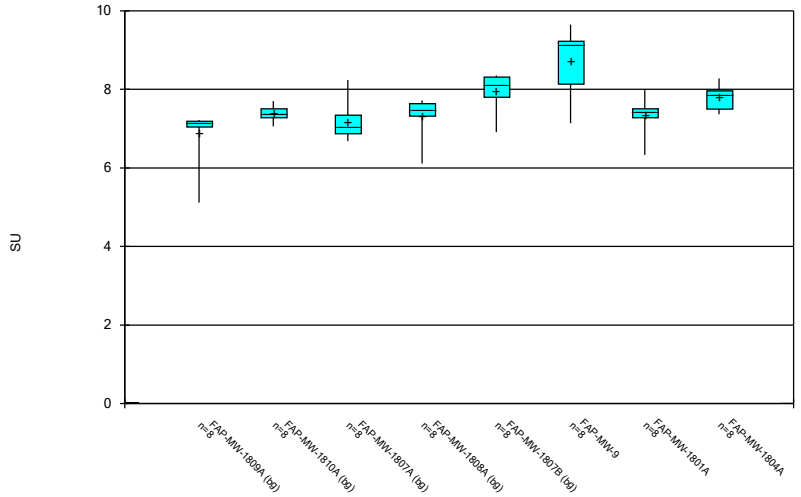
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

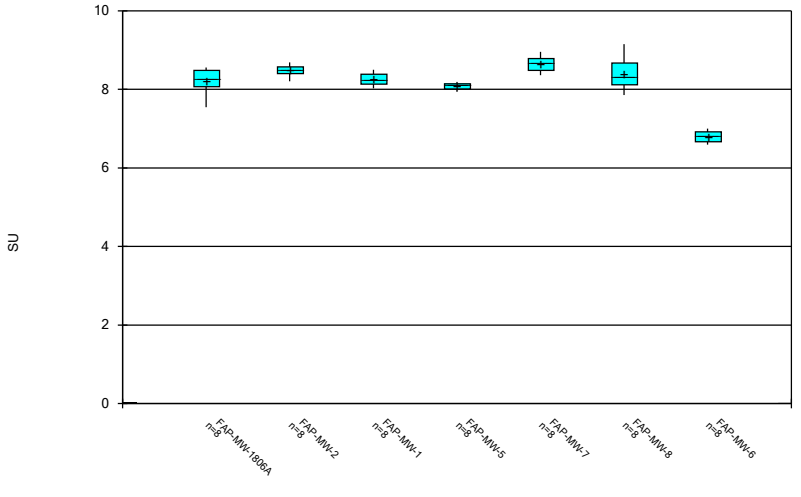
Box & Whiskers Plot



Constituent: pH Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

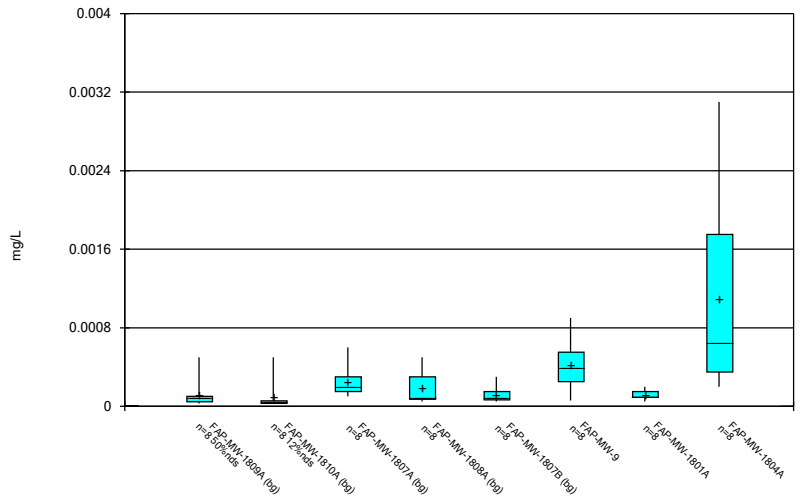
Box & Whiskers Plot



Constituent: pH Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

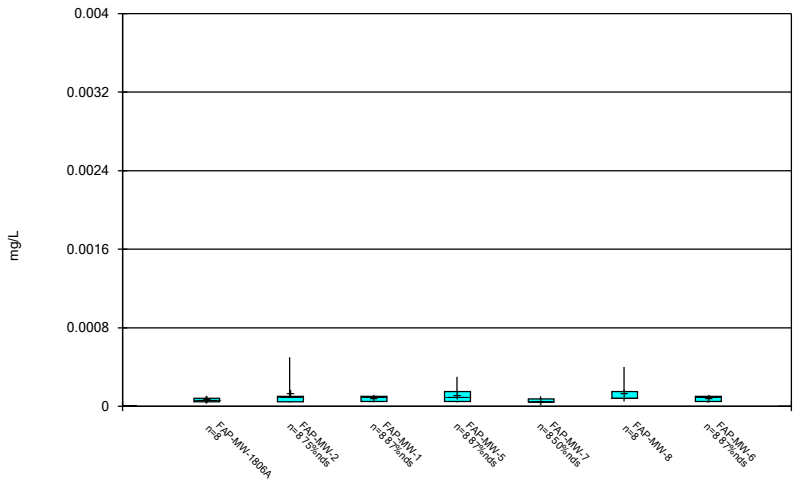
Box & Whiskers Plot



Constituent: Selenium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

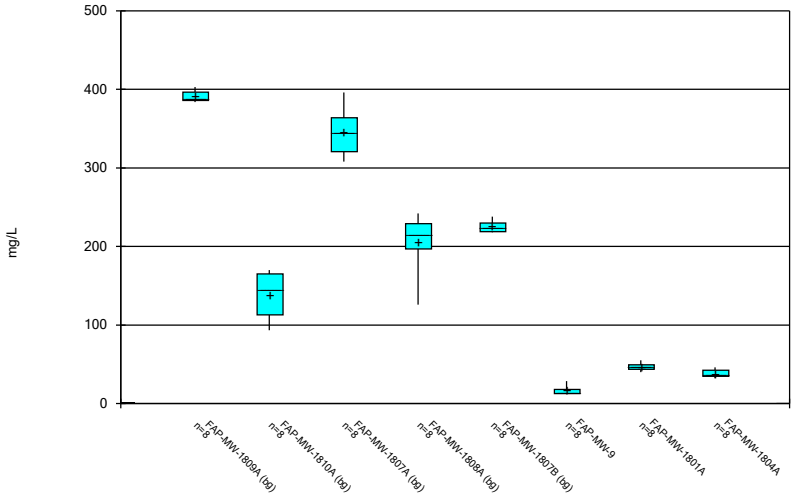
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

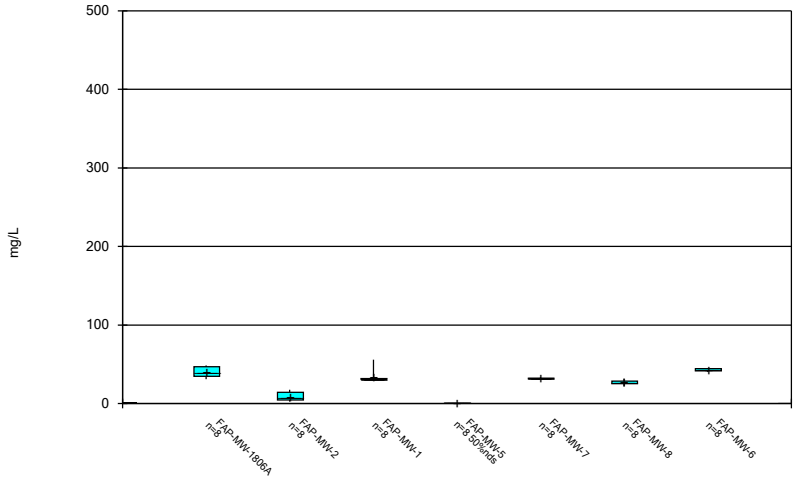
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

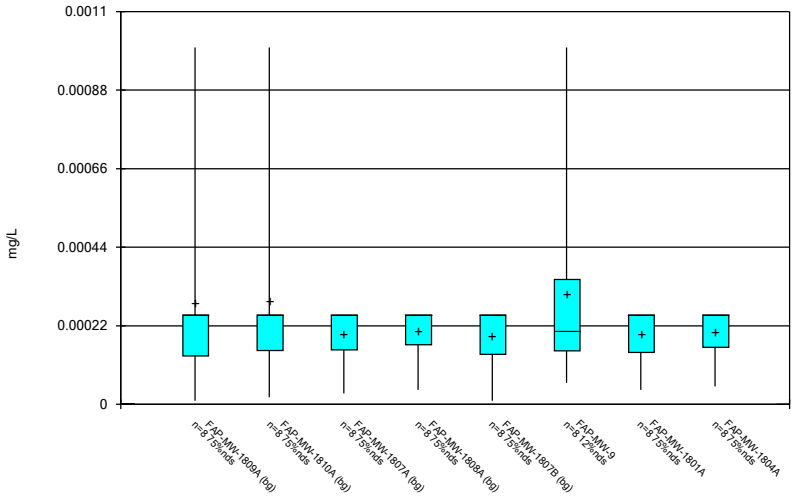
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

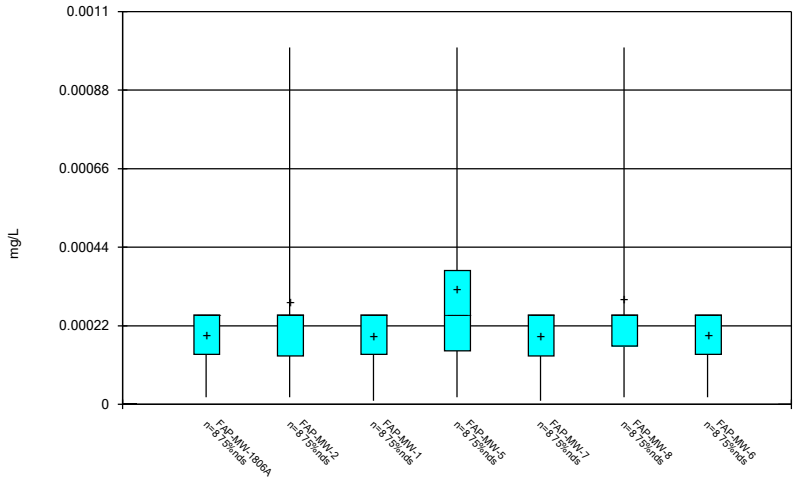
Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

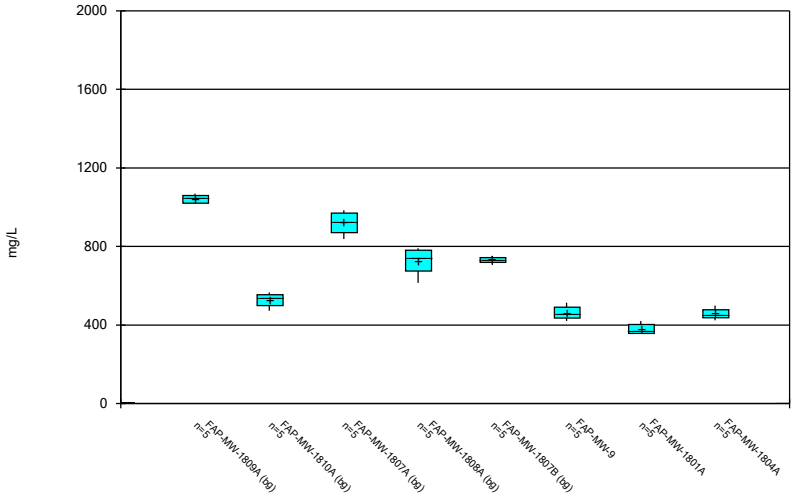
Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

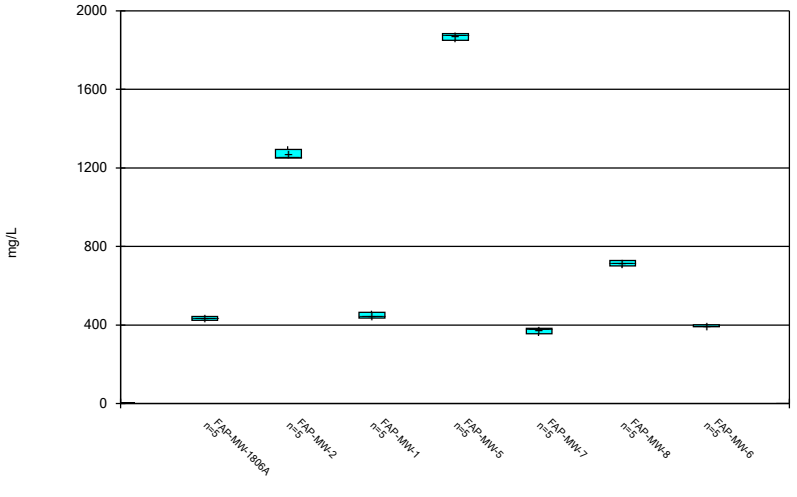
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 4/18/2019 10:20 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

FIGURE C: TUKEY’S OUTLIER TESTS

Outlier Analysis - Significant Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 5:07 AM

Constituent	Well	Outlier	Value(s)	Method	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/L)	**FAP-MW-1810A (bg)**	**Yes**	**0.0005**	**NP**	**8**	**0.0001438**	**0.0001454**	**ln(x)**	**ShapiroWilk**
Antimony (mg/L)	**FAP-MW-1807A (bg)**	**Yes**	**0.00087**	**NP**	**8**	**0.0002325**	**0.0002597**	**ln(x)**	**ShapiroWilk**
Barium (mg/L)	**FAP-MW-1810A (bg)**	**Yes**	**0.124**	**NP**	**8**	**0.09029**	**0.01381**	**ln(x)**	**ShapiroWilk**
Boron (mg/L)	**FAP-MW-1806A**	**Yes**	**0.213**	**NP**	**8**	**0.1638**	**0.02273**	**ln(x)**	**ShapiroWilk**
Calcium (mg/L)	**FAP-MW-1808A (bg)**	**Yes**	**47.4**	**NP**	**8**	**40.79**	**2.851**	**ln(x)**	**ShapiroWilk**
Chloride (mg/L)	**FAP-MW-1**	**Yes**	**14.6**	**NP**	**8**	**11.65**	**1.235**	**ln(x)**	**ShapiroWilk**
Chromium (mg/L)	**FAP-MW-1**	**Yes**	**0.000583**	**NP**	**8**	**0.0001525**	**0.0001742**	**ln(x)**	**ShapiroWilk**
pH (SU)	**FAP-MW-1809A (bg)**	**Yes**	**5.12**	**NP**	**8**	**6.885**	**0.7173**	**x^6**	**ShapiroWilk**
Selenium (mg/L)	**FAP-MW-1810A (bg)**	**Yes**	**0.001**	**NP**	**8**	**0.00016**	**0.0003396**	**ln(x)**	**ShapiroWilk**
Sulfate (mg/L)	**FAP-MW-1**	**Yes**	**55.9**	**NP**	**8**	**34.25**	**8.764**	**ln(x)**	**ShapiroWilk**
Sulfate (mg/L)	**FAP-MW-7**	**Yes**	**33.2**	**NP**	**8**	**32.04**	**0.5097**	**ln(x)**	**ShapiroWilk**

Outlier Analysis - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 5:07 AM

Constituent	Well	Outlier	Value(s)	Method	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.0003263	0.0002399	ln(x)	ShapiroWilk
Antimony (mg/L)	**FAP-MW-1810A (bg)**	**Yes**	**0.0005**	**NP**	**8**	**0.0001438**	**0.0001454**	**ln(x)**	**ShapiroWilk**
Antimony (mg/L)	**FAP-MW-1807A (bg)**	**Yes**	**0.00087**	**NP**	**8**	**0.0002325**	**0.0002597**	**ln(x)**	**ShapiroWilk**
Antimony (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.00009625	0.00009117	ln(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.0002413	0.000111	sqrt(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-9	No	n/a	NP	8	0.0006438	0.0003966	ln(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.00008125	0.00003682	ln(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.0002638	0.0001781	ln(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.0003813	0.0004076	ln(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-2	No	n/a	NP	8	0.0003263	0.0002401	ln(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-1	No	n/a	NP	8	0.00006	0.00003586	x^(1/3)	ShapiroWilk
Antimony (mg/L)	FAP-MW-5	No	n/a	NP	8	0.00022	0.000119	normal	ShapiroWilk
Antimony (mg/L)	FAP-MW-7	No	n/a	NP	8	0.0001538	0.0001398	ln(x)	ShapiroWilk
Antimony (mg/L)	FAP-MW-8	No	n/a	NP	8	0.0002888	0.0002506	x^(1/3)	ShapiroWilk
Antimony (mg/L)	FAP-MW-6	No	n/a	NP	8	0.00007125	0.00004051	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.003145	0.0006993	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.0005125	0.0001569	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.0009625	0.0001104	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.003121	0.001258	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.001571	0.0002975	normal	ShapiroWilk
Arsenic (mg/L)	FAP-MW-9	No	n/a	NP	8	0.005539	0.0008197	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.00096	0.0004309	sqrt(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.003468	0.0007616	x^2	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.004518	0.001173	x^2	ShapiroWilk
Arsenic (mg/L)	FAP-MW-2	No	n/a	NP	8	0.001524	0.0001916	x^6	ShapiroWilk
Arsenic (mg/L)	FAP-MW-1	No	n/a	NP	8	0.007691	0.0003777	x^6	ShapiroWilk
Arsenic (mg/L)	FAP-MW-5	No	n/a	NP	8	0.004691	0.0003713	x^5	ShapiroWilk
Arsenic (mg/L)	FAP-MW-7	No	n/a	NP	8	0.005405	0.0002489	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-8	No	n/a	NP	8	0.003809	0.001152	ln(x)	ShapiroWilk
Arsenic (mg/L)	FAP-MW-6	No	n/a	NP	8	0.001835	0.0001686	x^2	ShapiroWilk
Barium (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.06063	0.004548	x^3	ShapiroWilk
Barium (mg/L)	**FAP-MW-1810A (bg)**	**Yes**	**0.124**	**NP**	**8**	**0.09029**	**0.01381**	**ln(x)**	**ShapiroWilk**
Barium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.02911	0.002811	x^2	ShapiroWilk
Barium (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.08248	0.01051	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.0541	0.01211	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-9	No	n/a	NP	8	0.04725	0.008794	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.05356	0.00337	x^6	ShapiroWilk
Barium (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.1966	0.08892	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.1095	0.04334	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-2	No	n/a	NP	8	0.1834	0.00997	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-1	No	n/a	NP	8	0.04844	0.003641	x^6	ShapiroWilk
Barium (mg/L)	FAP-MW-5	No	n/a	NP	8	0.3585	0.007964	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-7	No	n/a	NP	8	0.03431	0.001732	ln(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-8	No	n/a	NP	8	0.07156	0.008329	sqrt(x)	ShapiroWilk
Barium (mg/L)	FAP-MW-6	No	n/a	NP	8	0.5103	0.02051	x^6	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.000376	0.0002296	ln(x)	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1810A (bg)	n/a	n/a	NP	8	0.0004386	0.0001736	unknown	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.00007637	0.00004375	ln(x)	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.000109	0.0001054	ln(x)	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.00008487	0.00002846	x^(1/3)	ShapiroWilk
Beryllium (mg/L)	FAP-MW-9	No	n/a	NP	8	0.0001876	0.0002012	x^(1/3)	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1801A	n/a	n/a	NP	8	0.0001	0	unknown	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1804A	n/a	n/a	NP	8	0.0000885	0.00003253	unknown	ShapiroWilk
Beryllium (mg/L)	FAP-MW-1806A	n/a	n/a	NP	8	0.00008875	0.00003182	unknown	ShapiroWilk
Beryllium (mg/L)	FAP-MW-2	n/a	n/a	NP	8	0.0004385	0.0001739	unknown	ShapiroWilk

Outlier Analysis - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 5:07 AM

Constituent	Well	Outlier	Value(s)	Method	N	Mean	Std. Dev.	Distribution	Normality Test
Beryllium (mg/L)	FAP-MW-1	n/a	n/a	NP	8	0.0001	0	unknown	ShapiroWilk
Beryllium (mg/L)	FAP-MW-5	n/a	n/a	NP	8	0.000263	0.0001047	unknown	ShapiroWilk
Beryllium (mg/L)	FAP-MW-7	n/a	n/a	NP	8	0.00009125	0.00002475	unknown	ShapiroWilk
Beryllium (mg/L)	FAP-MW-8	No	n/a	NP	8	0.0003818	0.0002193	x^(1/3)	ShapiroWilk
Beryllium (mg/L)	FAP-MW-6	No	n/a	NP	8	0.00006837	0.00004415	x^(1/3)	ShapiroWilk
Boron (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.08625	0.01507	normal	ShapiroWilk
Boron (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.2449	0.03627	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.1601	0.04237	x^3	ShapiroWilk
Boron (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.1476	0.02746	x^2	ShapiroWilk
Boron (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.1963	0.03653	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-9	No	n/a	NP	8	0.1391	0.01684	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.1984	0.08327	x^(1/3)	ShapiroWilk
Boron (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.7071	0.08232	ln(x)	ShapiroWilk
Boron (mg/L)	**FAP-MW-1806A**	**Yes**	**0.213**	**NP**	**8**	**0.1638**	**0.02273**	**ln(x)**	**ShapiroWilk**
Boron (mg/L)	FAP-MW-2	No	n/a	NP	8	0.2668	0.03688	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-1	No	n/a	NP	8	0.1503	0.03518	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-5	No	n/a	NP	8	0.258	0.03107	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-7	No	n/a	NP	8	0.1155	0.04212	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-8	No	n/a	NP	8	0.2351	0.02698	ln(x)	ShapiroWilk
Boron (mg/L)	FAP-MW-6	No	n/a	NP	8	0.099	0.0191	normal	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1809A (bg)	n/a	n/a	NP	8	0.0002	0	unknown	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1810A (bg)	n/a	n/a	NP	8	0.0002	0	unknown	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.000035	0.00001309	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.00003962	0.00001923	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1807B (bg)	n/a	n/a	NP	8	0.000045	0.00001414	unknown	ShapiroWilk
Cadmium (mg/L)	FAP-MW-9	No	n/a	NP	8	0.0001	0.000119	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.00003875	0.00001642	sqrt(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1804A	n/a	n/a	NP	8	0.00005	0	unknown	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.00003975	0.00001899	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-2	No	n/a	NP	8	0.0001562	0.00008105	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-1	n/a	n/a	NP	8	0.00004475	0.00001485	unknown	ShapiroWilk
Cadmium (mg/L)	FAP-MW-5	No	n/a	NP	8	0.000152	0.00008889	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-7	No	n/a	NP	8	0.00002875	0.00001808	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-8	No	n/a	NP	8	0.0001587	0.0000768	ln(x)	ShapiroWilk
Cadmium (mg/L)	FAP-MW-6	No	n/a	NP	8	0.00003125	0.00002031	ln(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	183.3	5.8	x^6	ShapiroWilk
Calcium (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	27.25	3.41	ln(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	150.5	8.976	ln(x)	ShapiroWilk
Calcium (mg/L)	**FAP-MW-1808A (bg)**	**Yes**	**47.4**	**NP**	**8**	**40.79**	**2.851**	**ln(x)**	**ShapiroWilk**
Calcium (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	9.51	1.152	ln(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-9	No	n/a	NP	8	1.14	0.156	ln(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-1801A	No	n/a	NP	8	60.69	4.698	x^6	ShapiroWilk
Calcium (mg/L)	FAP-MW-1804A	No	n/a	NP	8	16.78	10.99	ln(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-1806A	No	n/a	NP	8	8.583	3.249	ln(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-2	No	n/a	NP	8	3.998	0.2101	ln(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-1	No	n/a	NP	8	2.666	0.29	x^6	ShapiroWilk
Calcium (mg/L)	FAP-MW-5	No	n/a	NP	8	6.703	0.3478	x^6	ShapiroWilk
Calcium (mg/L)	FAP-MW-7	No	n/a	NP	8	1.371	0.08167	x^4	ShapiroWilk
Calcium (mg/L)	FAP-MW-8	No	n/a	NP	8	2.353	0.227	sqrt(x)	ShapiroWilk
Calcium (mg/L)	FAP-MW-6	No	n/a	NP	8	59.19	3.638	x^2	ShapiroWilk
Chloride (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	27.84	1.338	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	18.85	2.689	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	10.96	1.101	x^2	ShapiroWilk
Chloride (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	18.56	1.606	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	9.093	1.103	ln(x)	ShapiroWilk

Outlier Analysis - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 5:07 AM

Constituent	Well	Outlier	Value(s)	Method	N	Mean	Std. Dev.	Distribution	Normality Test
Chloride (mg/L)	FAP-MW-9	No	n/a	NP	8	7.355	0.2072	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-1801A	No	n/a	NP	8	9.143	1.022	normal	ShapiroWilk
Chloride (mg/L)	FAP-MW-1804A	No	n/a	NP	8	4.228	0.8638	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-1806A	No	n/a	NP	8	10.14	4.628	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-2	No	n/a	NP	8	446.8	15.24	ln(x)	ShapiroWilk
Chloride (mg/L)	**FAP-MW-1**	**Yes**	**14.6**	**NP**	**8**	**11.65**	**1.235**	**ln(x)**	**ShapiroWilk**
Chloride (mg/L)	FAP-MW-5	No	n/a	NP	8	793.8	18.97	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-7	No	n/a	NP	8	5.355	0.143	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-8	No	n/a	NP	8	109.8	3.196	ln(x)	ShapiroWilk
Chloride (mg/L)	FAP-MW-6	No	n/a	NP	8	18.58	0.913	x^4	ShapiroWilk
Chromium (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.0001701	0.0001443	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.0001939	0.0001273	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.0001811	0.0001093	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.0005408	0.0003399	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.0003675	0.0004312	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-9	No	n/a	NP	8	0.001779	0.001397	x^(1/3)	ShapiroWilk
Chromium (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.000097	0.00002313	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.0001736	0.00007119	normal	ShapiroWilk
Chromium (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.0003485	0.0004947	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-2	No	n/a	NP	8	0.0003613	0.0002728	ln(x)	ShapiroWilk
Chromium (mg/L)	**FAP-MW-1**	**Yes**	**0.000583**	**NP**	**8**	**0.0001525**	**0.0001742**	**ln(x)**	**ShapiroWilk**
Chromium (mg/L)	FAP-MW-5	No	n/a	NP	8	0.0002721	0.000202	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-7	No	n/a	NP	8	0.0001449	0.0000813	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-8	No	n/a	NP	8	0.00047	0.0005849	ln(x)	ShapiroWilk
Chromium (mg/L)	FAP-MW-6	No	n/a	NP	8	0.0001718	0.0002117	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.0005189	0.0001156	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.00005225	0.00004775	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.0006831	0.0001259	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.0002771	0.0002647	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.0001471	0.0001601	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-9	No	n/a	NP	8	0.001542	0.001085	sqrt(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.0003294	0.00007873	x^2	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.0002714	0.000208	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.0001345	0.0000629	normal	ShapiroWilk
Cobalt (mg/L)	FAP-MW-2	No	n/a	NP	8	0.00005887	0.00002687	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-1	No	n/a	NP	8	0.00003375	0.000007265	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-5	No	n/a	NP	8	0.0001225	0.000161	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-7	No	n/a	NP	8	0.00005	0.00003771	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-8	No	n/a	NP	8	0.0004986	0.0004978	ln(x)	ShapiroWilk
Cobalt (mg/L)	FAP-MW-6	No	n/a	NP	8	0.0002486	0.0000337	ln(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	2.02	1.043	ln(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.7074	0.3193	normal	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	1.051	0.3606	x^2	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	1.848	1.487	ln(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.79	0.6477	ln(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-9	No	n/a	NP	8	0.8083	0.3769	sqrt(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1801A	No	n/a	NP	8	0.6799	0.2725	sqrt(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1804A	No	n/a	NP	8	1.175	0.5199	x^2	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1806A	No	n/a	NP	8	0.8351	0.4085	sqrt(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-2	No	n/a	NP	8	0.9934	0.458	normal	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-1	No	n/a	NP	8	0.6505	0.5593	sqrt(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-5	No	n/a	NP	8	1.421	0.374	x^3	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-7	No	n/a	NP	8	1.063	0.7688	sqrt(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-8	No	n/a	NP	8	1.157	1.205	ln(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	FAP-MW-6	No	n/a	NP	8	2.598	0.8502	ln(x)	ShapiroWilk

Outlier Analysis - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 5:07 AM

Constituent	Well	Outlier	Value(s)	Method	N	Mean	Std. Dev.	Distribution	Normality Test
Fluoride (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.15	0.01195	x^2	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.9425	0.06228	ln(x)	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.1838	0.02925	x^3	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.4788	0.06896	x^4	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.9525	0.1599	normal	ShapiroWilk
Fluoride (mg/L)	FAP-MW-9	No	n/a	NP	8	0.8488	0.04051	x^6	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.1125	0.01581	ln(x)	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.7775	0.1019	x^2	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.7225	0.1321	x^6	ShapiroWilk
Fluoride (mg/L)	FAP-MW-2	No	n/a	NP	8	3.066	0.1017	ln(x)	ShapiroWilk
Fluoride (mg/L)	FAP-MW-1	No	n/a	NP	8	0.4275	0.01832	ln(x)	ShapiroWilk
Fluoride (mg/L)	FAP-MW-5	No	n/a	NP	8	3.403	0.1025	ln(x)	ShapiroWilk
Fluoride (mg/L)	FAP-MW-7	No	n/a	NP	8	0.2675	0.01165	ln(x)	ShapiroWilk
Fluoride (mg/L)	FAP-MW-8	No	n/a	NP	8	2.735	0.1209	ln(x)	ShapiroWilk
Fluoride (mg/L)	FAP-MW-6	No	n/a	NP	8	0.2288	0.01126	x^2	ShapiroWilk
Lead (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.0001931	0.0001055	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.00006825	0.00004172	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.0001473	0.00008514	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.0008293	0.0008433	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.0002011	0.0002441	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-9	No	n/a	NP	8	0.003196	0.002643	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.00003825	0.00001216	normal	ShapiroWilk
Lead (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.0001554	0.0001303	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.000163	0.00009175	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-2	No	n/a	NP	8	0.0001961	0.0001197	sqrt(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-1	No	n/a	NP	8	0.00004988	0.0000305	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-5	No	n/a	NP	8	0.0001345	0.00009112	normal	ShapiroWilk
Lead (mg/L)	FAP-MW-7	No	n/a	NP	8	0.0002269	0.0001449	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-8	No	n/a	NP	8	0.0008005	0.0008372	ln(x)	ShapiroWilk
Lead (mg/L)	FAP-MW-6	No	n/a	NP	8	0.00005212	0.00004819	ln(x)	ShapiroWilk
Lithium (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.03037	0.01212	normal	ShapiroWilk
Lithium (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.02037	0.006844	x^(1/3)	ShapiroWilk
Lithium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.01975	0.007592	normal	ShapiroWilk
Lithium (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.02425	0.00776	x^2	ShapiroWilk
Lithium (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.02137	0.006391	normal	ShapiroWilk
Lithium (mg/L)	FAP-MW-9	No	n/a	NP	8	0.01737	0.01046	ln(x)	ShapiroWilk
Lithium (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.01812	0.01058	ln(x)	ShapiroWilk
Lithium (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.02062	0.009023	x^(1/3)	ShapiroWilk
Lithium (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.019	0.008071	sqrt(x)	ShapiroWilk
Lithium (mg/L)	FAP-MW-2	No	n/a	NP	8	0.0215	0.006459	normal	ShapiroWilk
Lithium (mg/L)	FAP-MW-1	No	n/a	NP	8	0.02137	0.009782	ln(x)	ShapiroWilk
Lithium (mg/L)	FAP-MW-5	No	n/a	NP	8	0.02825	0.005285	x^6	ShapiroWilk
Lithium (mg/L)	FAP-MW-7	No	n/a	NP	8	0.02237	0.01053	ln(x)	ShapiroWilk
Lithium (mg/L)	FAP-MW-8	No	n/a	NP	8	0.0205	0.008718	ln(x)	ShapiroWilk
Lithium (mg/L)	FAP-MW-6	No	n/a	NP	8	0.01887	0.009819	ln(x)	ShapiroWilk
Mercury (mg/L)	FAP-MW-1809A (bg)	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-1810A (bg)	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-1807A (bg)	n/a	n/a	NP	8	0.000004625	0.000001061	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-1808A (bg)	n/a	n/a	NP	8	0.0000045	0.000001309	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-1807B (bg)	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-9	No	n/a	NP	8	0.00000875	0.000003955	ln(x)	ShapiroWilk
Mercury (mg/L)	FAP-MW-1801A	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-1804A	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-1806A	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-2	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk

Outlier Analysis - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 5:07 AM

Constituent	Well	Outlier	Value(s)	Method	N	Mean	Std. Dev.	Distribution	Normality Test
Mercury (mg/L)	FAP-MW-1	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-5	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-7	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-8	n/a	n/a	NP	8	0.000004875	3.5e-7	unknown	ShapiroWilk
Mercury (mg/L)	FAP-MW-6	n/a	n/a	NP	8	0.000005	0	unknown	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.002918	0.001771	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.006541	0.001708	x^(1/3)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.003553	0.004099	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.004066	0.003587	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.009851	0.006736	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-9	No	n/a	NP	8	0.006331	0.000452	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.003226	0.001131	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.1229	0.01101	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.008676	0.004443	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-2	No	n/a	NP	8	0.02805	0.003792	sqrt(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-1	No	n/a	NP	8	0.001178	0.0003509	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-5	No	n/a	NP	8	0.03548	0.001444	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-7	No	n/a	NP	8	0.001023	0.00004464	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-8	No	n/a	NP	8	0.0106	0.004374	ln(x)	ShapiroWilk
Molybdenum (mg/L)	FAP-MW-6	No	n/a	NP	8	0.00061	0.00006503	x^(1/3)	ShapiroWilk
pH (SU)	**FAP-MW-1809A (bg)**	**Yes**	**5.12**	**NP**	**8**	**6.885**	**0.7173**	**x^6**	**ShapiroWilk**
pH (SU)	FAP-MW-1810A (bg)	No	n/a	NP	8	7.39	0.1929	x^3	ShapiroWilk
pH (SU)	FAP-MW-1807A (bg)	No	n/a	NP	8	7.181	0.4982	ln(x)	ShapiroWilk
pH (SU)	FAP-MW-1808A (bg)	No	n/a	NP	8	7.343	0.5245	x^6	ShapiroWilk
pH (SU)	FAP-MW-1807B (bg)	No	n/a	NP	8	7.968	0.4824	x^6	ShapiroWilk
pH (SU)	FAP-MW-9	No	n/a	NP	8	8.724	0.8413	x^6	ShapiroWilk
pH (SU)	FAP-MW-1801A	No	n/a	NP	8	7.345	0.4707	x^6	ShapiroWilk
pH (SU)	FAP-MW-1804A	No	n/a	NP	8	7.79	0.3147	x^4	ShapiroWilk
pH (SU)	FAP-MW-1806A	No	n/a	NP	8	8.219	0.3396	x^6	ShapiroWilk
pH (SU)	FAP-MW-2	No	n/a	NP	8	8.485	0.1476	x^6	ShapiroWilk
pH (SU)	FAP-MW-1	No	n/a	NP	8	8.255	0.1656	ln(x)	ShapiroWilk
pH (SU)	FAP-MW-5	No	n/a	NP	8	8.081	0.08839	x^6	ShapiroWilk
pH (SU)	FAP-MW-7	No	n/a	NP	8	8.654	0.203	x^3	ShapiroWilk
pH (SU)	FAP-MW-8	No	n/a	NP	8	8.405	0.4332	ln(x)	ShapiroWilk
pH (SU)	FAP-MW-6	No	n/a	NP	8	6.805	0.1462	x^6	ShapiroWilk
Selenium (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.0005225	0.0005105	ln(x)	ShapiroWilk
Selenium (mg/L)	**FAP-MW-1810A (bg)**	**Yes**	**0.001**	**NP**	**8**	**0.00016**	**0.0003396**	**ln(x)**	**ShapiroWilk**
Selenium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.00025	0.0001604	ln(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.0001825	0.0001733	ln(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.0001175	0.0000873	ln(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-9	No	n/a	NP	8	0.00042	0.000257	sqrt(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.0001163	0.00005423	ln(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.0011	0.001017	ln(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.00006375	0.00002387	sqrt(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-2	No	n/a	NP	8	0.00076	0.0004444	x^2	ShapiroWilk
Selenium (mg/L)	FAP-MW-1	n/a	n/a	NP	8	0.0001812	0.00005303	unknown	ShapiroWilk
Selenium (mg/L)	FAP-MW-5	n/a	n/a	NP	8	0.00053	0.000198	unknown	ShapiroWilk
Selenium (mg/L)	FAP-MW-7	No	n/a	NP	8	0.0001212	0.00008442	ln(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-8	No	n/a	NP	8	0.000135	0.0001159	ln(x)	ShapiroWilk
Selenium (mg/L)	FAP-MW-6	n/a	n/a	NP	8	0.00018	0.00005657	unknown	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	391.3	7.536	ln(x)	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	138.5	30.15	x^(1/3)	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	345.4	29.79	ln(x)	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	206.1	36.67	x^6	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	225.1	7.259	ln(x)	ShapiroWilk

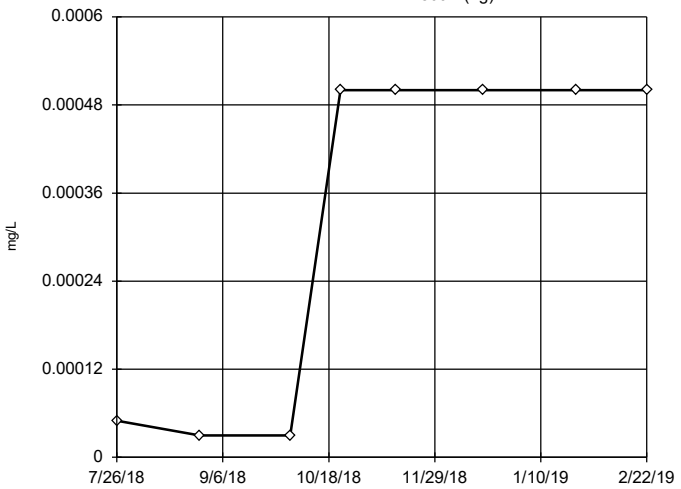
Outlier Analysis - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 5:07 AM

Constituent	Well	Outlier	Value(s)	Method	N	Mean	Std. Dev.	Distribution	Normality Test
Sulfate (mg/L)	FAP-MW-9	No	n/a	NP	8	15.84	5.801	ln(x)	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1801A	No	n/a	NP	8	46.73	4.631	ln(x)	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1804A	No	n/a	NP	8	38.09	5.039	ln(x)	ShapiroWilk
Sulfate (mg/L)	FAP-MW-1806A	No	n/a	NP	8	40.39	6.689	sqrt(x)	ShapiroWilk
Sulfate (mg/L)	FAP-MW-2	No	n/a	NP	8	8.825	5.716	sqrt(x)	ShapiroWilk
Sulfate (mg/L)	**FAP-MW-1**	**Yes**	**55.9**	**NP**	**8**	**34.25**	**8.764**	**ln(x)**	**ShapiroWilk**
Sulfate (mg/L)	FAP-MW-5	No	n/a	NP	8	0.175	0.04629	x^6	ShapiroWilk
Sulfate (mg/L)	**FAP-MW-7**	**Yes**	**33.2**	**NP**	**8**	**32.04**	**0.5097**	**ln(x)**	**ShapiroWilk**
Sulfate (mg/L)	FAP-MW-8	No	n/a	NP	8	26.73	3.126	normal	ShapiroWilk
Sulfate (mg/L)	FAP-MW-6	No	n/a	NP	8	42.8	1.659	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	8	0.001504	0.0009189	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	8	0.001509	0.0009094	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	8	0.0003855	0.0002121	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	8	0.0003904	0.0002033	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	8	0.00038	0.0002223	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-9	No	n/a	NP	8	0.0004336	0.0006418	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1801A	No	n/a	NP	8	0.000385	0.0002129	sqrt(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1804A	No	n/a	NP	8	0.0003899	0.000204	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-1806A	No	n/a	NP	8	0.0003813	0.0002199	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-2	No	n/a	NP	8	0.001505	0.0009166	normal	ShapiroWilk
Thallium (mg/L)	FAP-MW-1	No	n/a	NP	8	0.00038	0.0002223	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-5	No	n/a	NP	8	0.001509	0.0009097	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-7	No	n/a	NP	8	0.0003788	0.0002245	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-8	No	n/a	NP	8	0.001512	0.0009037	ln(x)	ShapiroWilk
Thallium (mg/L)	FAP-MW-6	No	n/a	NP	8	0.0003813	0.0002199	ln(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1809A (bg)	No	n/a	NP	5	1042	21.68	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1810A (bg)	No	n/a	NP	5	529.8	34.78	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1807A (bg)	No	n/a	NP	5	921.8	55.59	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1808A (bg)	No	n/a	NP	5	729.6	68.5	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1807B (bg)	No	n/a	NP	5	731.4	16.46	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-9	No	n/a	NP	5	462.2	33.51	ln(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1801A	No	n/a	NP	5	378.2	26.4	ln(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1804A	No	n/a	NP	5	456.6	26.87	ln(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1806A	No	n/a	NP	5	434.2	9.628	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-2	No	n/a	NP	5	1270	25.5	ln(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-1	No	n/a	NP	5	448.6	16.47	ln(x)	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-5	No	n/a	NP	5	1870	20	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-7	No	n/a	NP	5	370.8	16.45	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-8	No	n/a	NP	5	714.8	15.69	x^6	ShapiroWilk
Total Dissolved Solids (mg/L)	FAP-MW-6	No	n/a	NP	5	396.4	5.177	x^6	ShapiroWilk

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

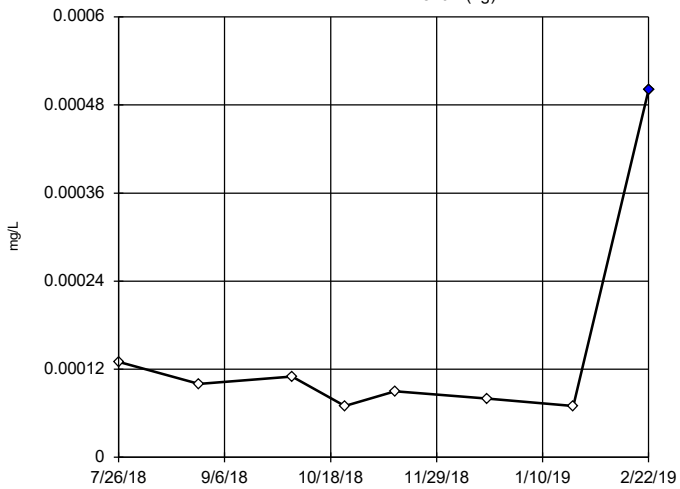
High cutoff = 1.076, low cutoff = 1.8e-8, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

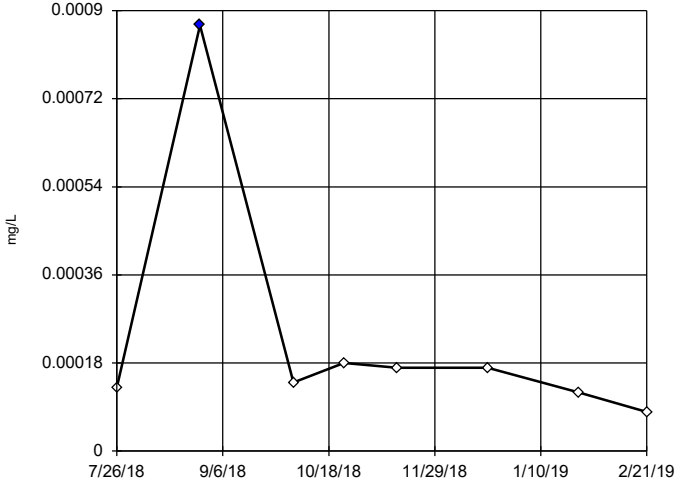
High cutoff = 0.000488, low cutoff = 0.00001834, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

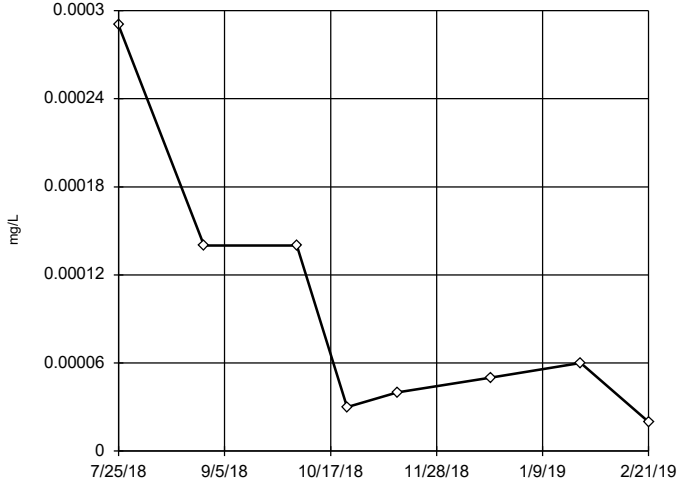
High cutoff = 0.0004806, low cutoff = 0.00004546, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

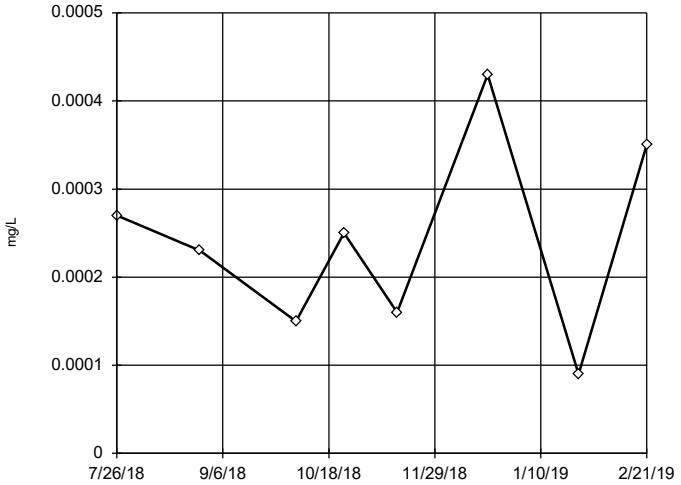
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.009241, low cutoff = 5.2e-7, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

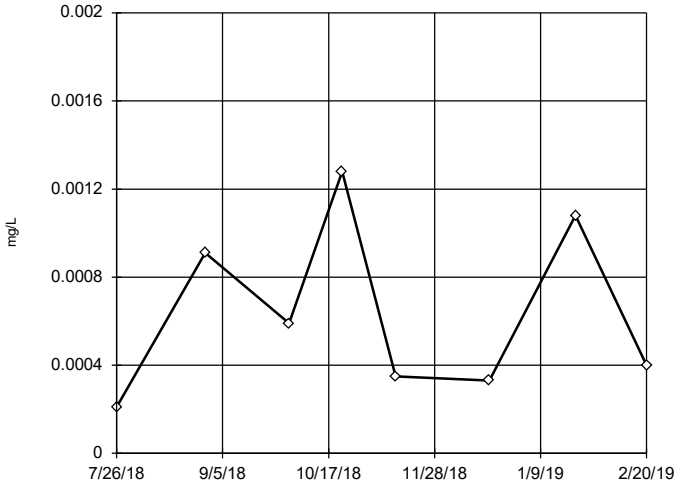
High cutoff = 0.001085, low cutoff = -0.000008508, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

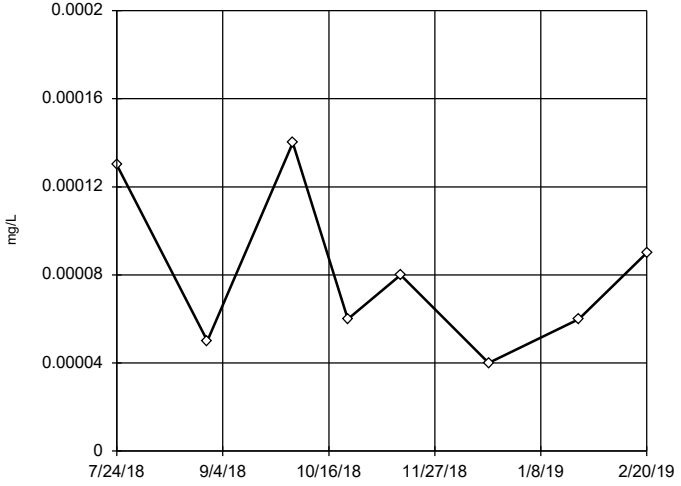
High cutoff = 0.02461, low cutoff = 0.00001369, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

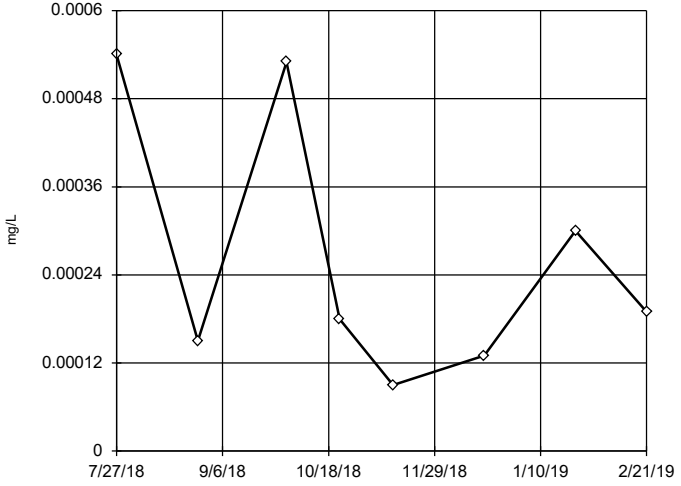
High cutoff = 0.0008331, low cutoff = 0.000007112, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

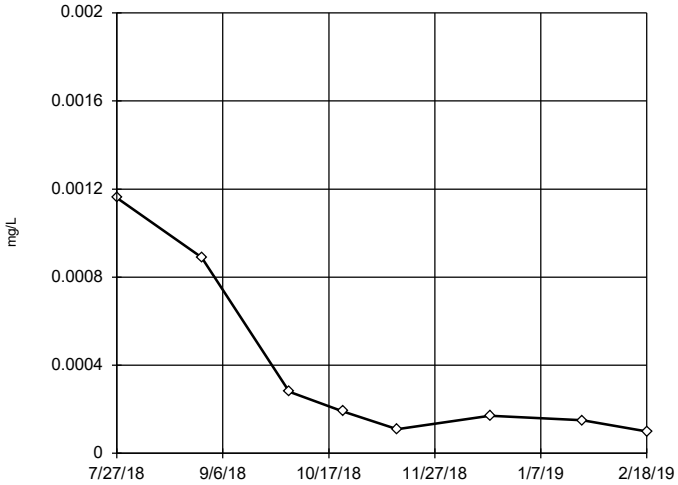
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.009284, low cutoff = 0.000005998, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

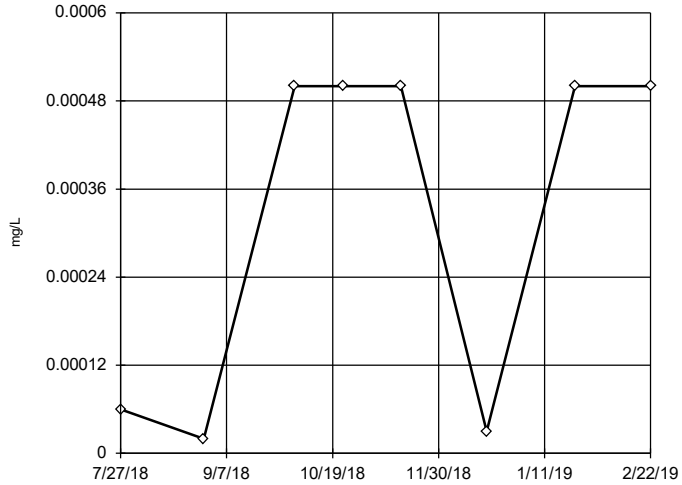
High cutoff = 0.0293, low cutoff = 0.000002188, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

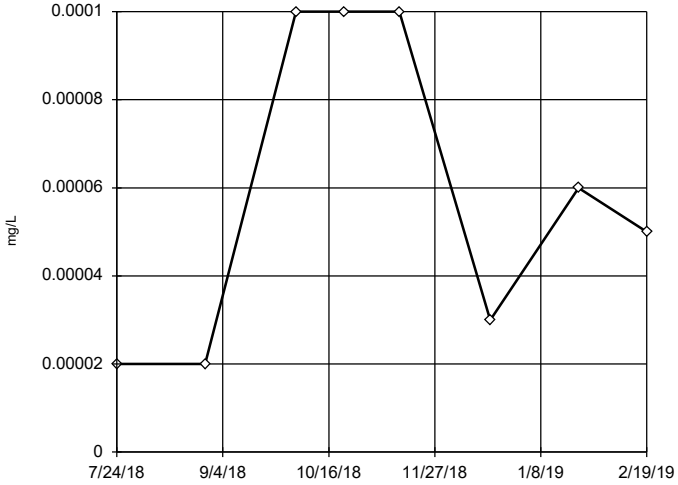
High cutoff = 0.8184, low cutoff = 2.6e-8, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

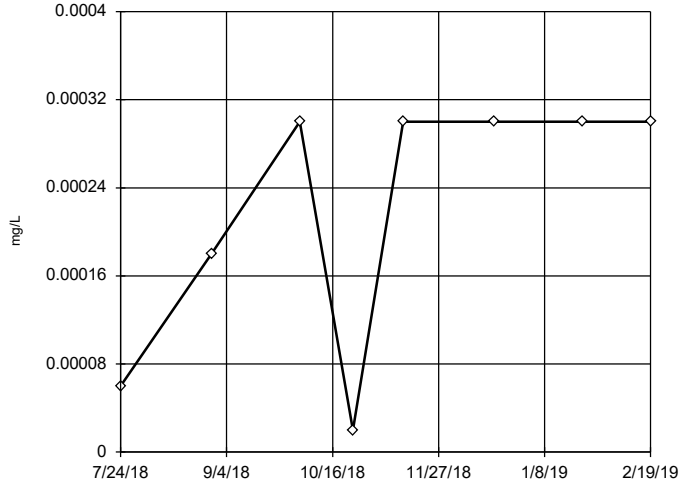
High cutoff = 0.000951, low cutoff = -0.00001188, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

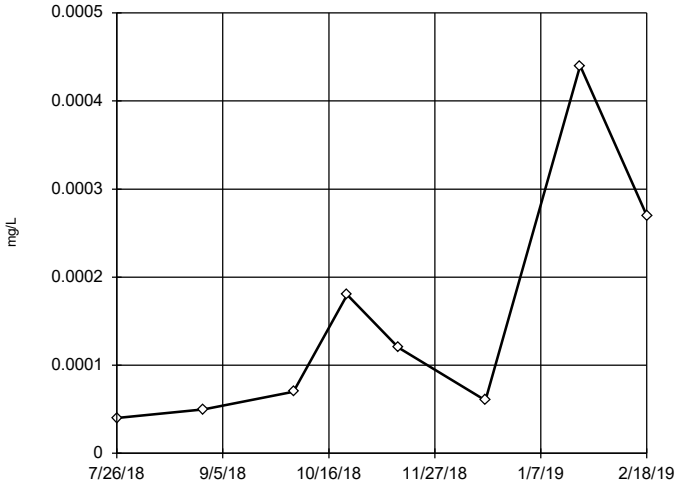
Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.00084, low cutoff = -0.00042, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01437, low cutoff = 8.4e-7, based on IQR multiplier of 3.

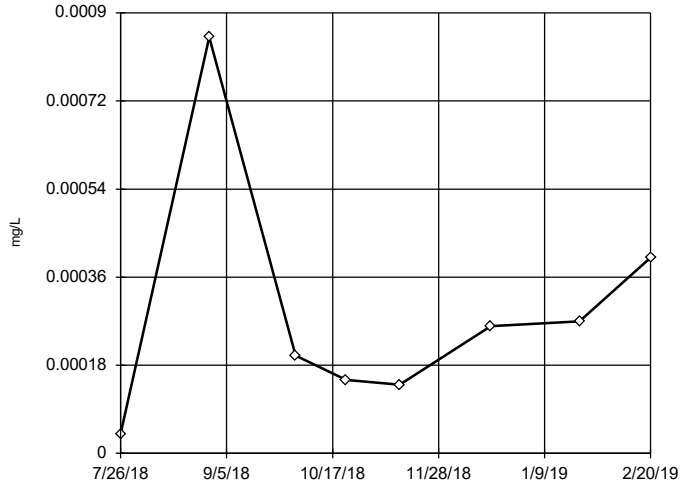
Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001687, low cutoff = 1.9e-8, based on IQR multiplier of 3.

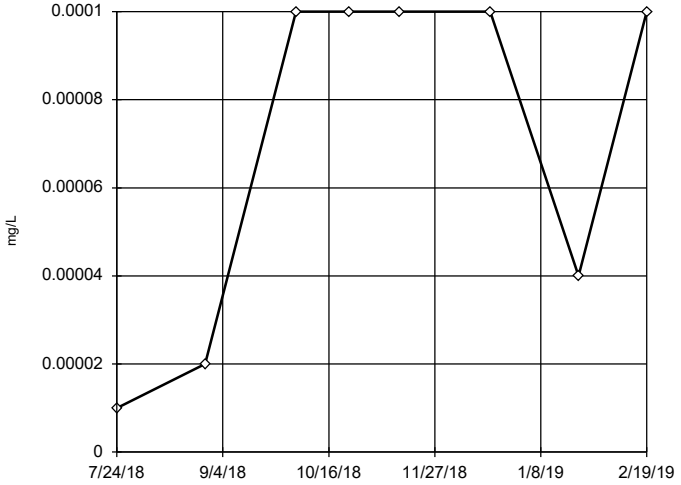
Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.004419, low cutoff = 6.4e-7, based on IQR multiplier of 3.

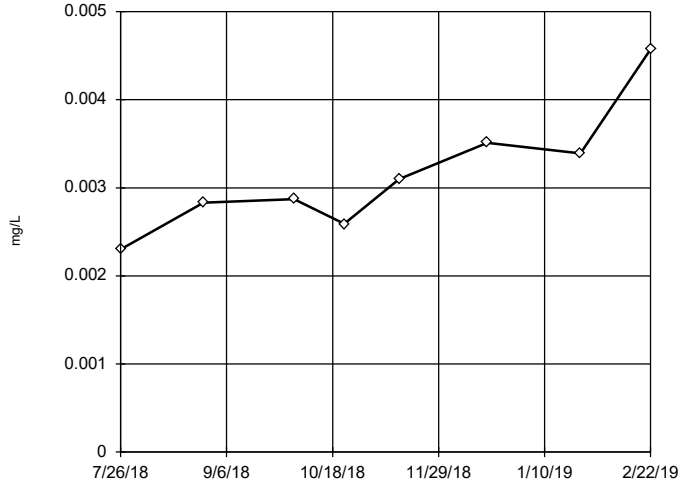
Constituent: Antimony Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

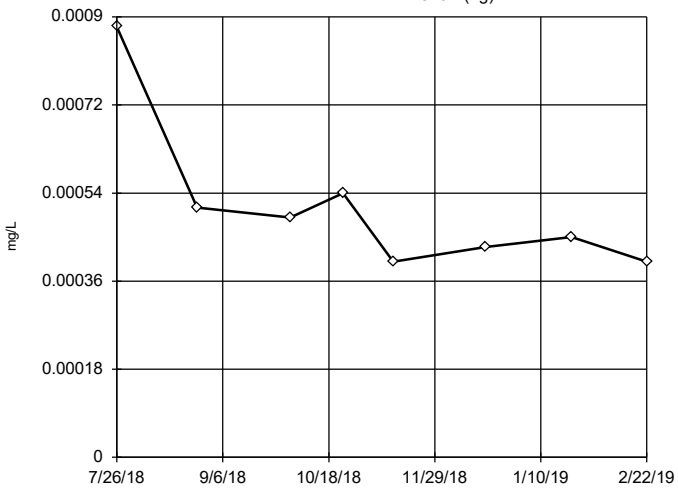
High cutoff = 0.007135, low cutoff = 0.001309, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

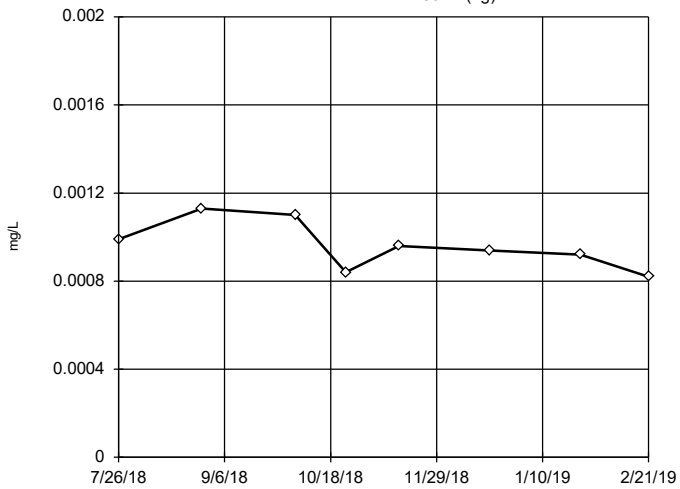
High cutoff = 0.001063, low cutoff = 0.0002047, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

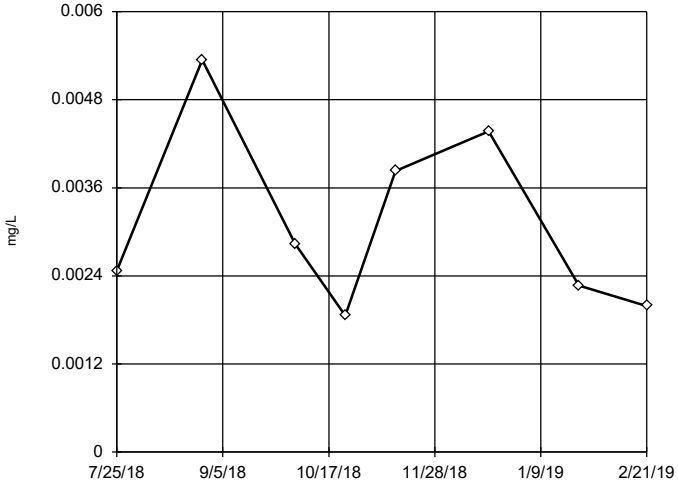
High cutoff = 0.001746, low cutoff = 0.0005255, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

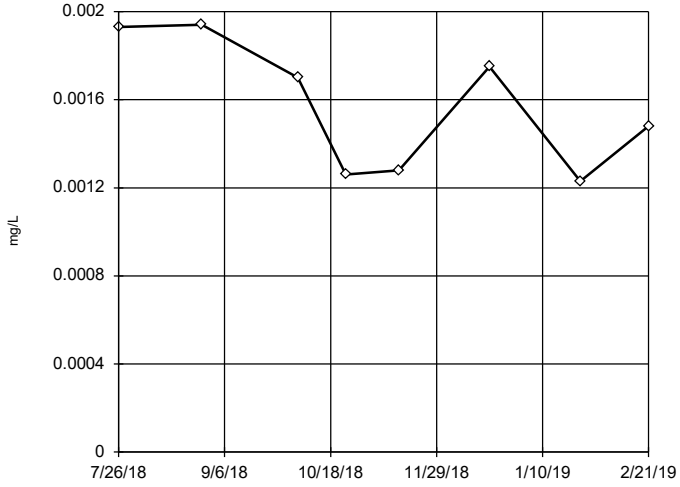
High cutoff = 0.02918, low cutoff = 0.000298, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

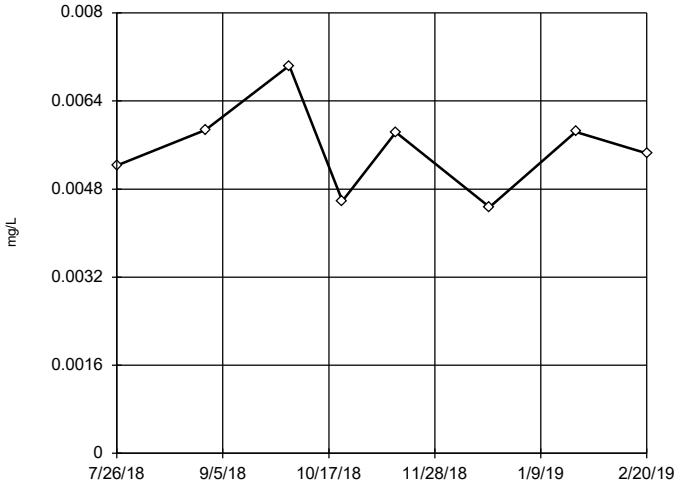
Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.00355, low cutoff = -0.00044, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

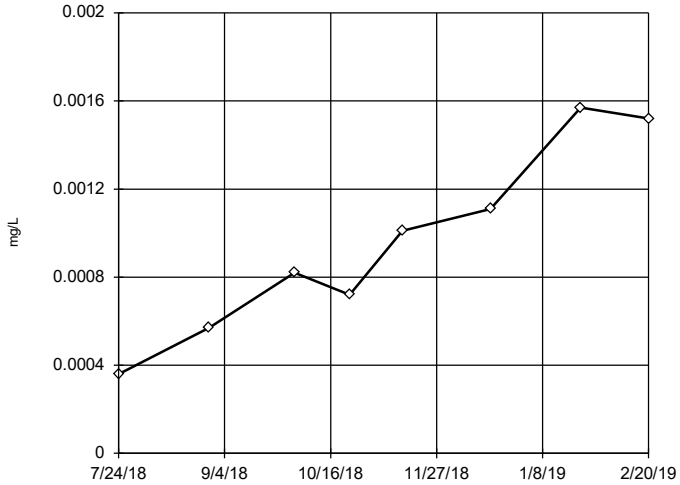
High cutoff = 0.01002, low cutoff = 0.002859, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

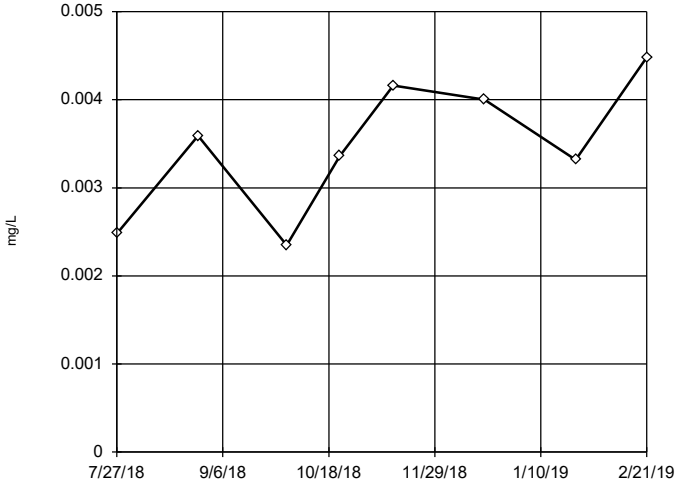
High cutoff = 0.004699, low cutoff = -0.00004957, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

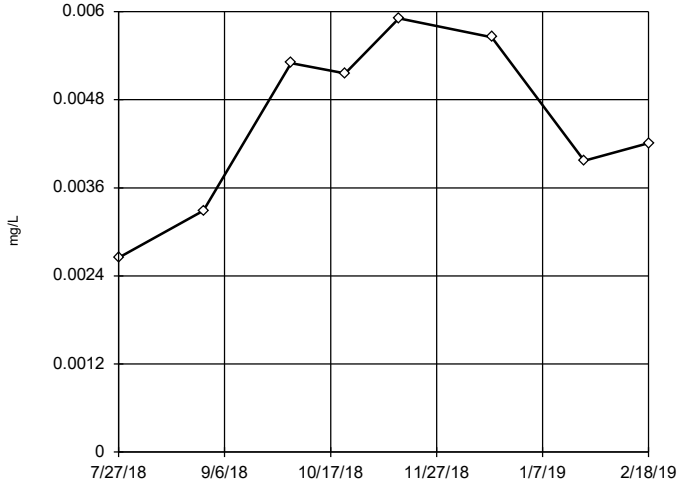
High cutoff = 0.006392, low cutoff = -0.003951, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

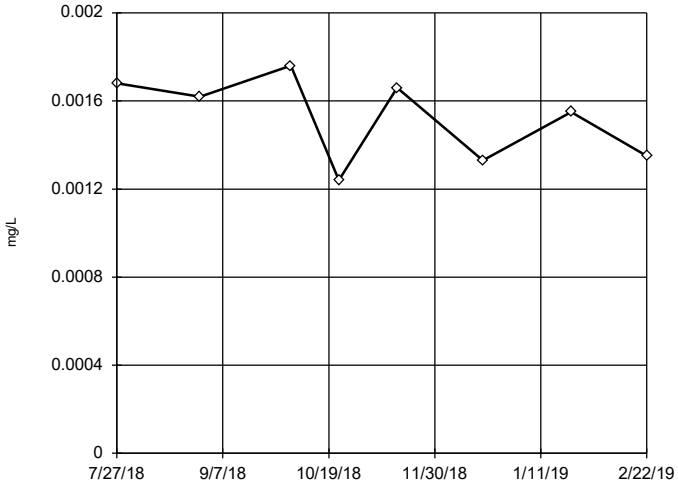
Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.008953, low cutoff = -0.00607, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.002027, low cutoff = -0.001864, based on IQR multiplier of 3.

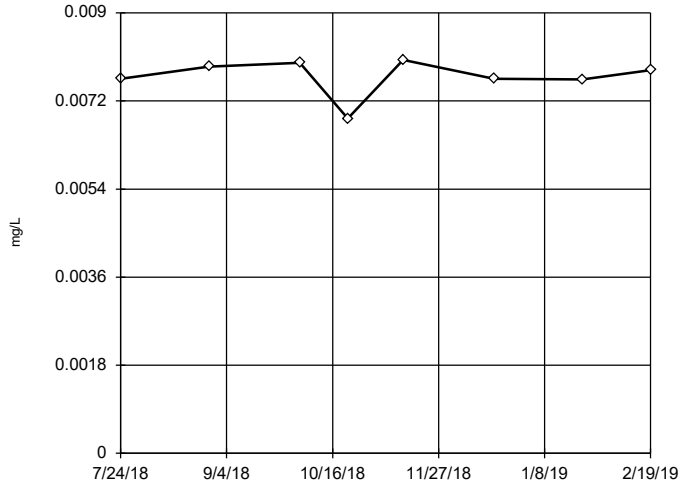
Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.008597, low cutoff = 0.005999, based on IQR multiplier of 3.

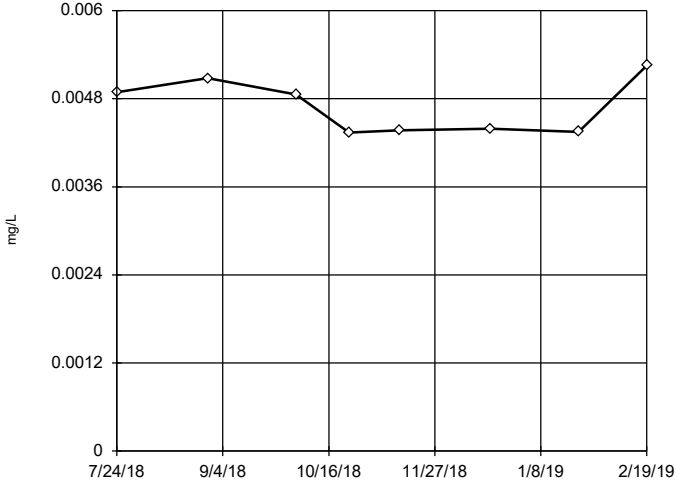
Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were x^5 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.005978, low cutoff = -0.004948, based on IQR multiplier of 3.

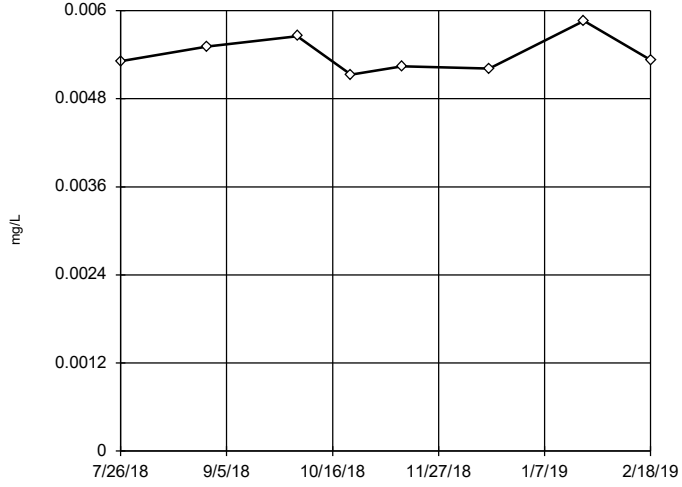
Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

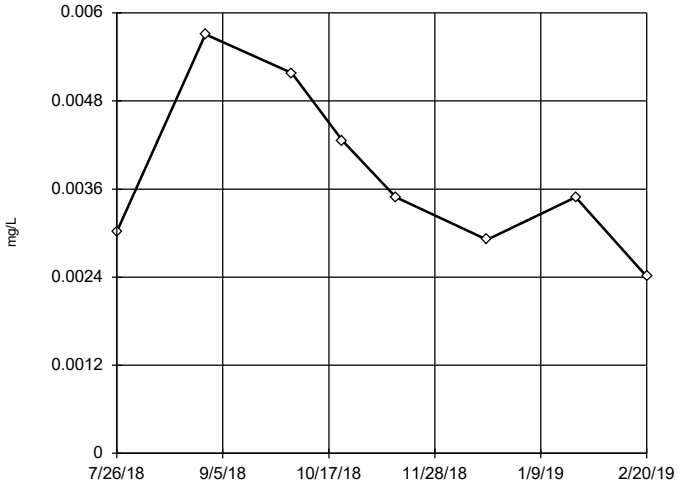
High cutoff = 0.006794, low cutoff = 0.004291, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

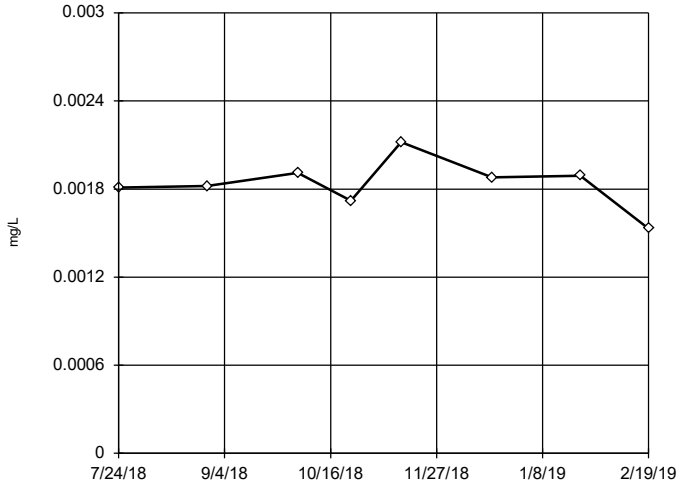
High cutoff = 0.01869, low cutoff = 0.0007451, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

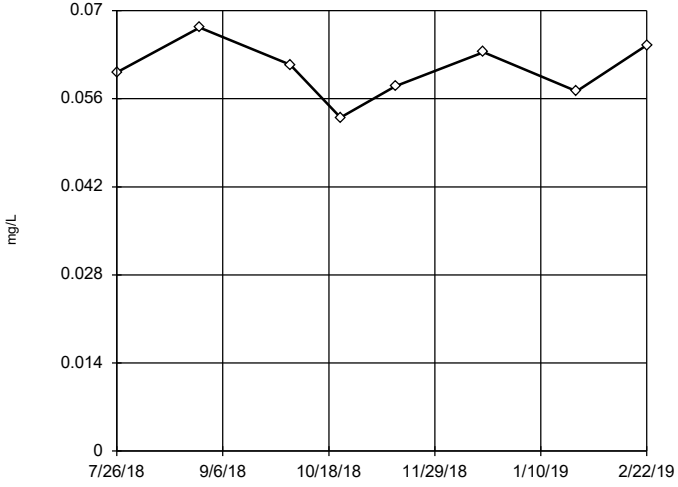
High cutoff = 0.002256, low cutoff = 0.00128, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

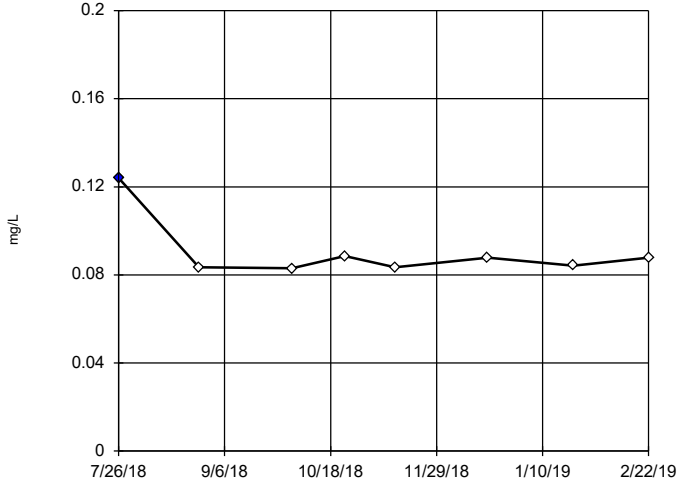
High cutoff = 0.07791, low cutoff = -0.02725, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

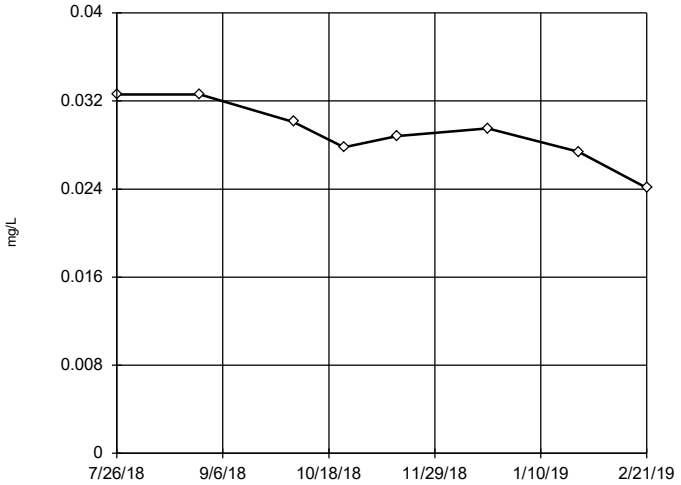
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.1041, low cutoff = 0.07068, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

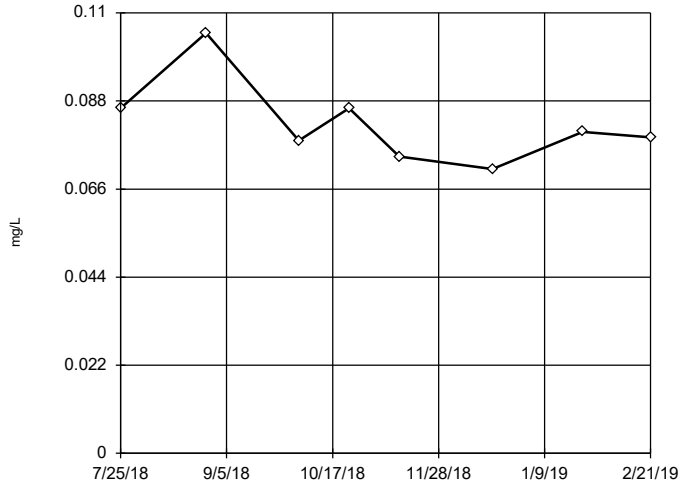
High cutoff = 0.04065, low cutoff = 0.009698, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

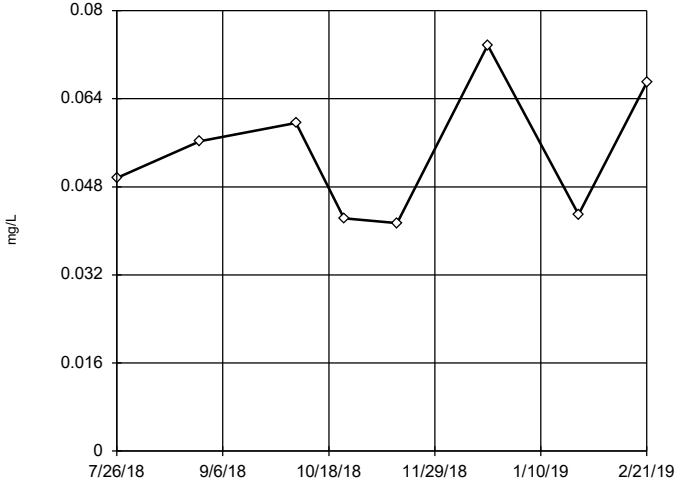
High cutoff = 0.1254, low cutoff = 0.05229, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

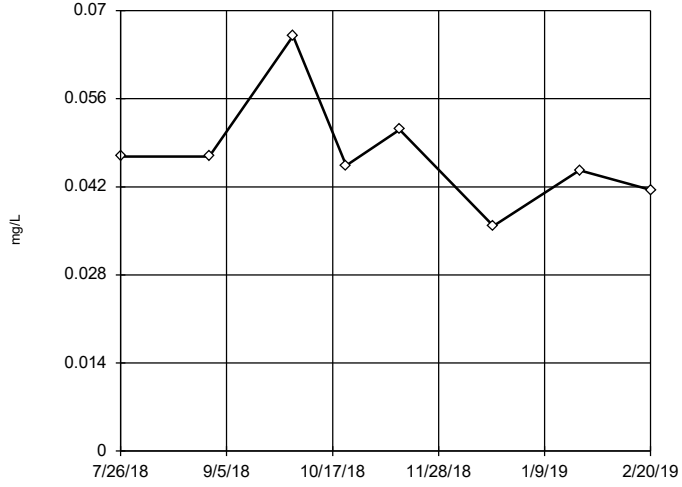
High cutoff = 0.2049, low cutoff = 0.01314, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

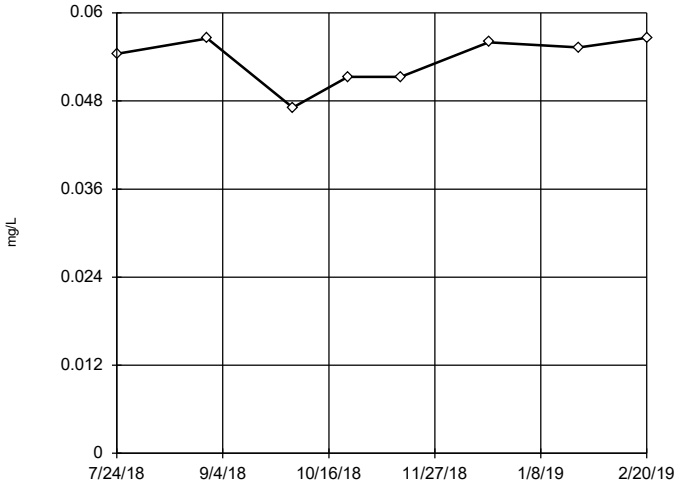
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.07182, low cutoff = 0.02929, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

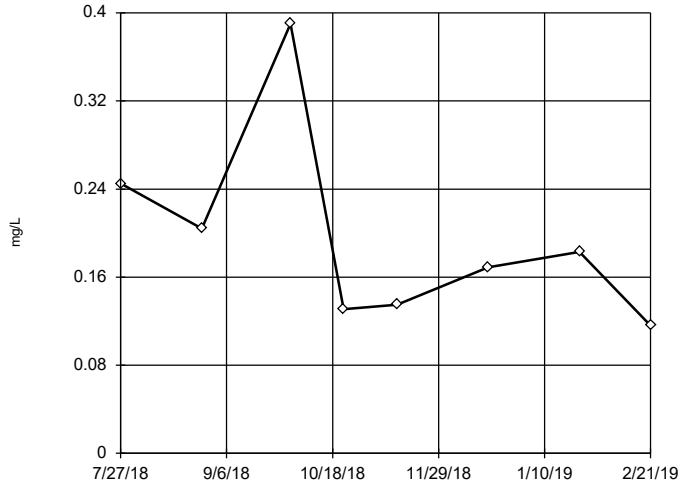
High cutoff = 0.06451, low cutoff = -0.05299, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:51 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

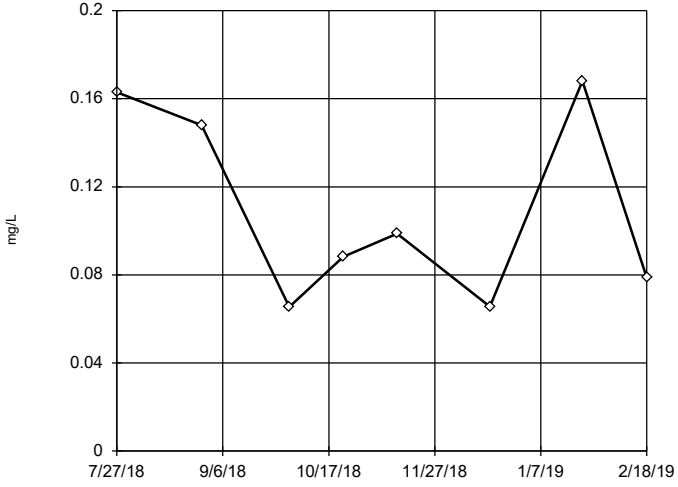
High cutoff = 1.062, low cutoff = 0.02799, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

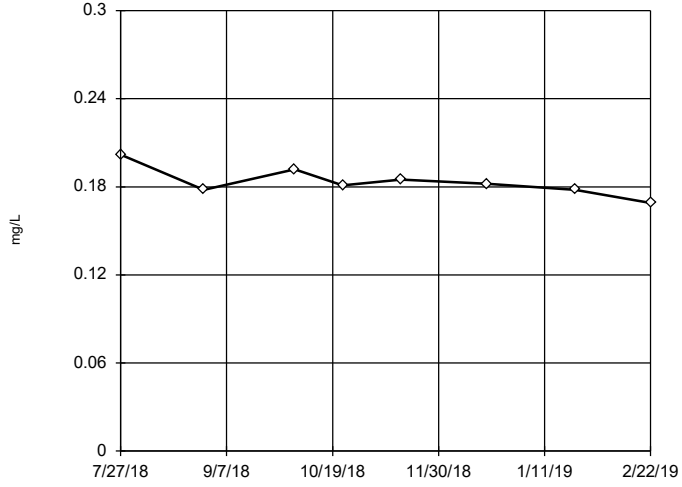
High cutoff = 1.566, low cutoff = 0.007132, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

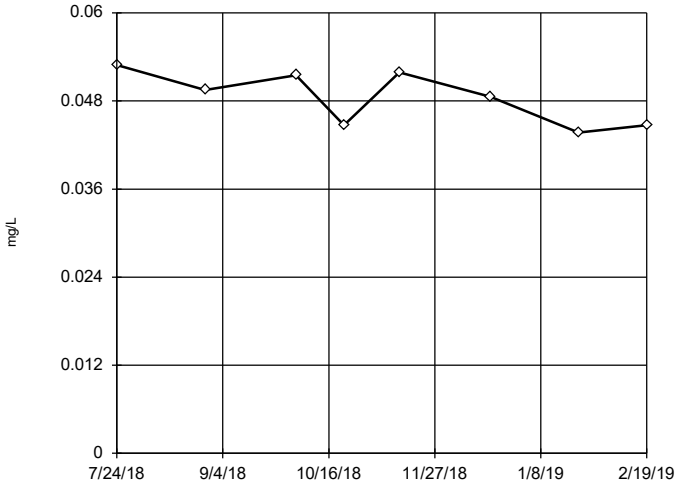
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2237, low cutoff = 0.15, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

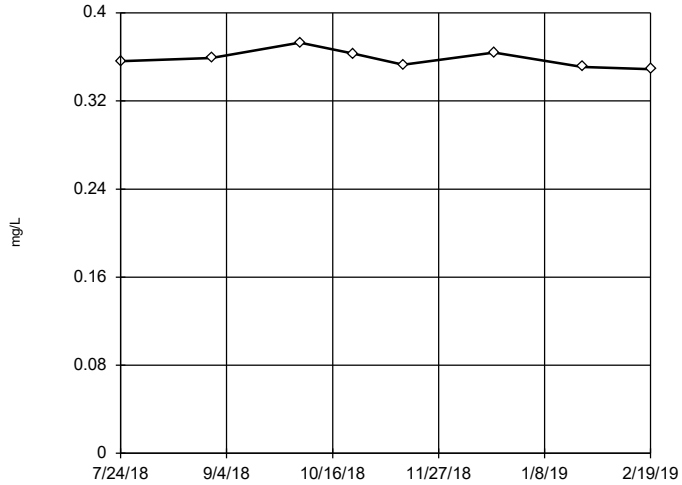
High cutoff = 0.06119, low cutoff = -0.05421, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

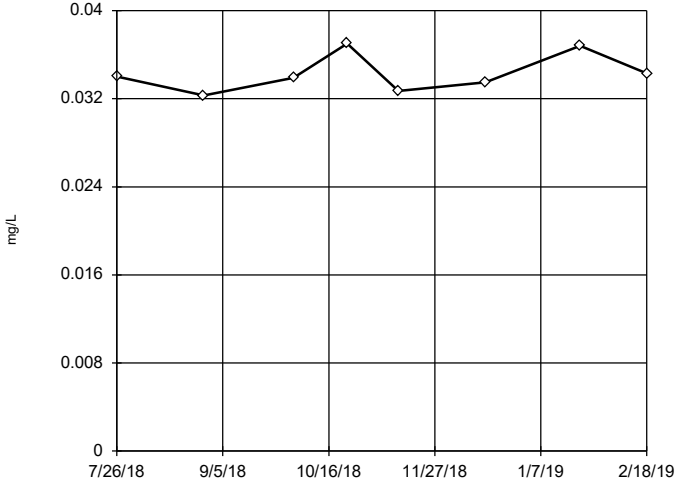
High cutoff = 0.4003, low cutoff = 0.3196, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

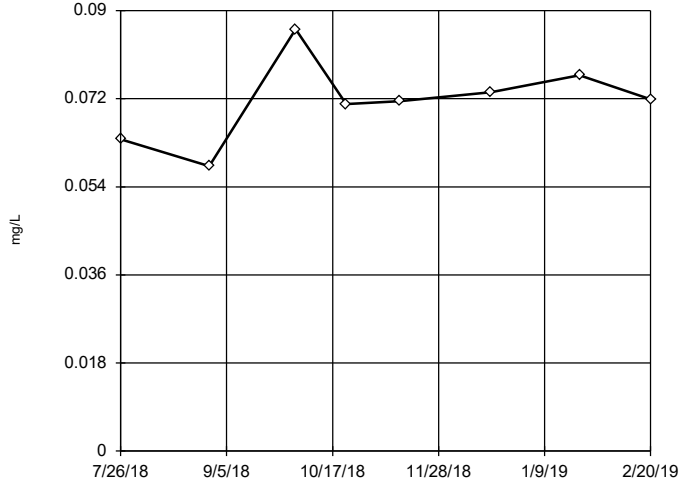
High cutoff = 0.04394, low cutoff = 0.02676, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

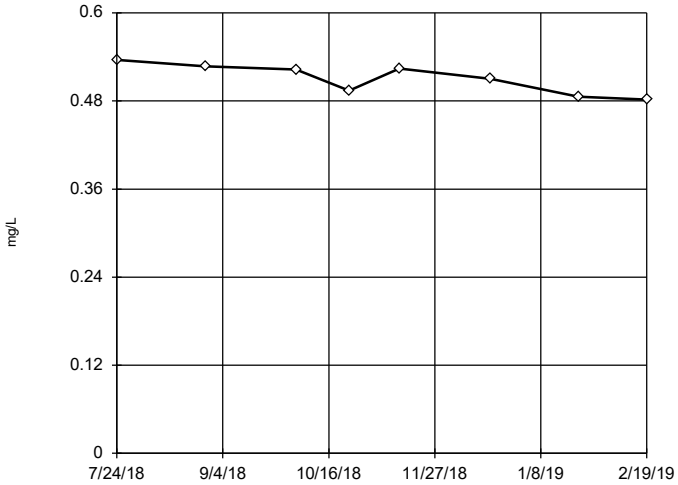
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.101, low cutoff = 0.04645, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

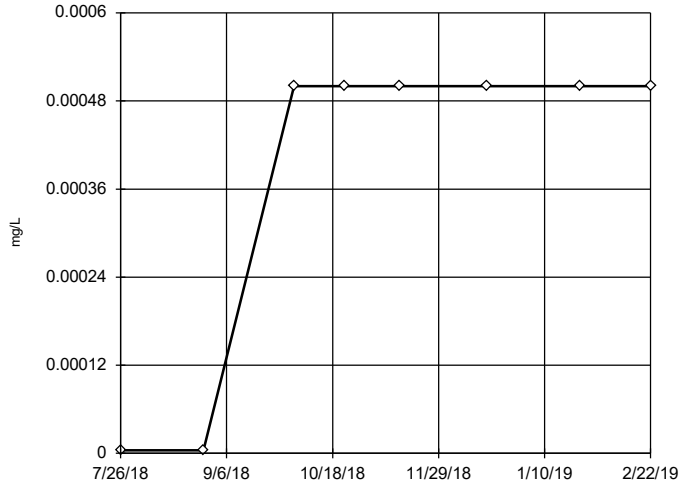
High cutoff = 0.5912, low cutoff = -0.445, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

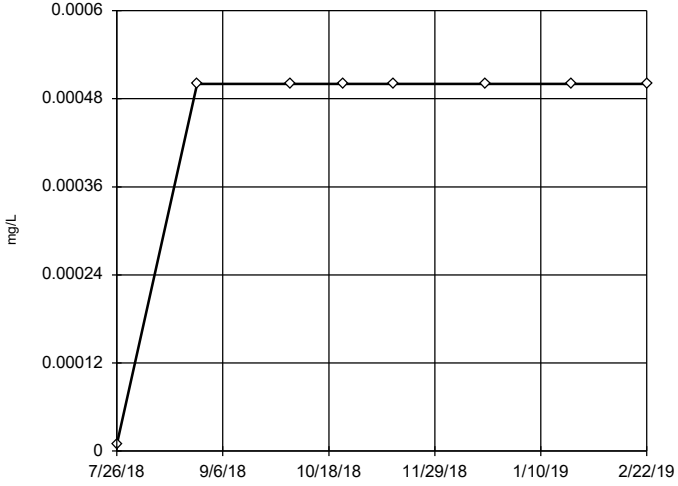
High cutoff = 0.6988, low cutoff = 3.2e-8, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

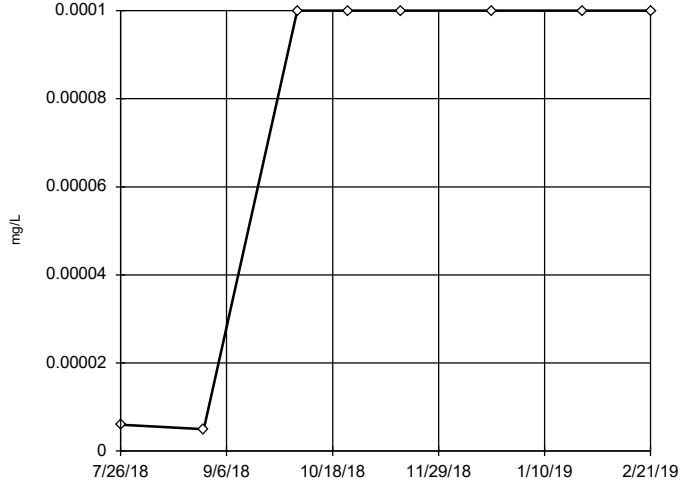
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

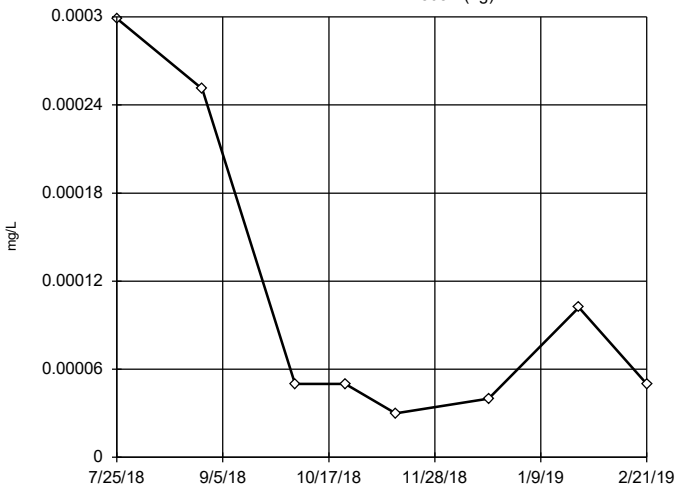
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.006804, low cutoff = 3.6e-7, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

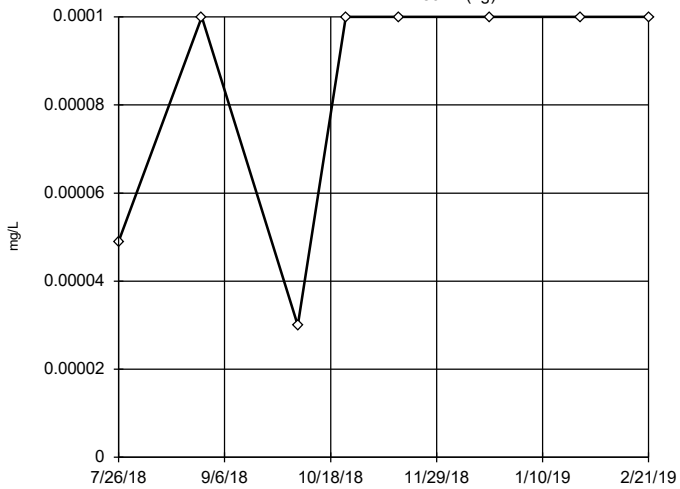
High cutoff = 0.007328, low cutoff = 9.8e-7, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

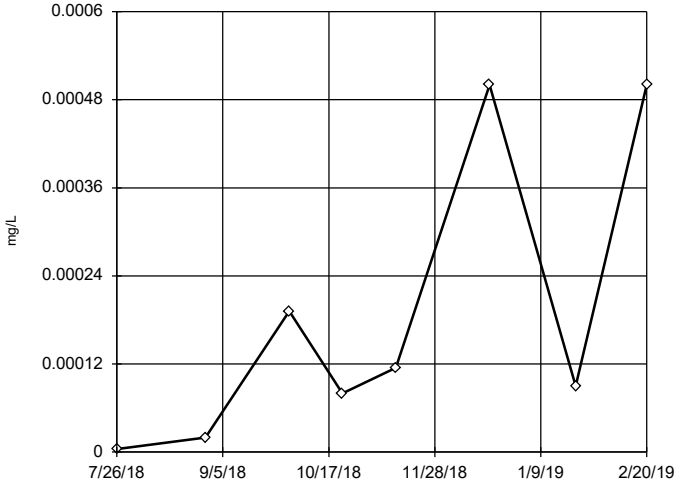
High cutoff = 0.0002287, low cutoff = 0.00001918, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

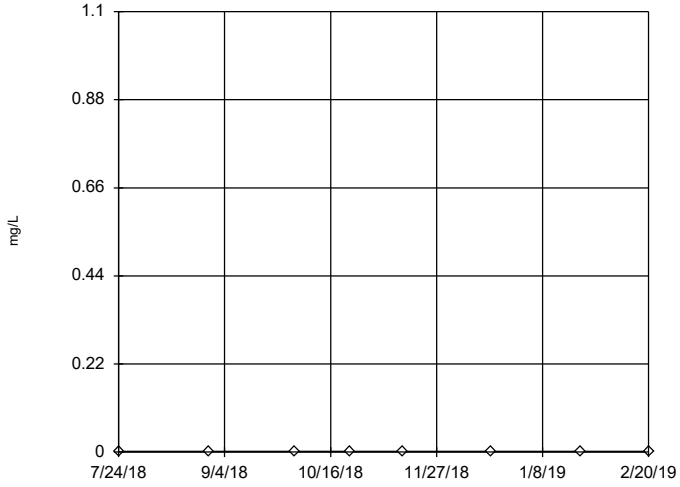
High cutoff = 0.004807, low cutoff = -0.0002762, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

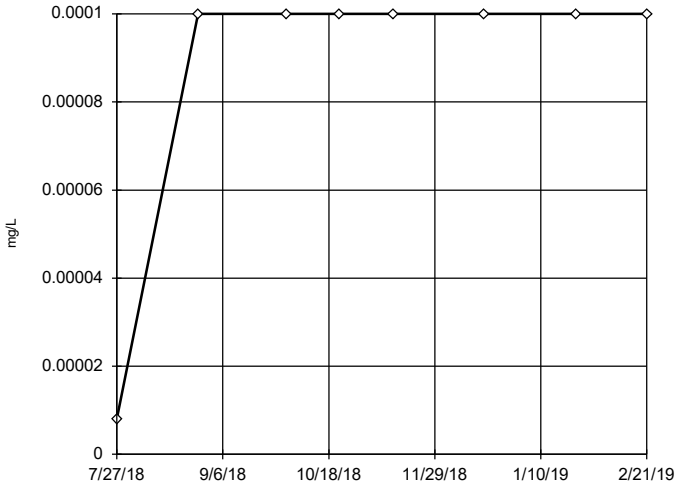
Data were natural log transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

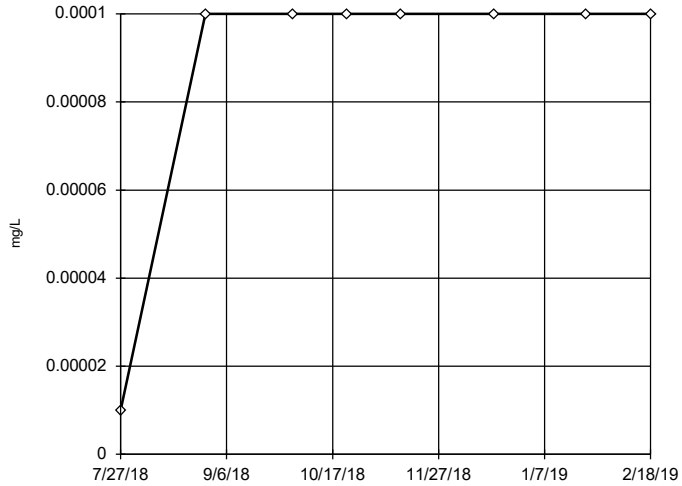
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

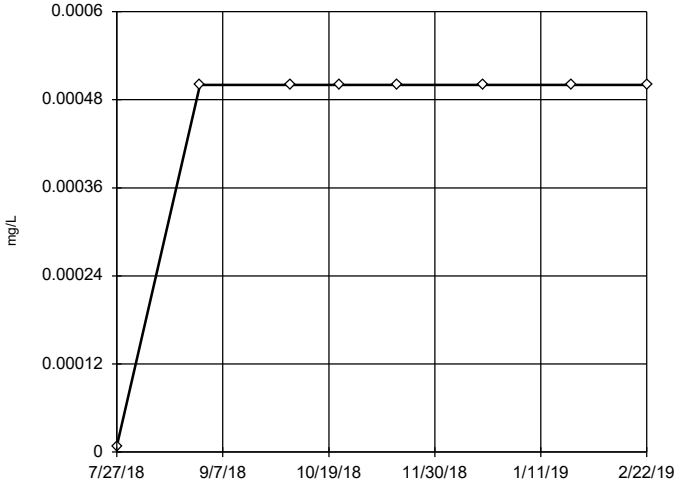
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

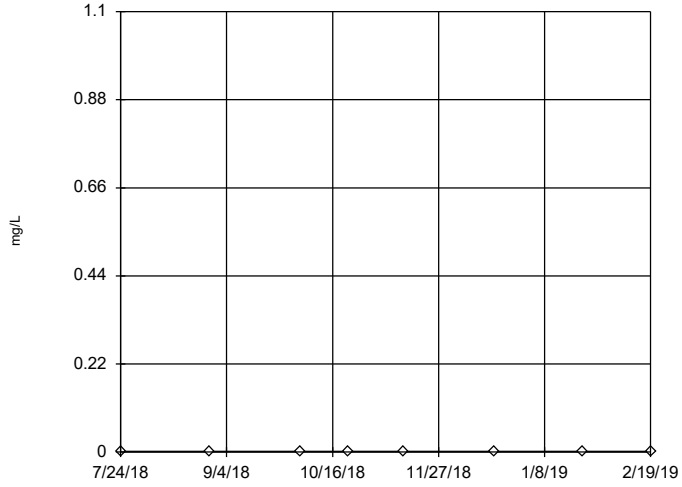
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

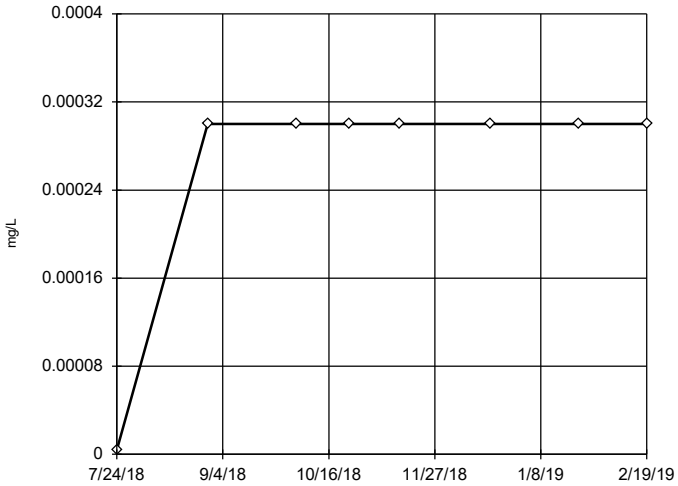
Data were natural log transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

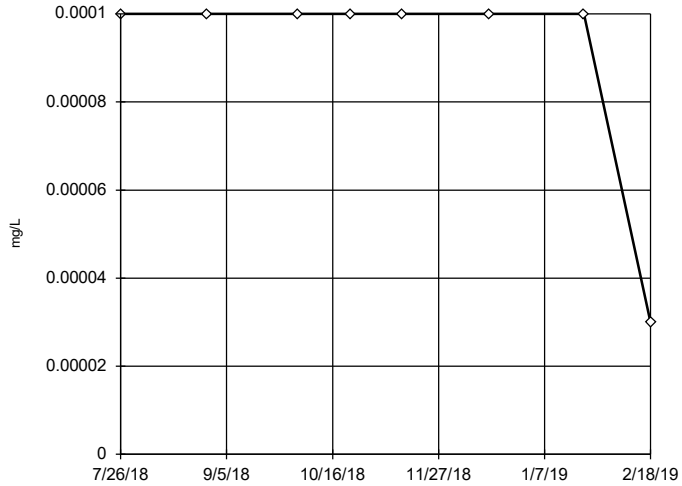
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

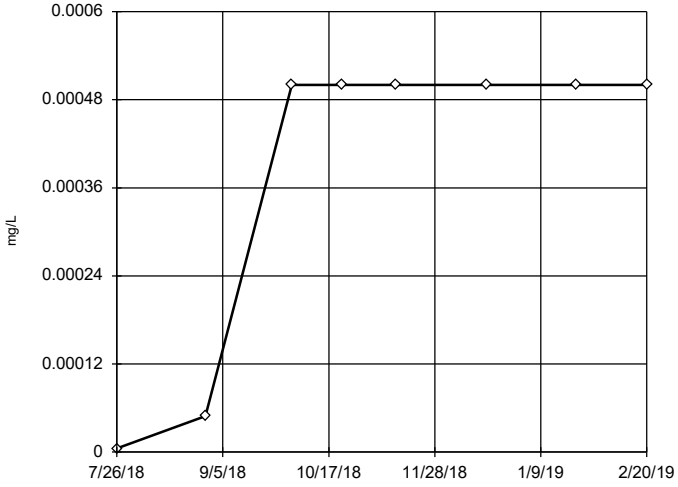
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

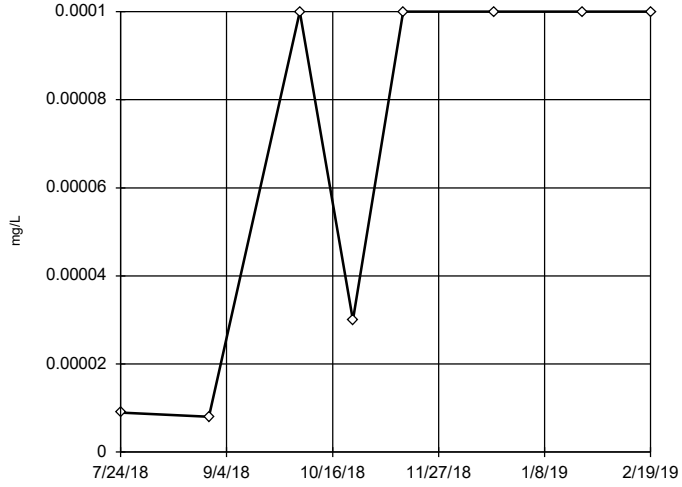
High cutoff = 0.002957, low cutoff = -2.4e-7, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

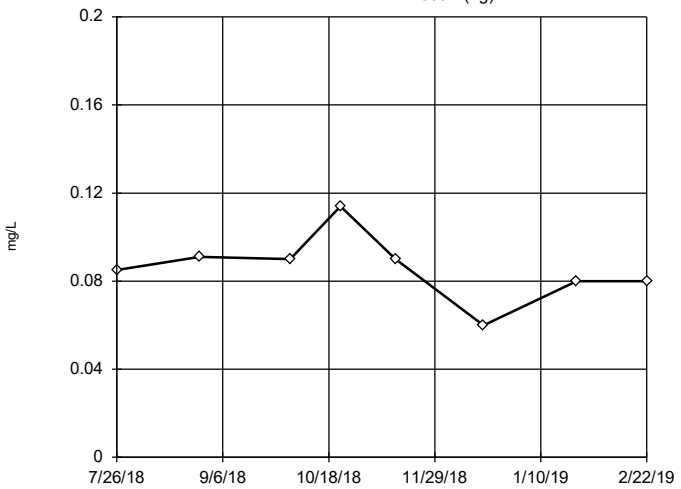
Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001255, low cutoff = -0.00004474, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.122, low cutoff = 0.0485, based on IQR multiplier of 3.

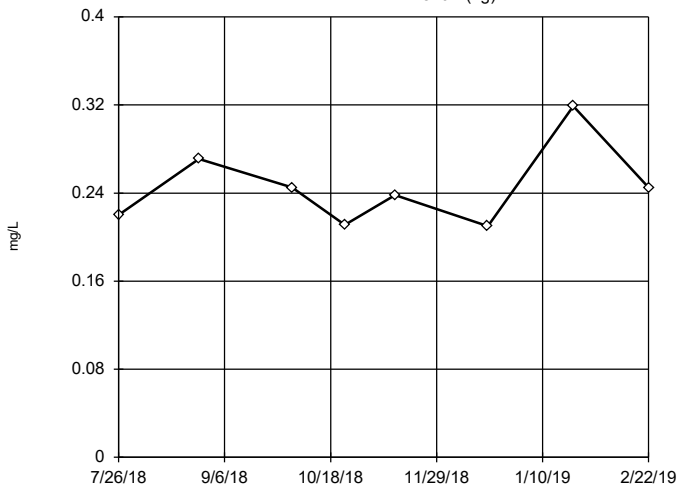
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.4408, low cutoff = 0.126, based on IQR multiplier of 3.

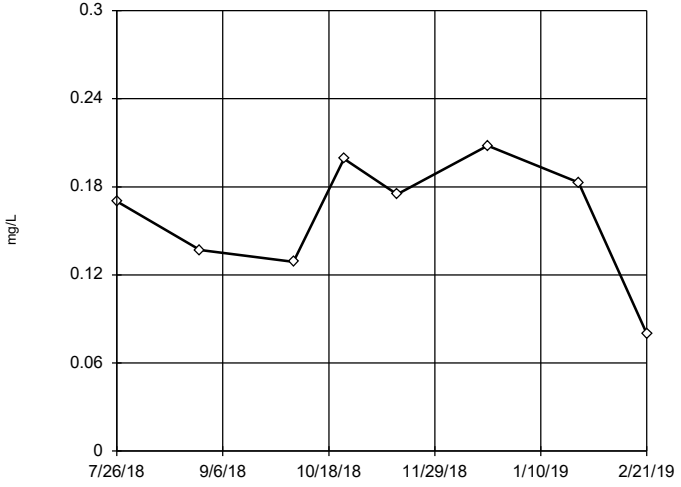
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2756, low cutoff = -0.2262, based on IQR multiplier of 3.

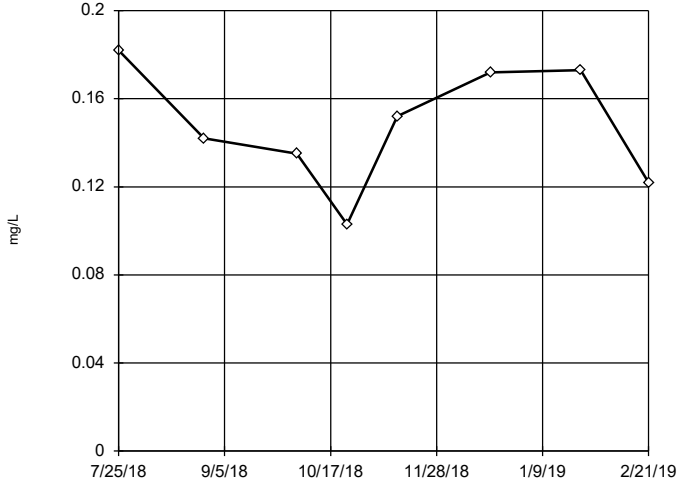
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

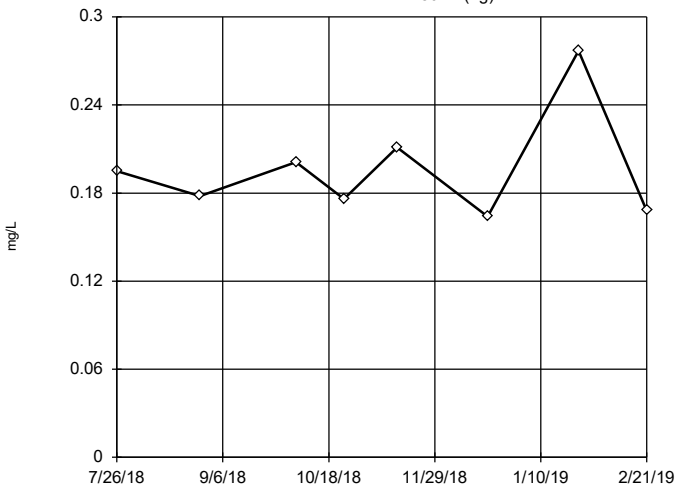
High cutoff = 0.2634, low cutoff = -0.1518, based on IQR multiplier of 3.

Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3538, low cutoff = 0.1001, based on IQR multiplier of 3.

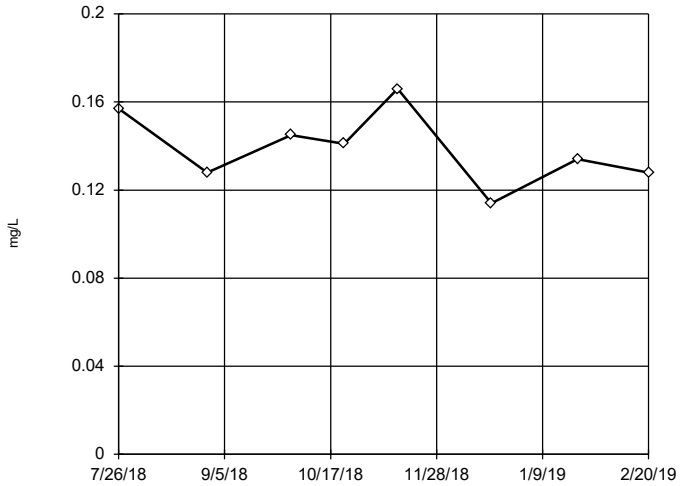
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2471, low cutoff = 0.07815, based on IQR multiplier of 3.

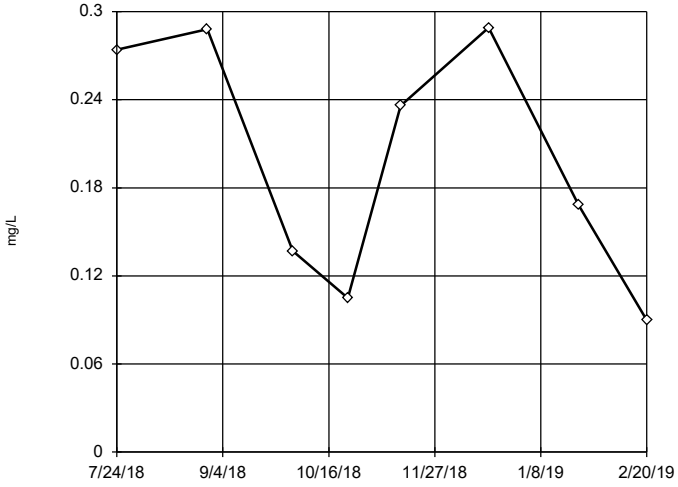
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1.477, low cutoff = 9.2e-7, based on IQR multiplier of 3.

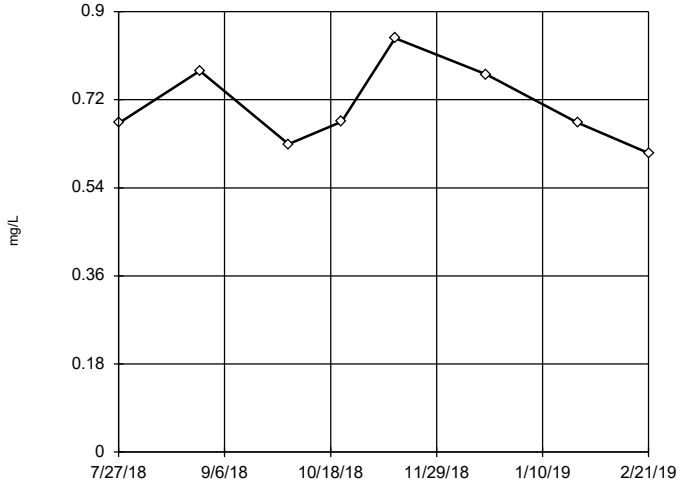
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

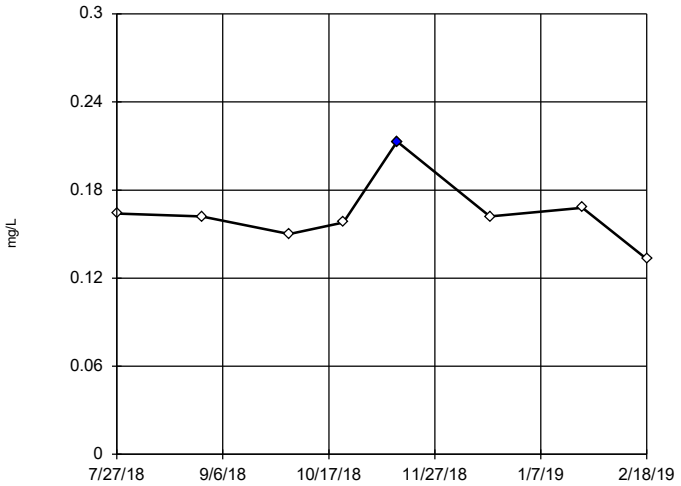
High cutoff = 1.316, low cutoff = 0.3831, based on IQR multiplier of 3.

Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

Outlier is drawn as solid. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2081, low cutoff = 0.1228, based on IQR multiplier of 3.

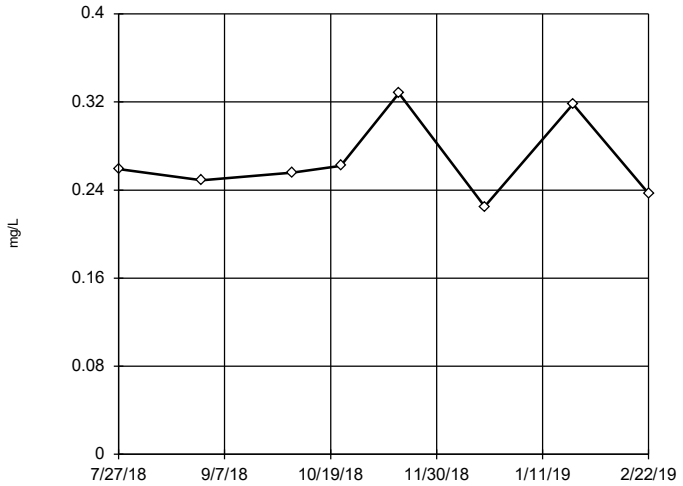
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.4842, low cutoff = 0.1448, based on IQR multiplier of 3.

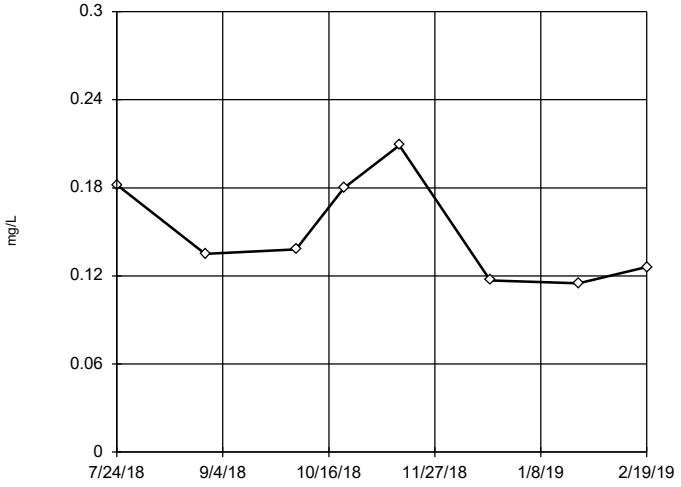
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.5996, low cutoff = 0.03665, based on IQR multiplier of 3.

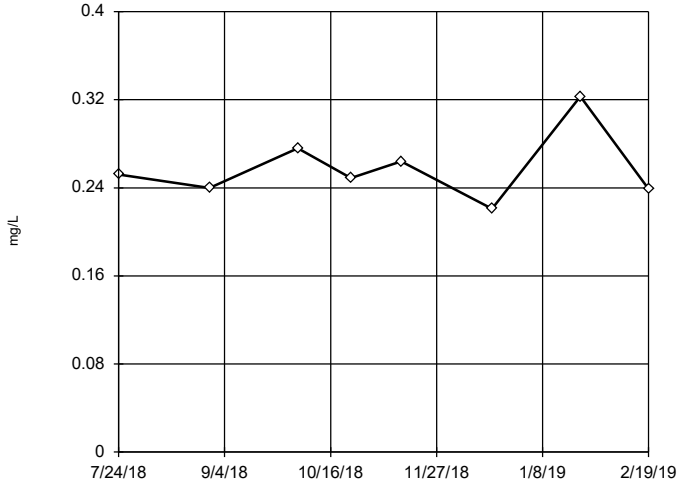
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

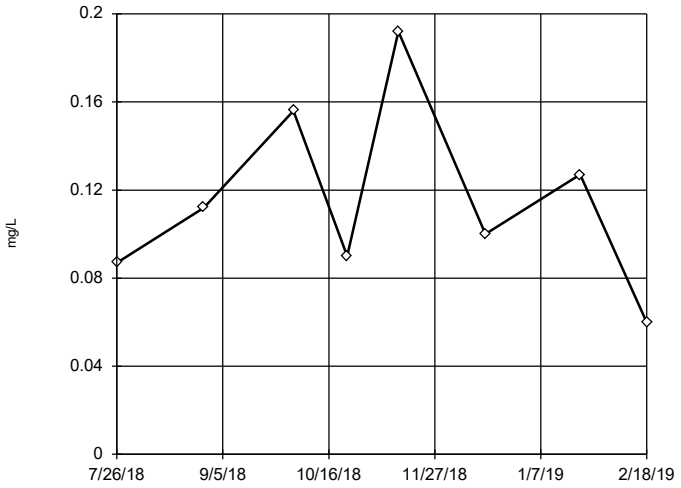
High cutoff = 0.3865, low cutoff = 0.1673, based on IQR multiplier of 3.

Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.5665, low cutoff = 0.02199, based on IQR multiplier of 3.

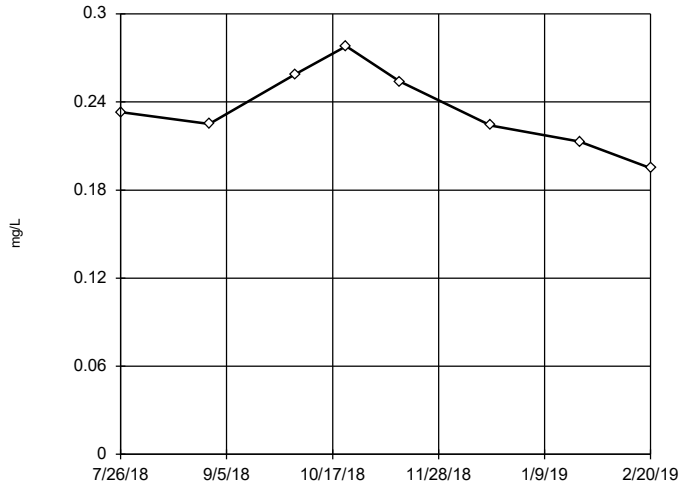
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.4153, low cutoff = 0.1349, based on IQR multiplier of 3.

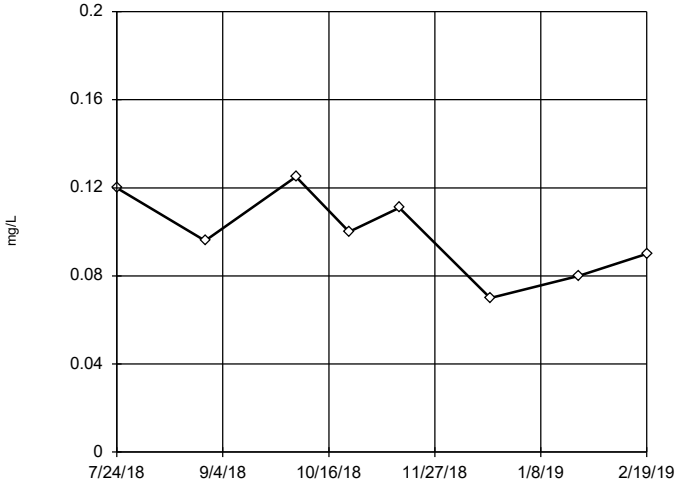
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.207, low cutoff = -0.0065, based on IQR multiplier of 3.

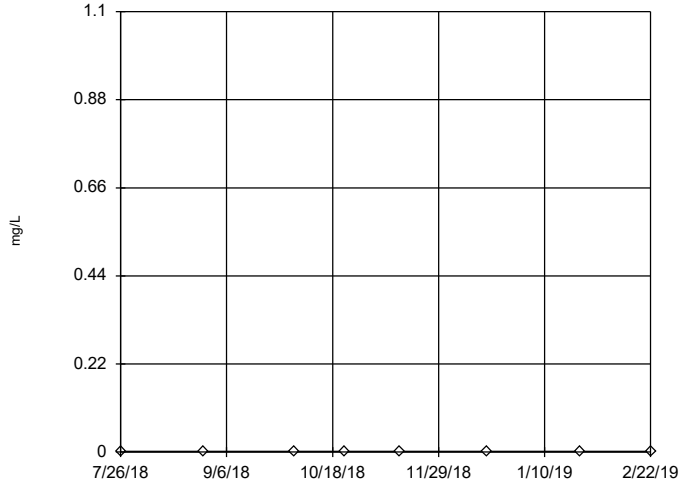
Constituent: Boron Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

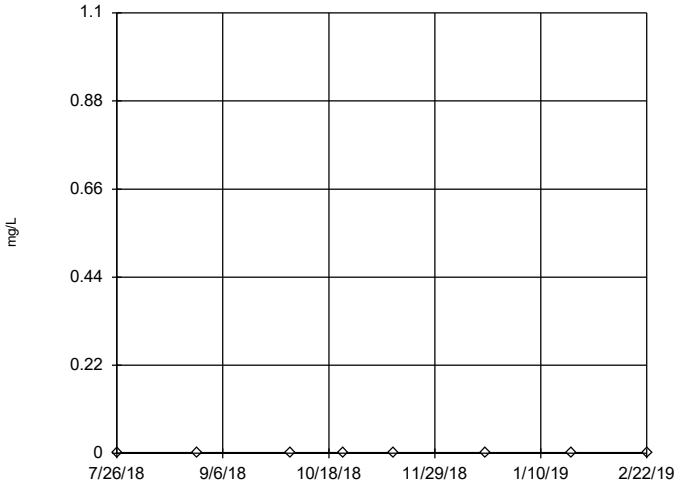
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 4/18/2019 4:52 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

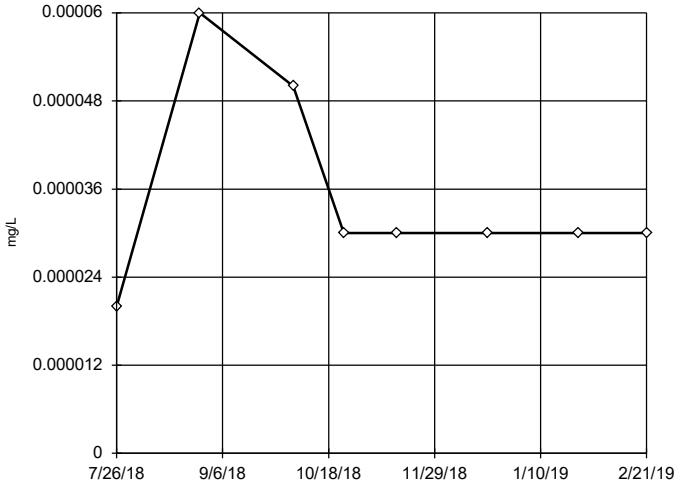
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

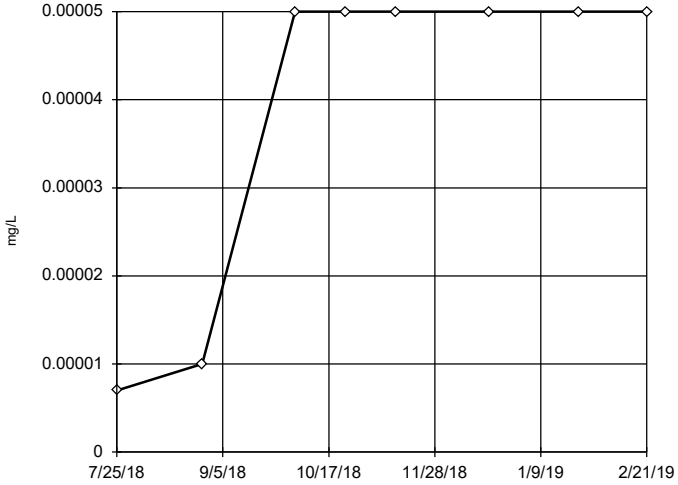
High cutoff = 0.00008333, low cutoff = 0.00001394, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

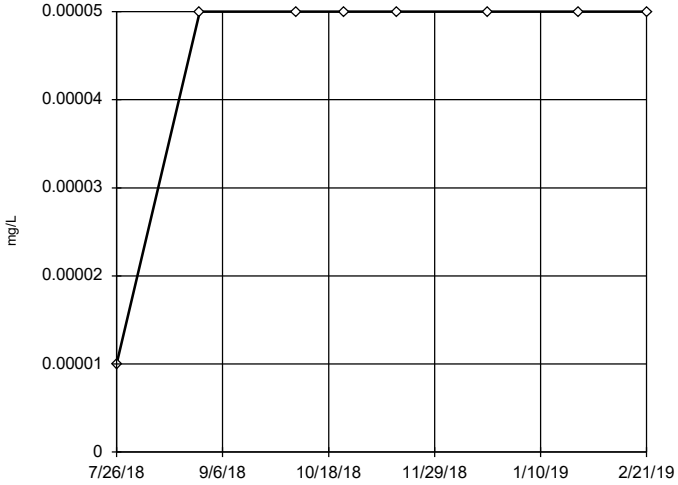
High cutoff = 0.000559, low cutoff = 0.000002, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:52 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

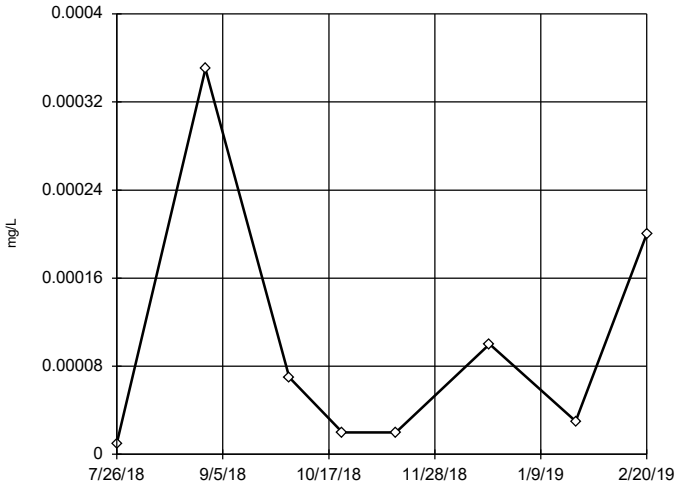
Ladder of Powers transformations did not improve normality; analysis run on raw data.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

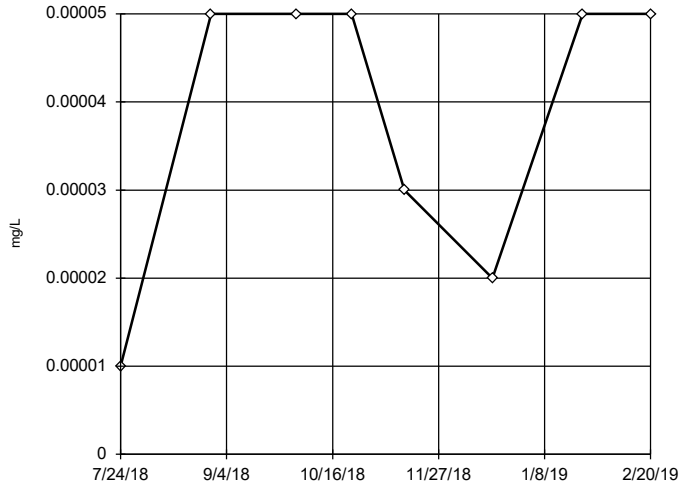
High cutoff = 0.05, low cutoff = 5.7e-8, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

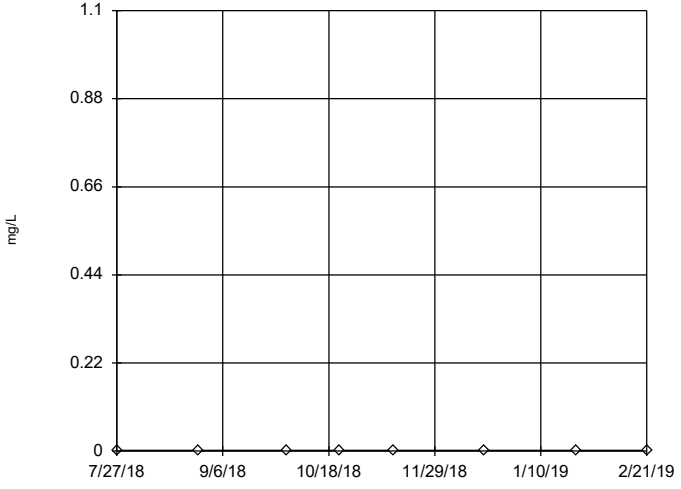
High cutoff = 0.0001785, low cutoff = -0.000001728, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A

n = 8

No outliers found. Tukey's method selected by user.

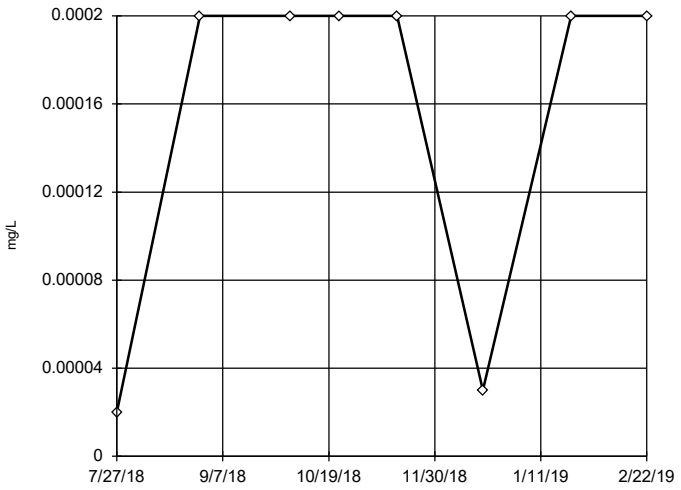
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.000559, low cutoff = 0.000002, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.003443, low cutoff = 0.0000045, based on IQR multiplier of 3.

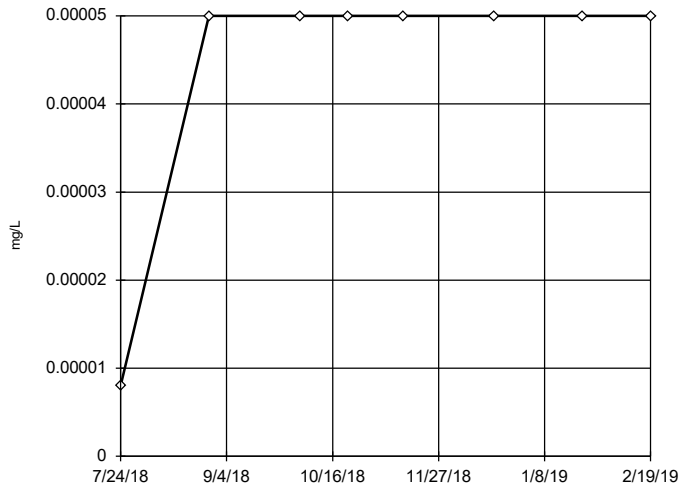
Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

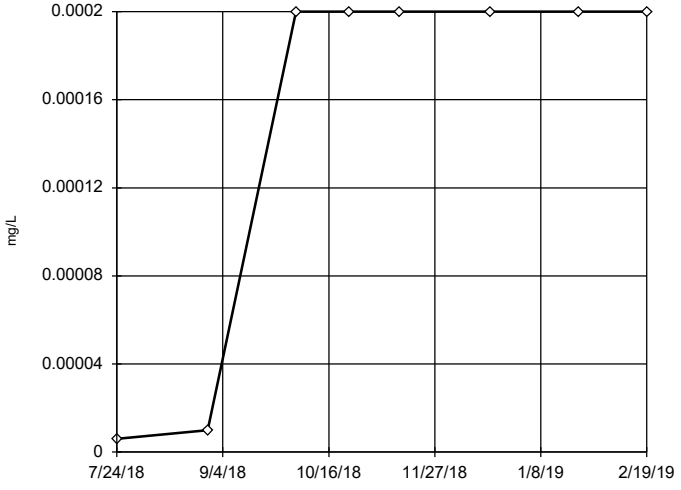
Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01789, low cutoff = 5.0e-7, based on IQR multiplier of 3.

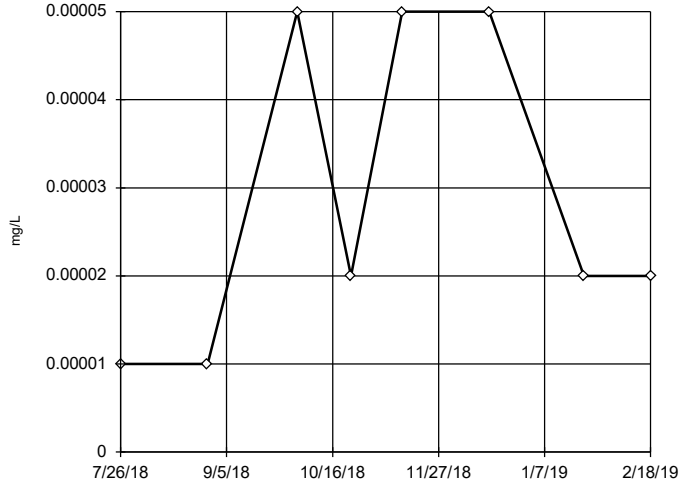
Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

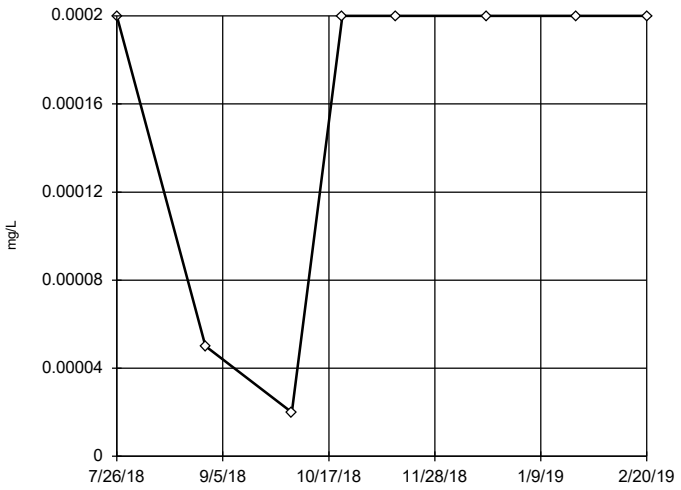
High cutoff = 0.00221, low cutoff = 3.2e-7, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

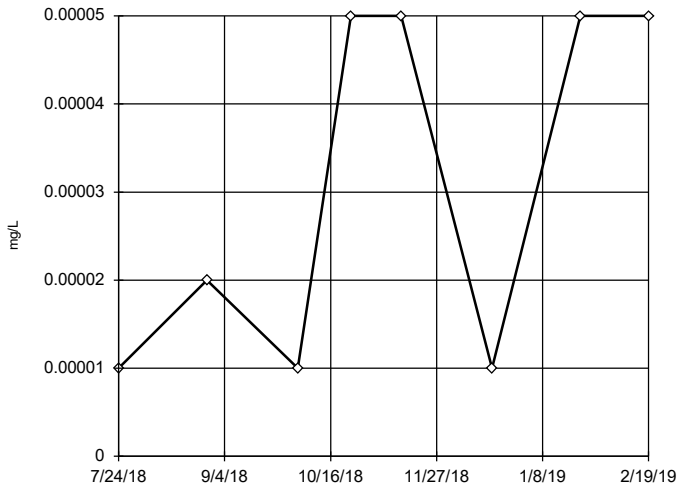
High cutoff = 0.0016, low cutoff = 0.0000125, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

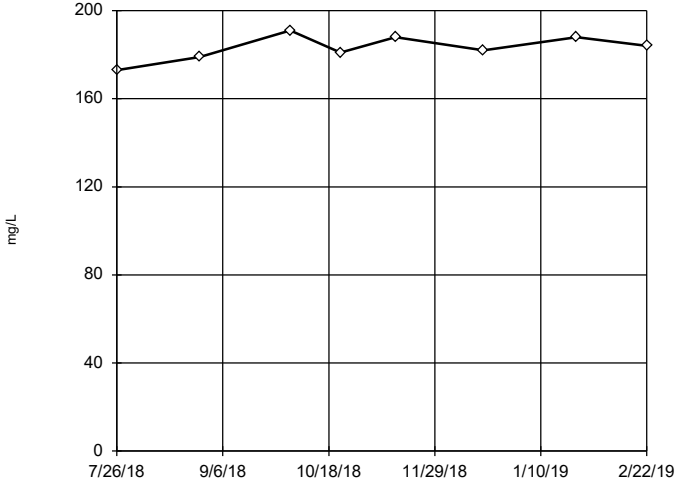
High cutoff = 0.00625, low cutoff = 8.0e-8, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

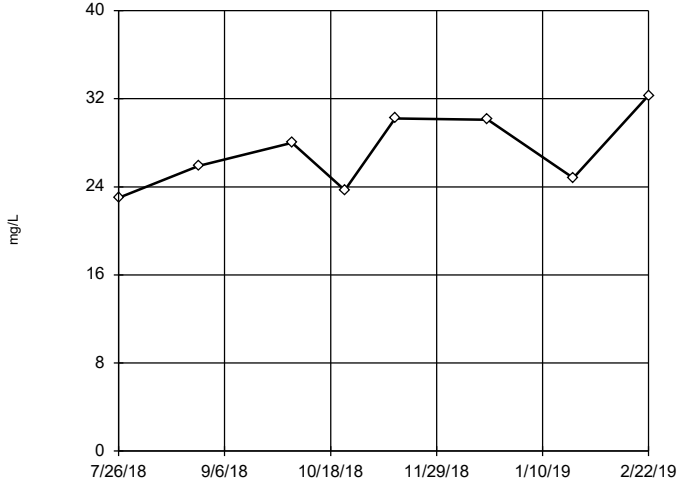
High cutoff = 205.1, low cutoff = 124.1, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

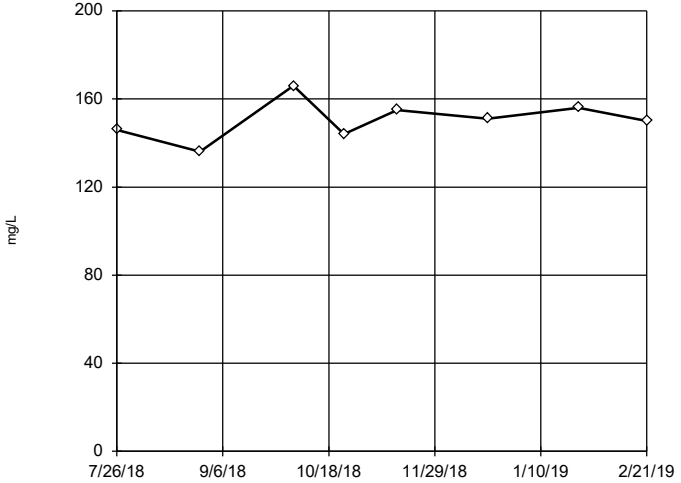
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 57.99, low cutoff = 12.6, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

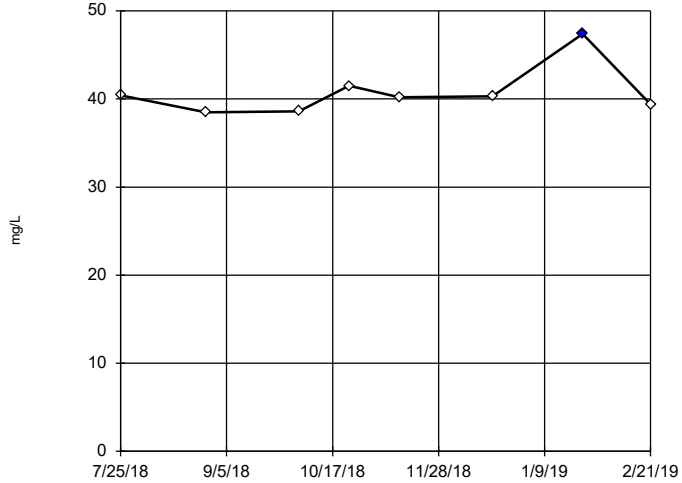
High cutoff = 191.8, low cutoff = 117.6, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

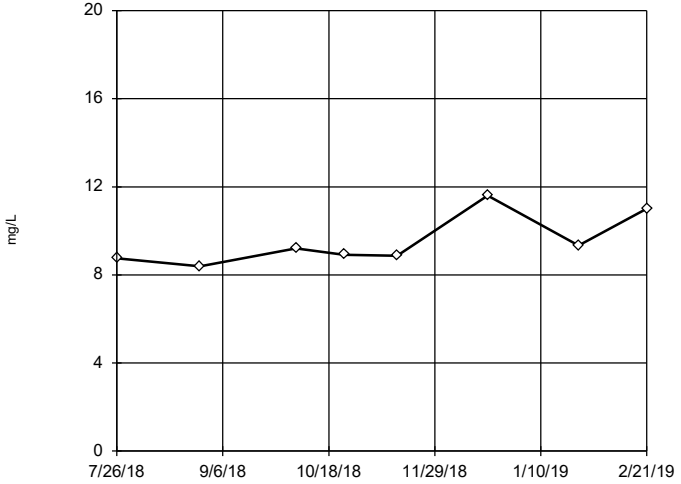
High cutoff = 47.4, low cutoff = 33.69, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

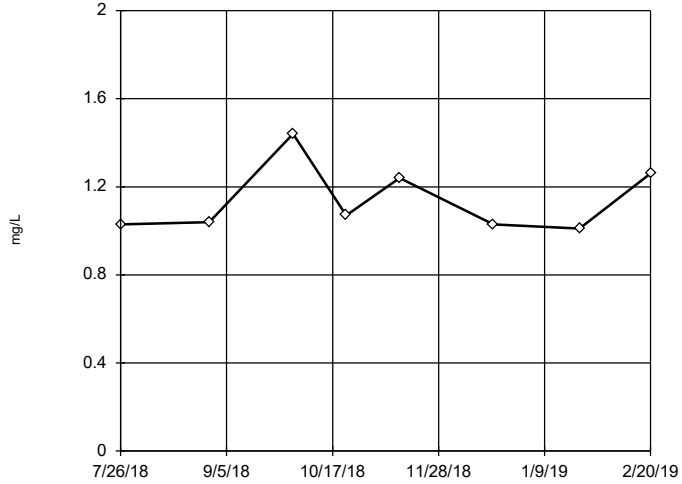
High cutoff = 15.38, low cutoff = 5.807, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

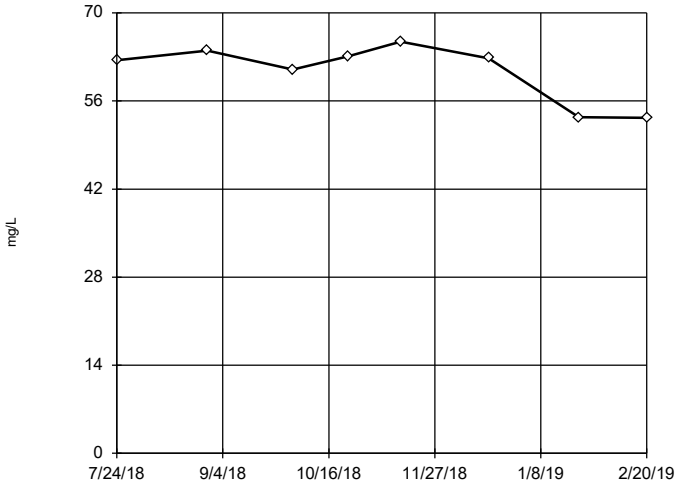
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2.234, low cutoff = 0.5763, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

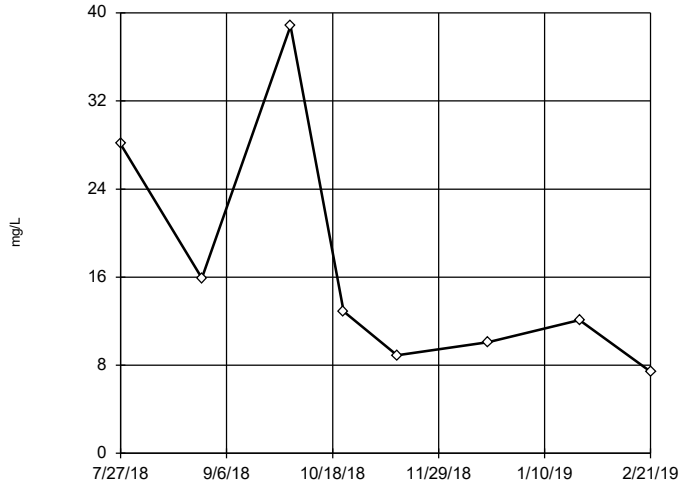
High cutoff = 73.02, low cutoff = -60.36, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

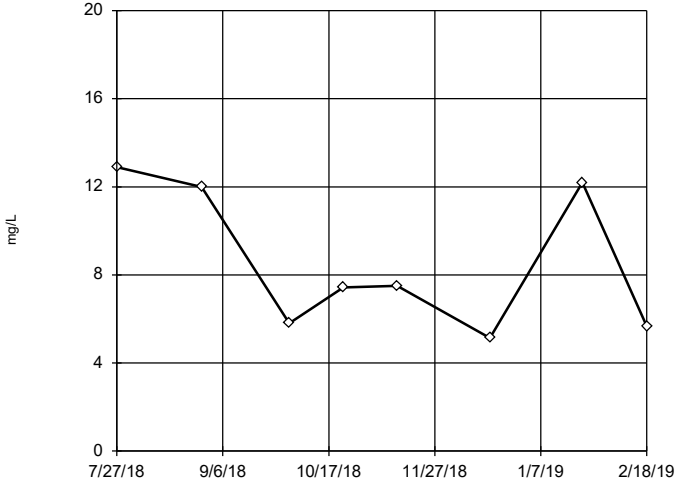
High cutoff = 234.2, low cutoff = 0.8556, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

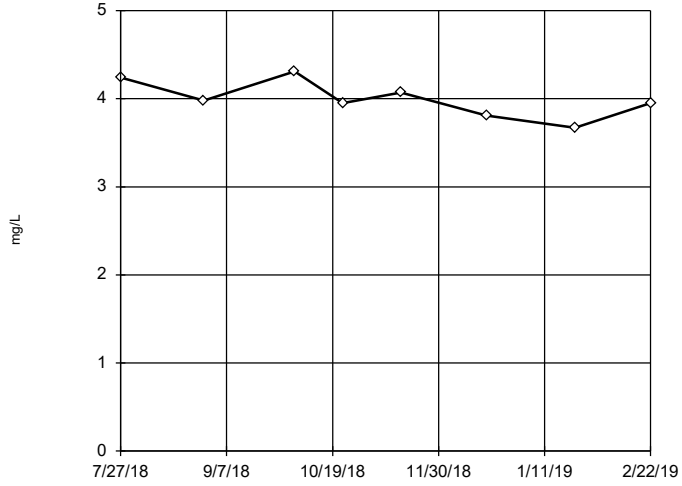
High cutoff = 113.4, low cutoff = 0.6126, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

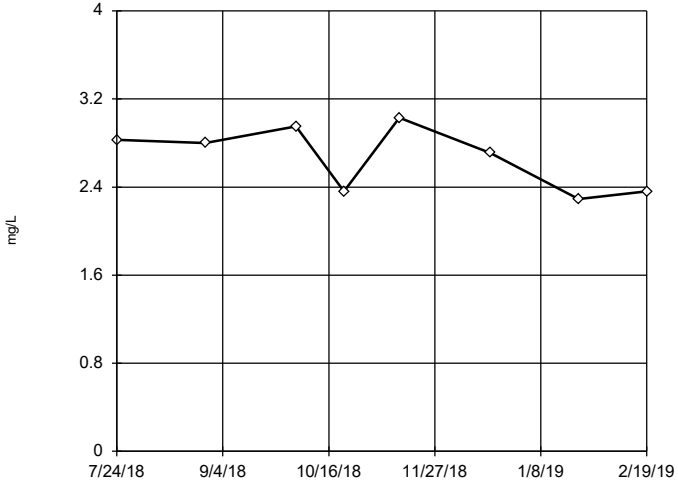
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5.101, low cutoff = 3.159, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

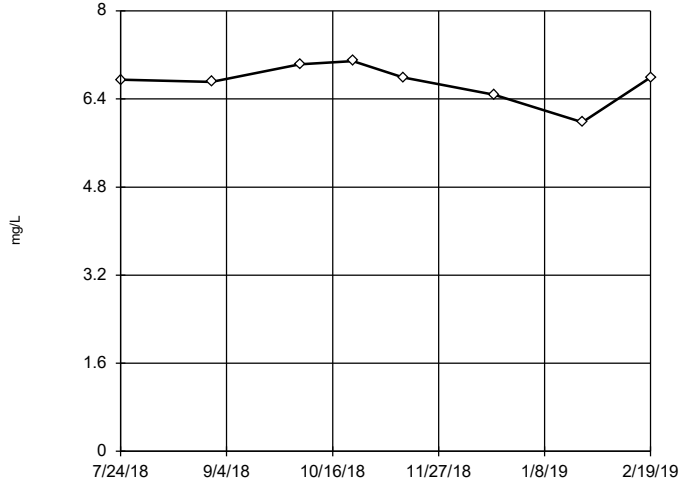
High cutoff = 3.496, low cutoff = -3.197, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

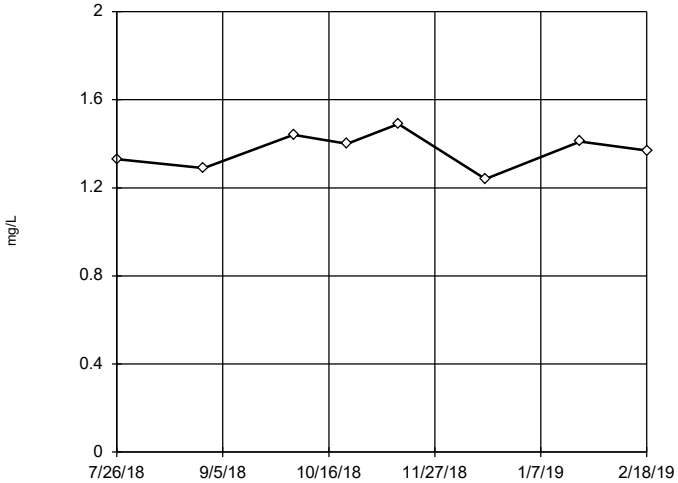
High cutoff = 7.578, low cutoff = 3.699, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were x^4 transformed to achieve best W statistic (graph shown in original units).

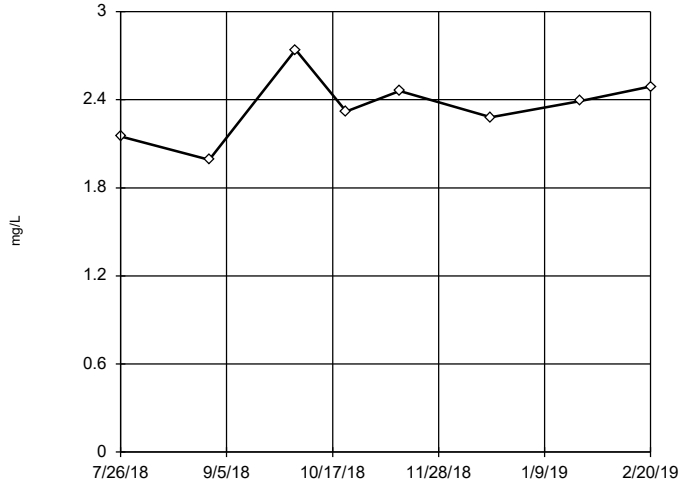
High cutoff = 1.663, low cutoff = -0.8735, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

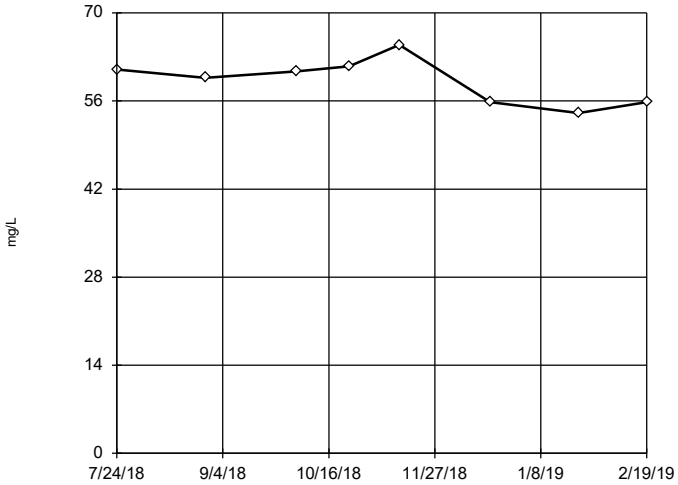
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.343, low cutoff = 1.52, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

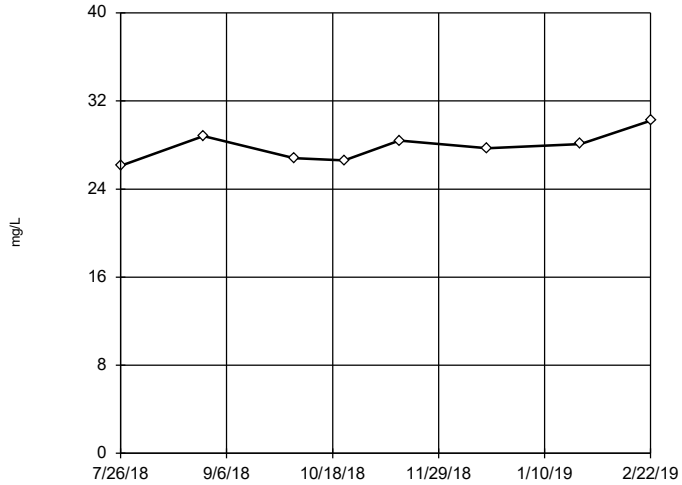
High cutoff = 75.27, low cutoff = 34.64, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

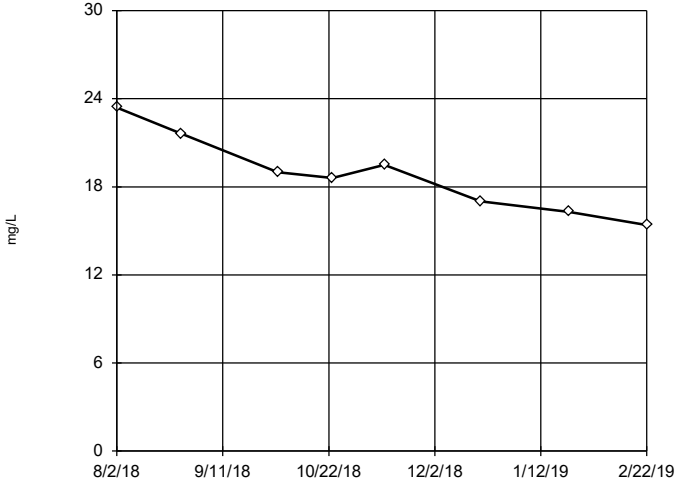
High cutoff = 35.15, low cutoff = 21.73, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

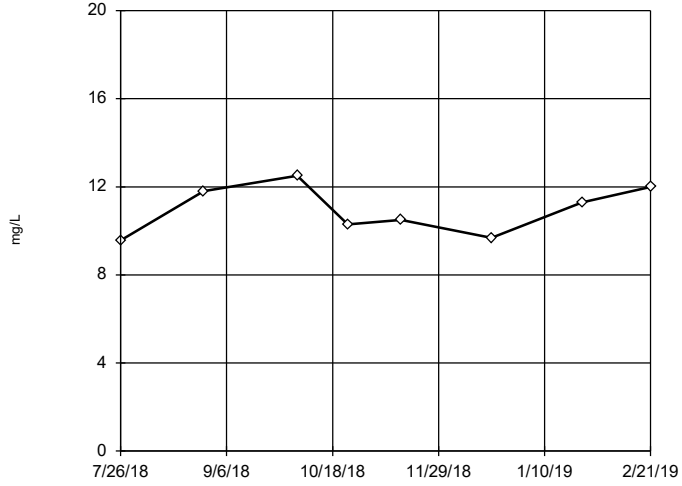
High cutoff = 38.46, low cutoff = 8.883, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

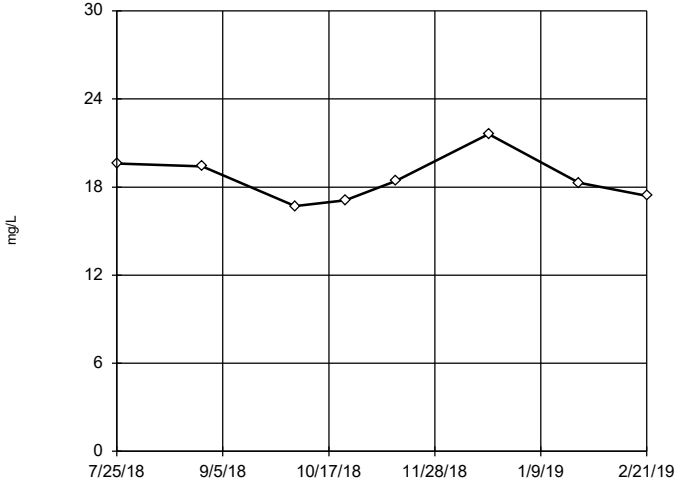
Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 16.33, low cutoff = -5.027, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

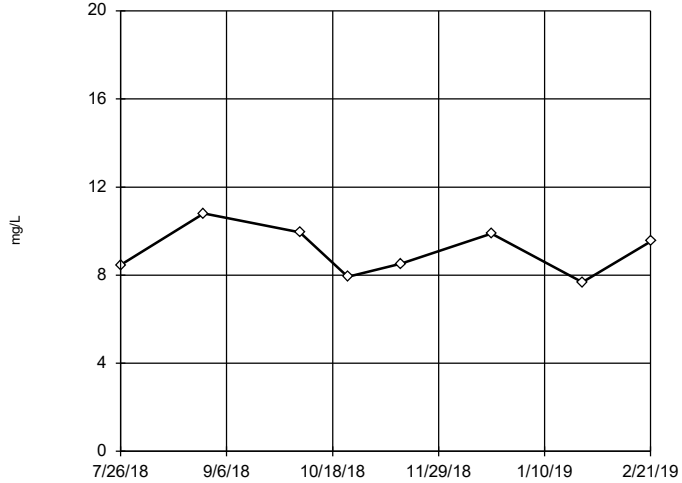
High cutoff = 28.17, low cutoff = 11.94, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

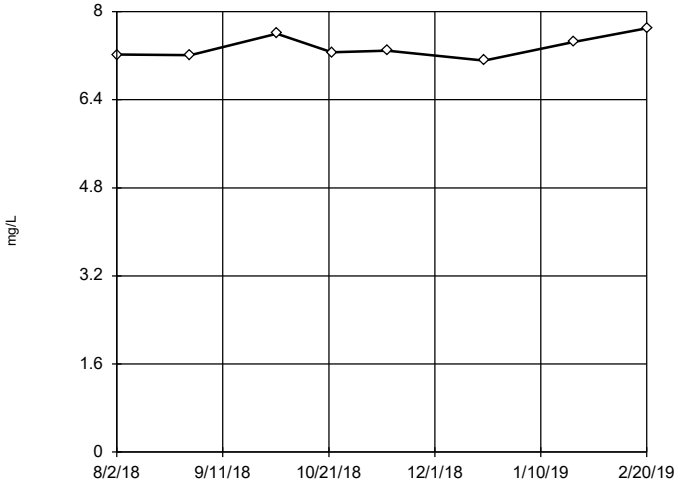
High cutoff = 17.55, low cutoff = 4.625, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

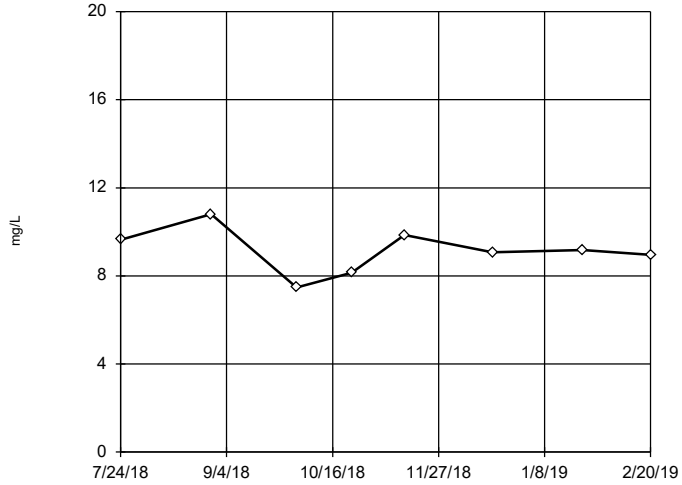
High cutoff = 8.536, low cutoff = 6.36, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

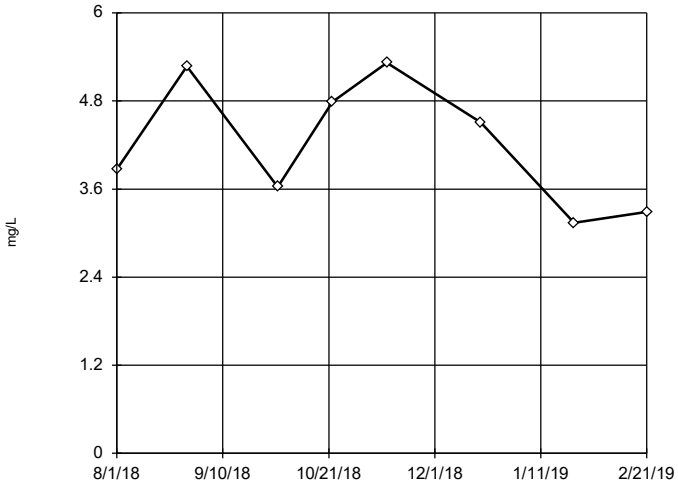
Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 13.35, low cutoff = 4.95, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

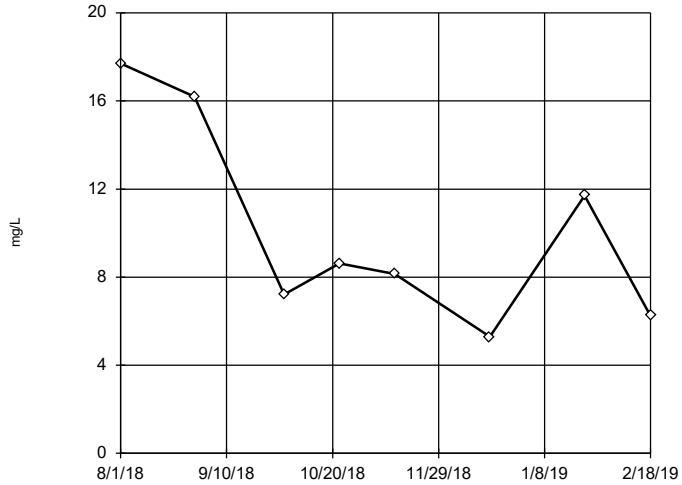
High cutoff = 15.44, low cutoff = 1.125, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

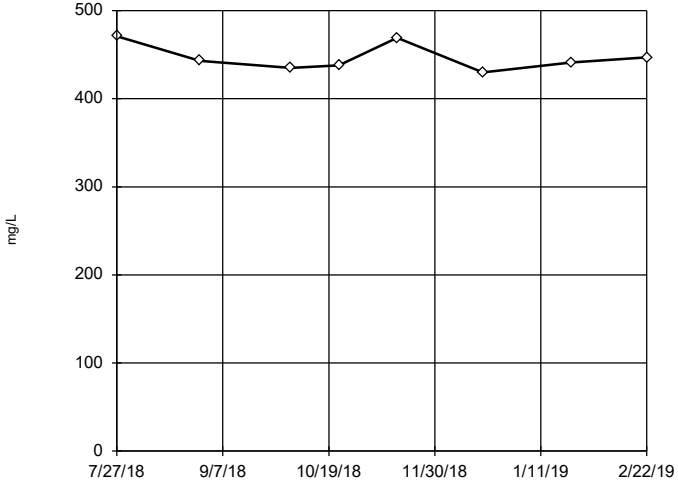
High cutoff = 119, low cutoff = 0.7757, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

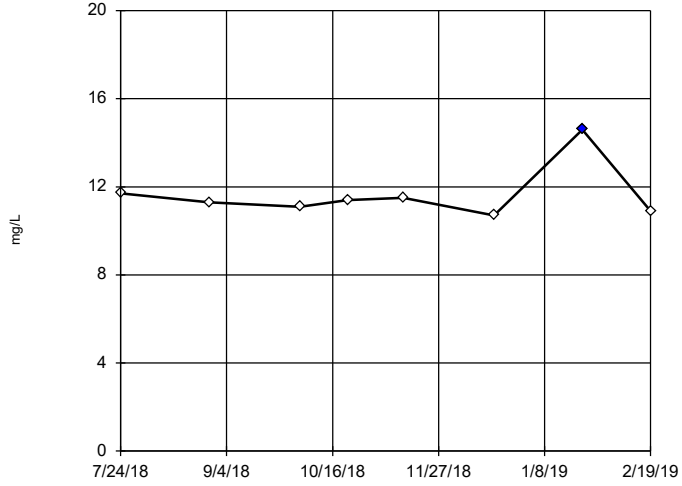
High cutoff = 528.5, low cutoff = 378.2, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

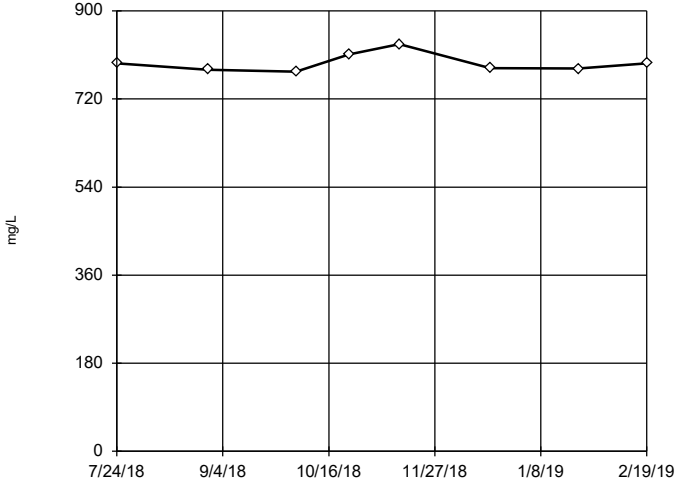
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 13.6, low cutoff = 9.379, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

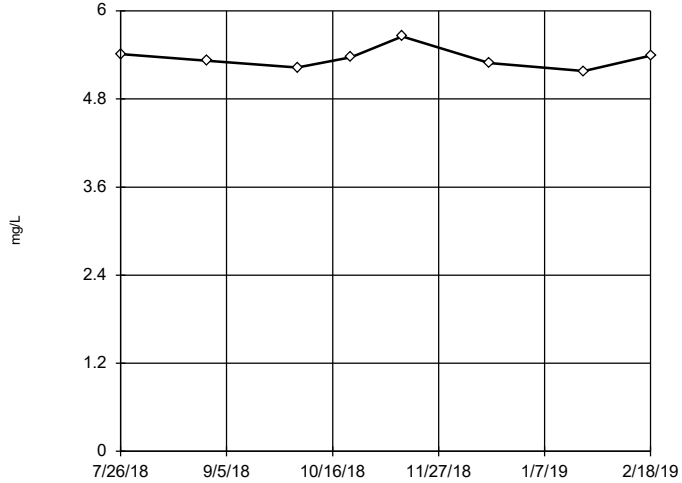
High cutoff = 868.2, low cutoff = 721.4, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

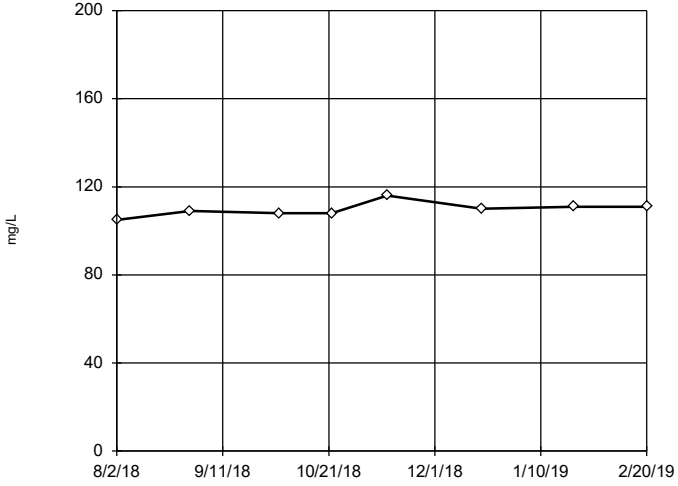
High cutoff = 5.843, low cutoff = 4.861, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

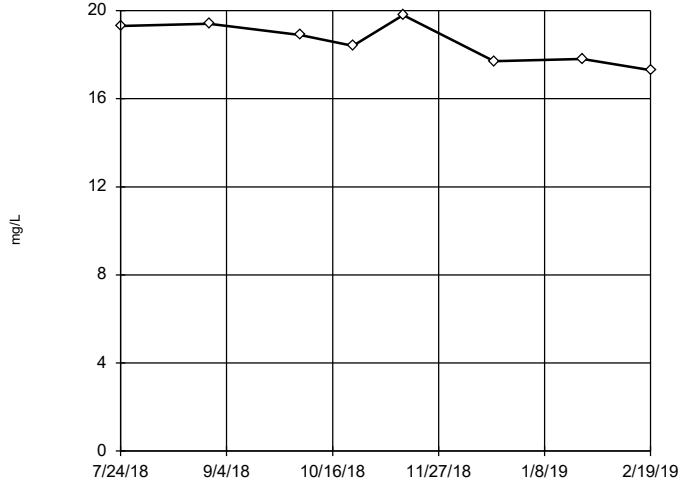
High cutoff = 120.5, low cutoff = 99.48, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

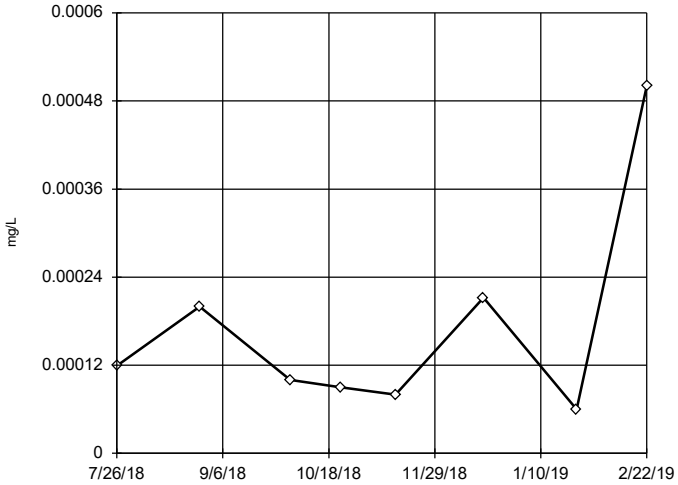
Data were x^4 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 22.65, low cutoff = -12.38, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 4/18/2019 4:53 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

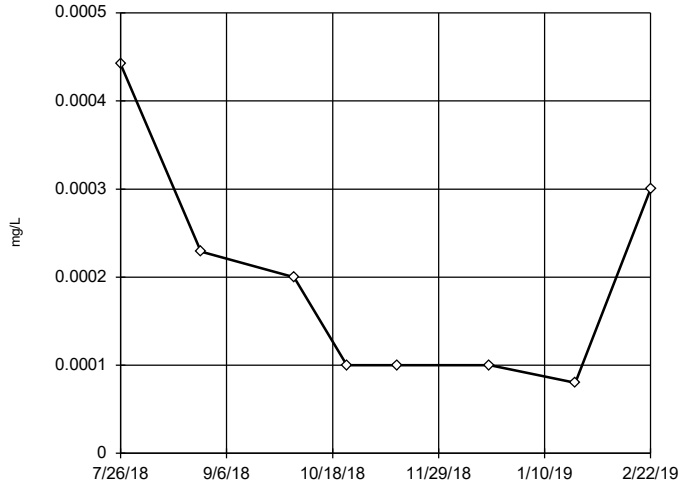
High cutoff = 0.002943, low cutoff = 0.000005938, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

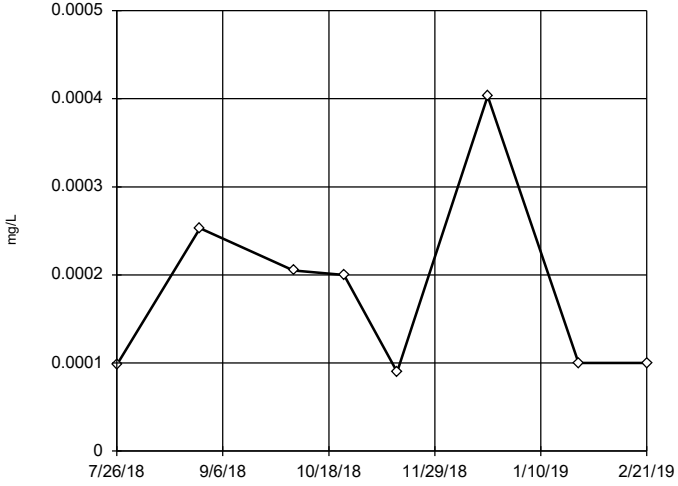
High cutoff = 0.00472, low cutoff = 0.000005553, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

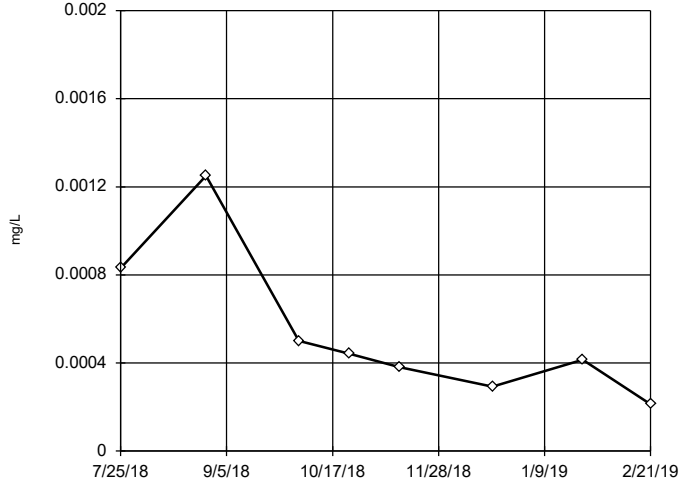
High cutoff = 0.002773, low cutoff = 0.000008131, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

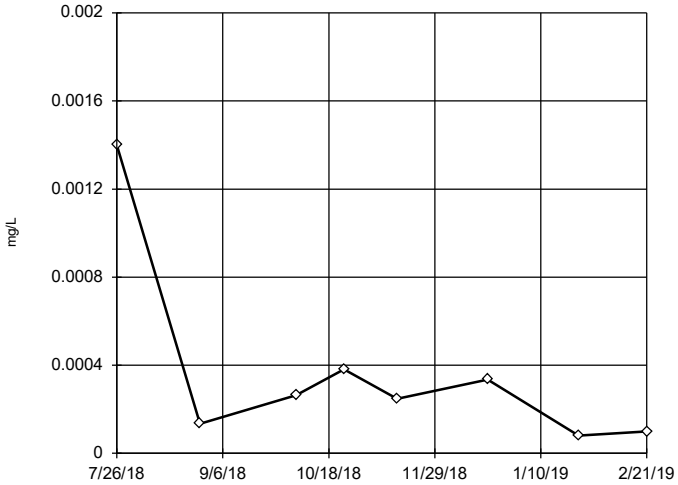
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.004629, low cutoff = 0.00004653, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

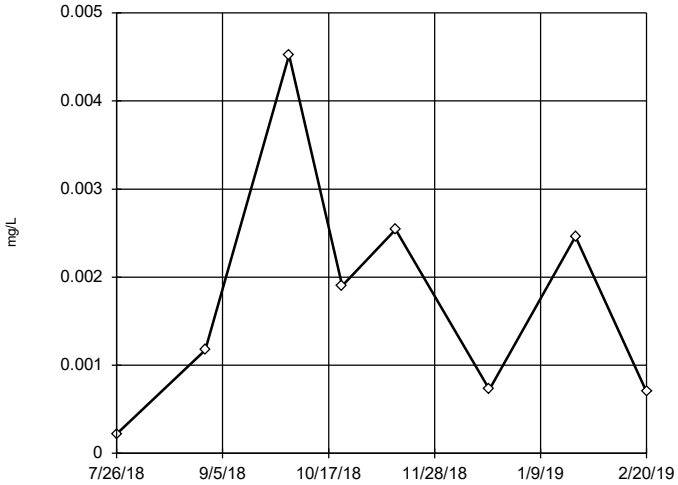
High cutoff = 0.0105, low cutoff = 0.000003938, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

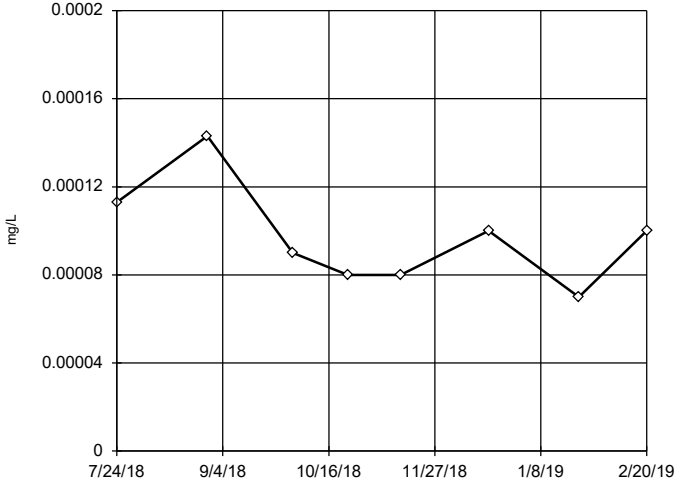
High cutoff = 0.02078, low cutoff = -0.0001243, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

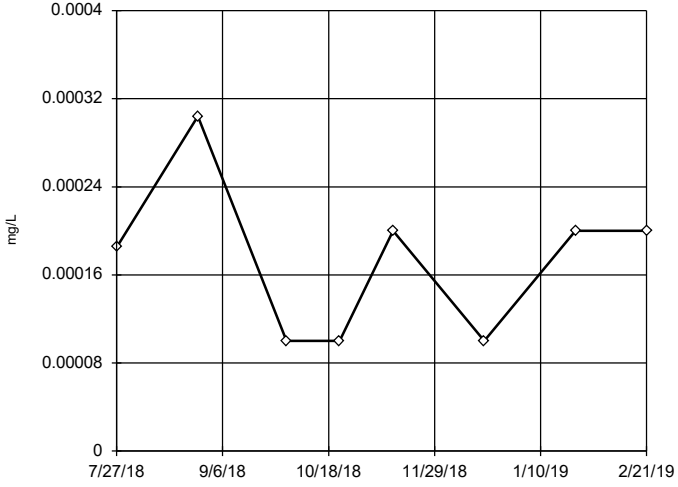
High cutoff = 0.0002494, low cutoff = 0.0000341, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

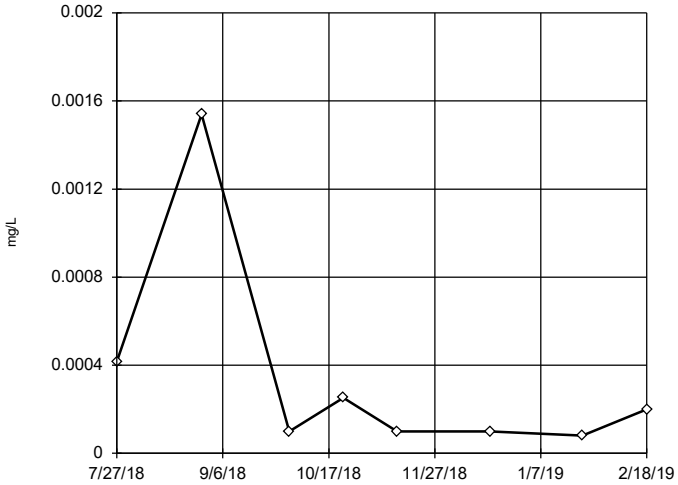
Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.0005, low cutoff = -0.0002, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

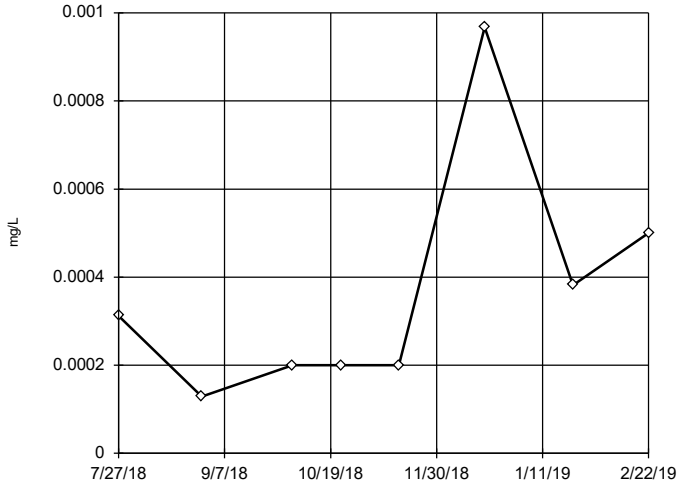
High cutoff = 0.01099, low cutoff = 0.000002946, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

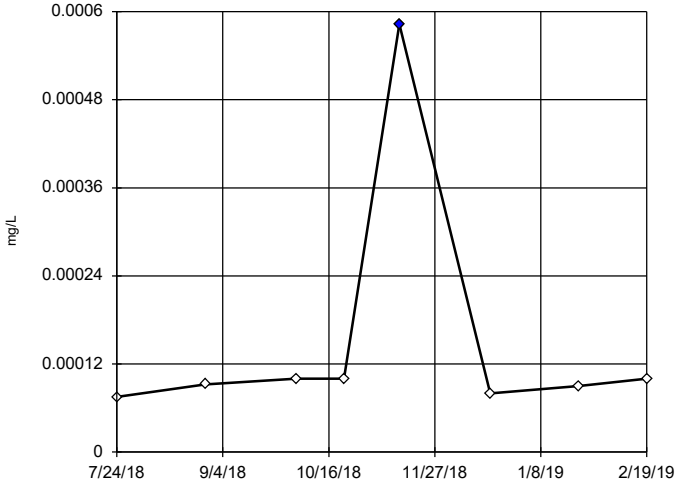
High cutoff = 0.00456, low cutoff = 0.00001917, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

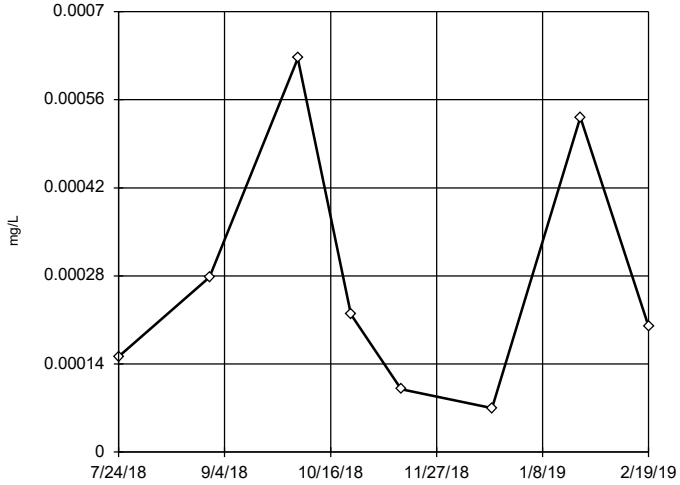
High cutoff = 0.0001637, low cutoff = 0.00005184, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

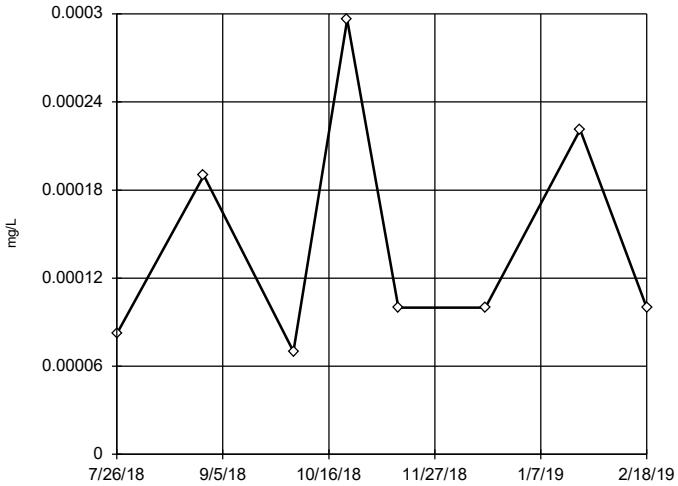
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01167, low cutoff = 0.000004062, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.002374, low cutoff = 0.000007815, based on IQR multiplier of 3.

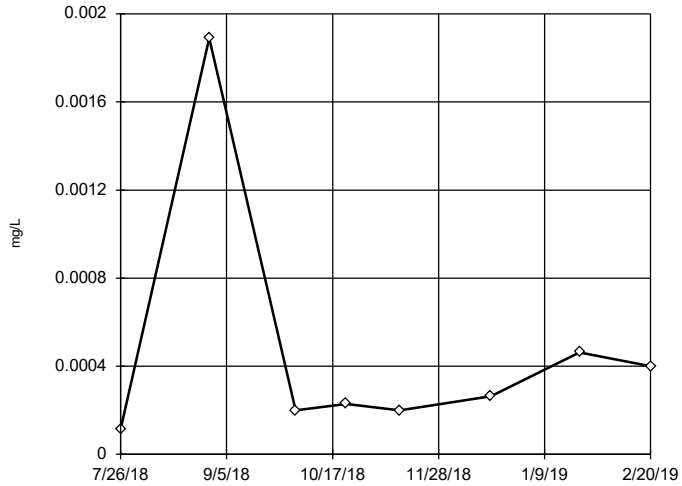
Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.004287, low cutoff = 0.00002008, based on IQR multiplier of 3.

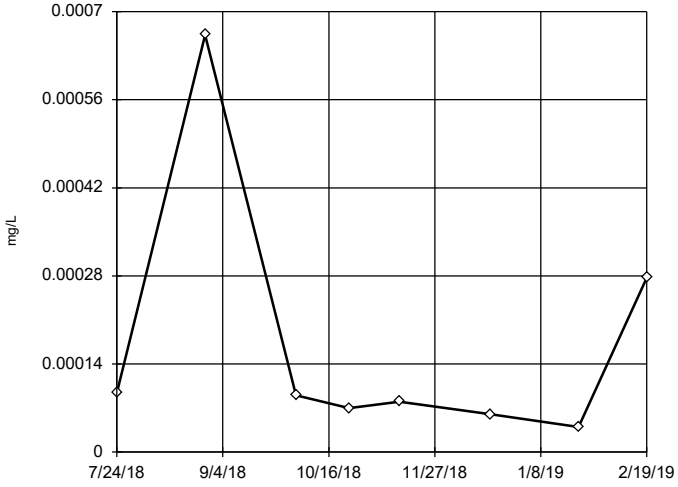
Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.002491, low cutoff = 0.000004198, based on IQR multiplier of 3.

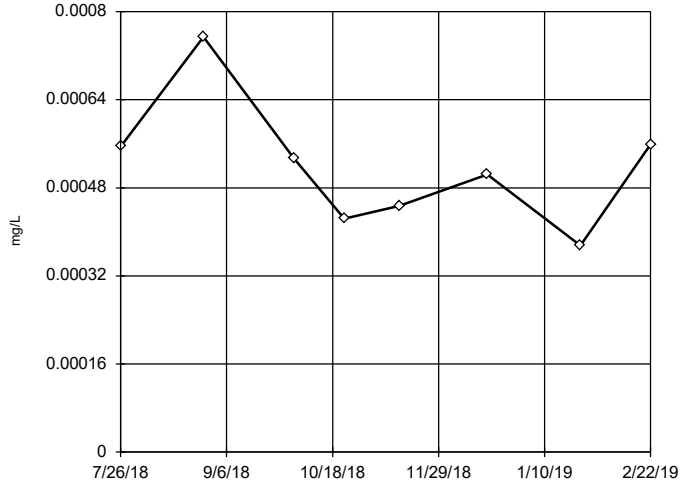
Constituent: Chromium Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

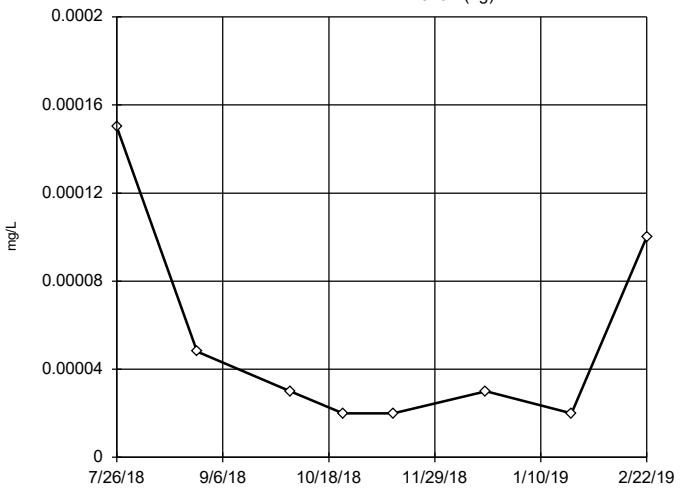
High cutoff = 0.001167, low cutoff = 0.0002079, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00288, low cutoff = 4.8e-7, based on IQR multiplier of 3.

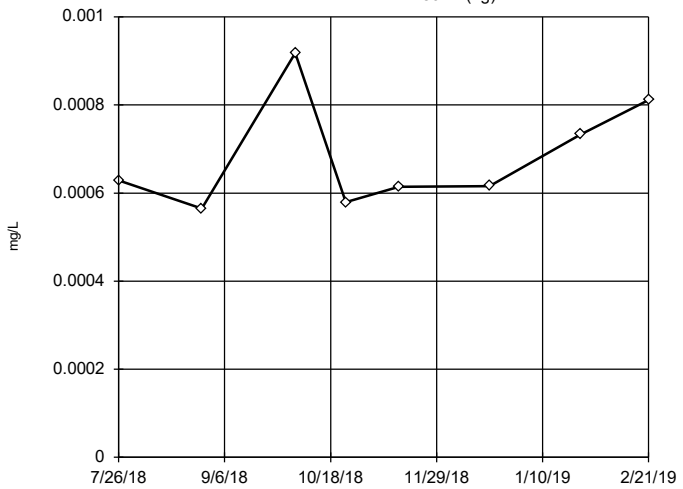
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001667, low cutoff = 0.0002757, based on IQR multiplier of 3.

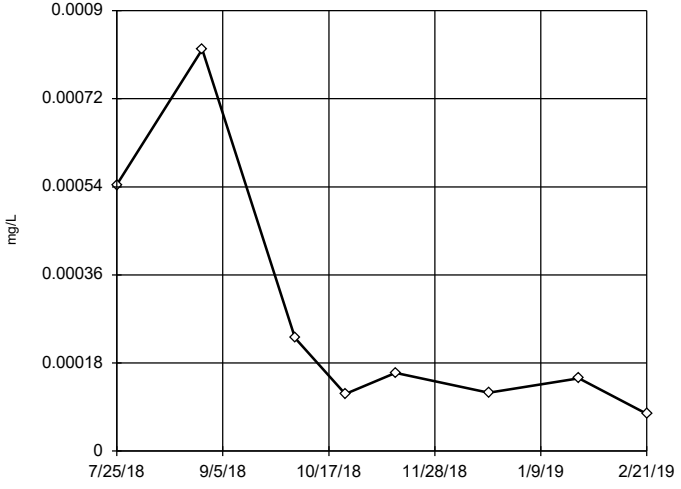
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.009612, low cutoff = 0.000004352, based on IQR multiplier of 3.

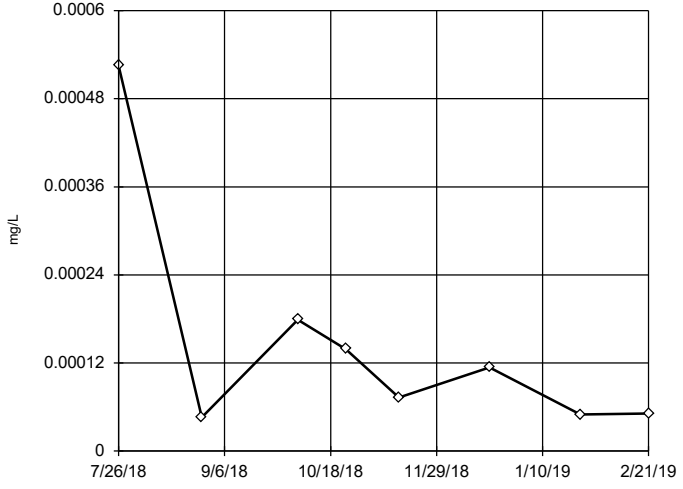
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method select-ed by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

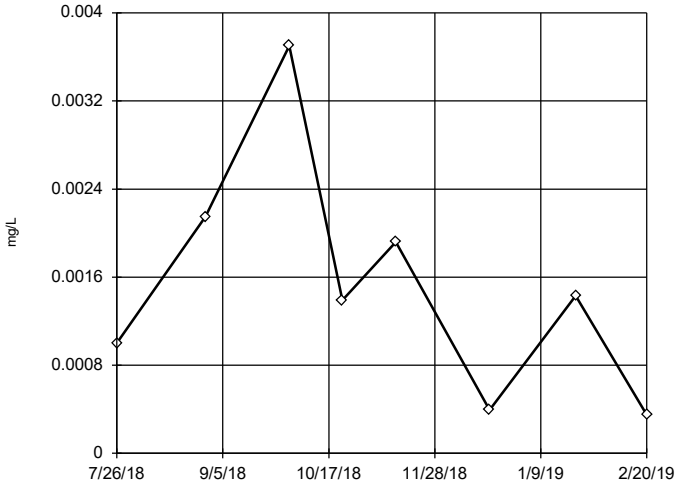
High cutoff = 0.004808, low cutoff = 0.000001657, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01065, low cutoff = -0.001049, based on IQR multiplier of 3.

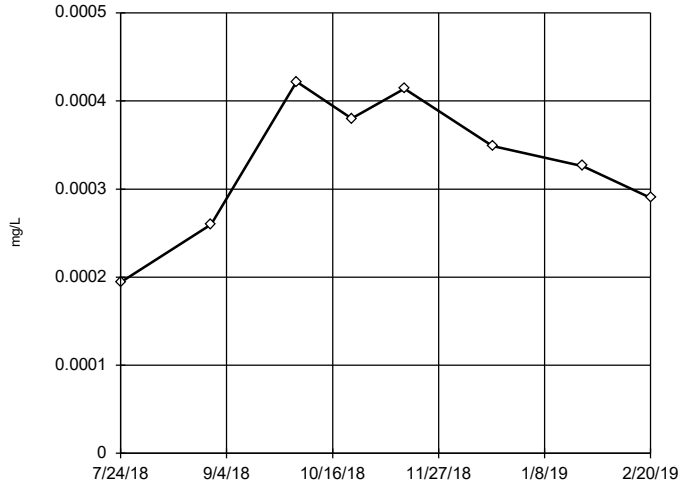
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0006356, low cutoff = -0.0004127, based on IQR multiplier of 3.

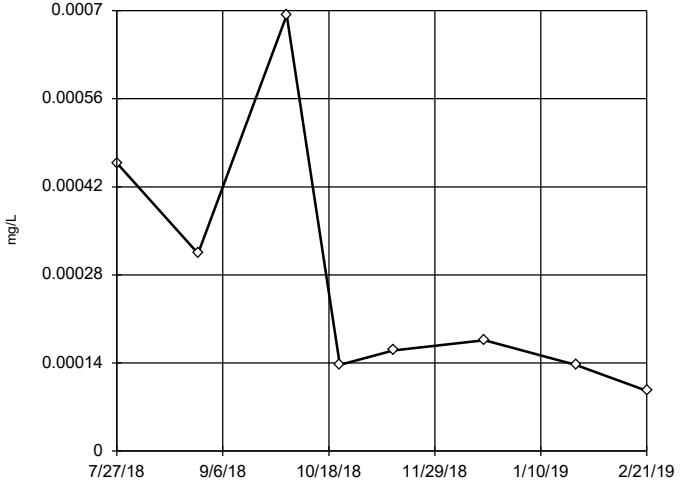
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.008043, low cutoff = 0.000006459, based on IQR multiplier of 3.

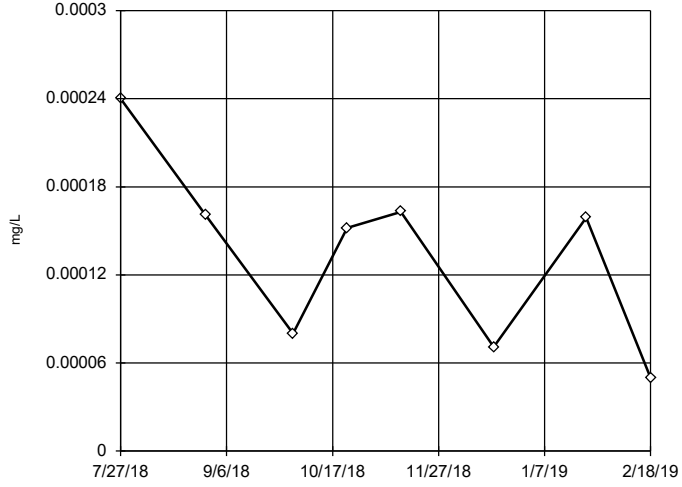
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

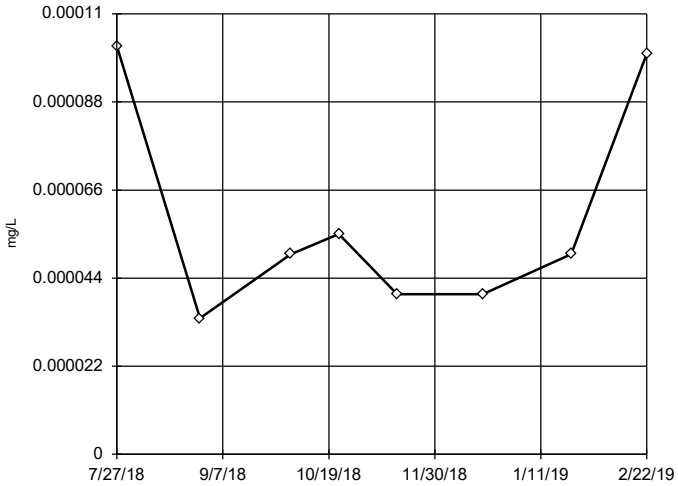
High cutoff = 0.0004215, low cutoff = -0.000184, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0004727, low cutoff = 0.000006276, based on IQR multiplier of 3.

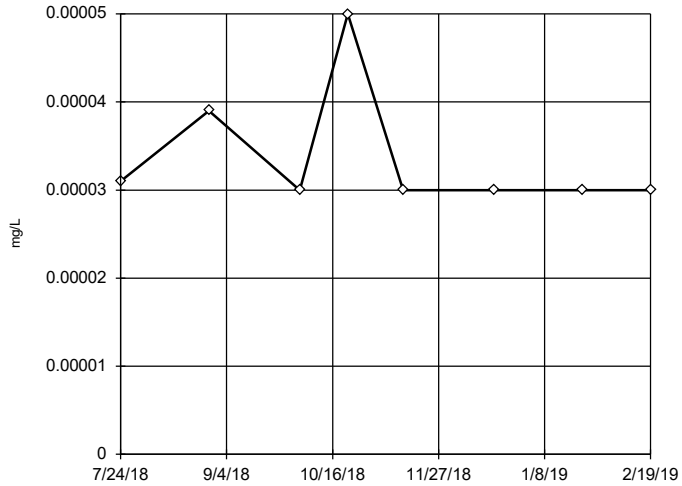
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00005414, low cutoff = 0.00001927, based on IQR multiplier of 3.

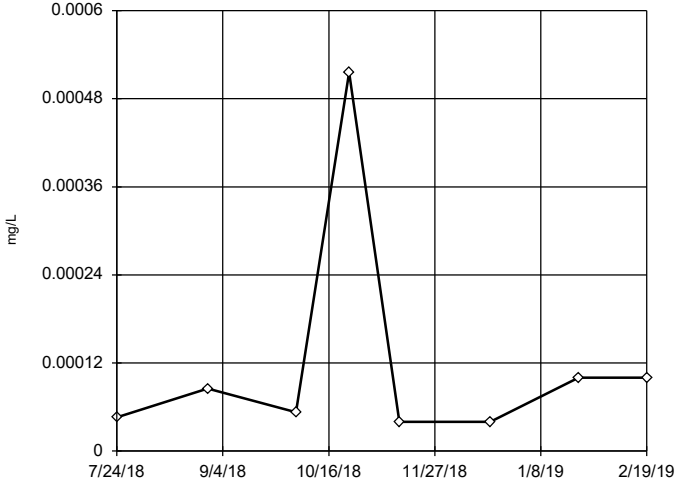
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001267, low cutoff = 0.000003386, based on IQR multiplier of 3.

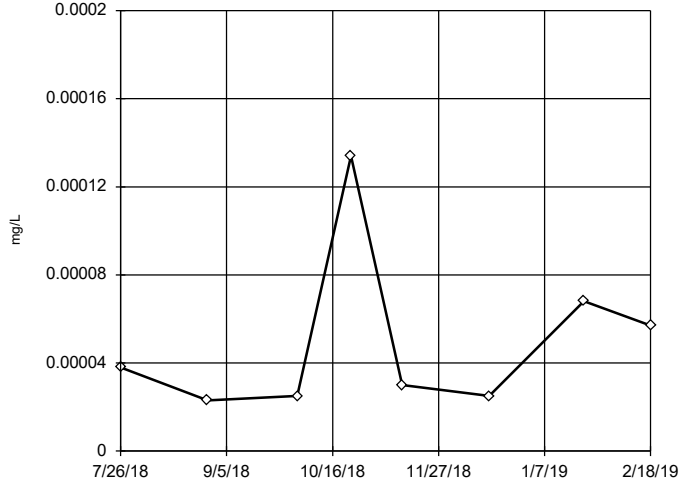
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

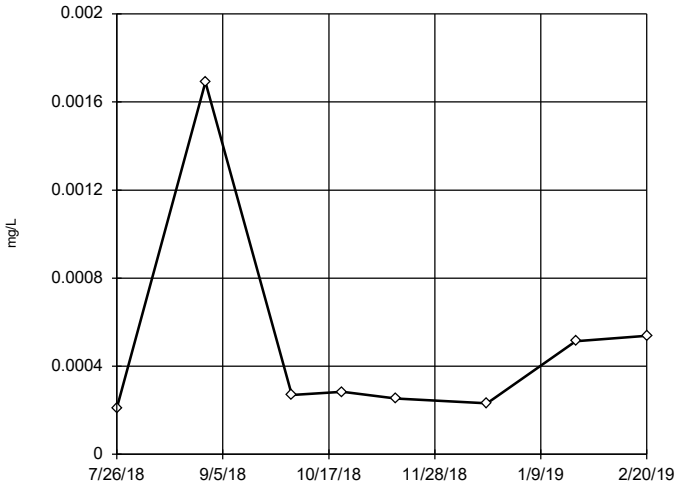
High cutoff = 0.0009615, low cutoff = 0.000001619, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.005391, low cutoff = 0.00002356, based on IQR multiplier of 3.

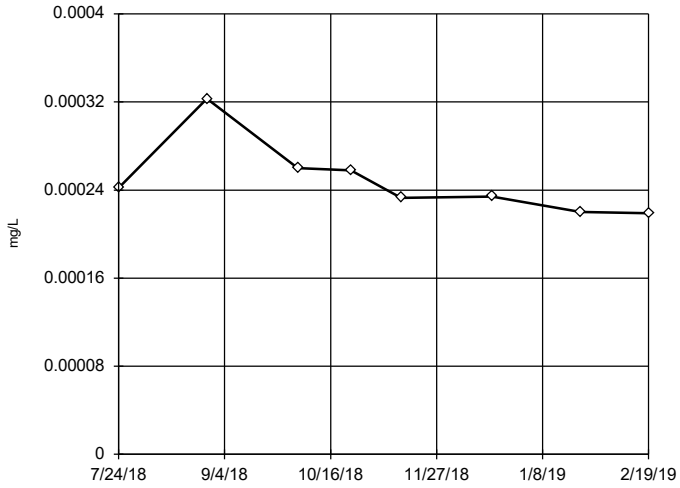
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0003877, low cutoff = 0.0001512, based on IQR multiplier of 3.

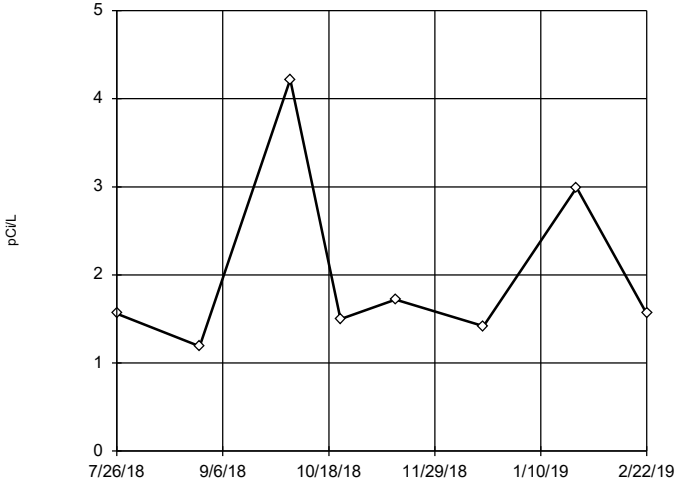
Constituent: Cobalt Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 8.508, low cutoff = 0.389, based on IQR multiplier of 3.

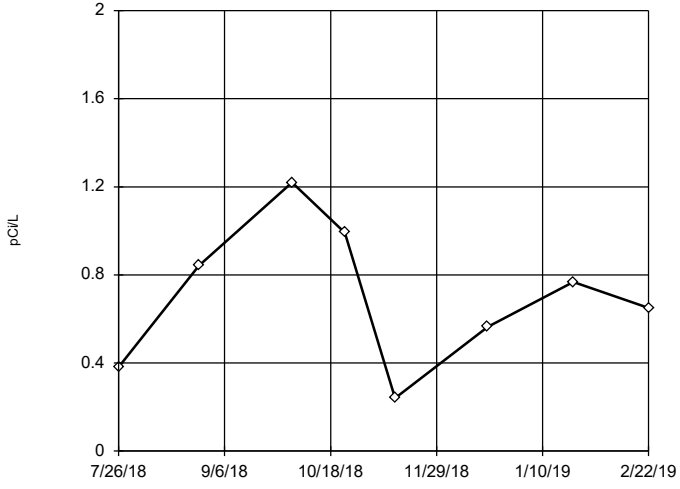
Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

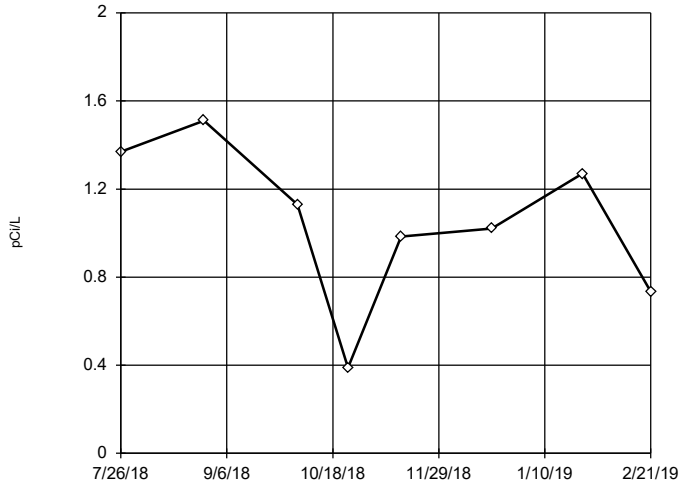
High cutoff = 2.248, low cutoff = -0.857, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

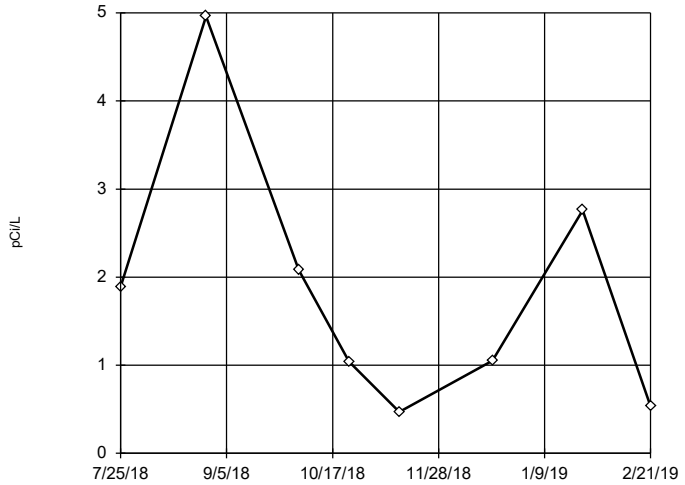
High cutoff = 2.171, low cutoff = -1.488, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

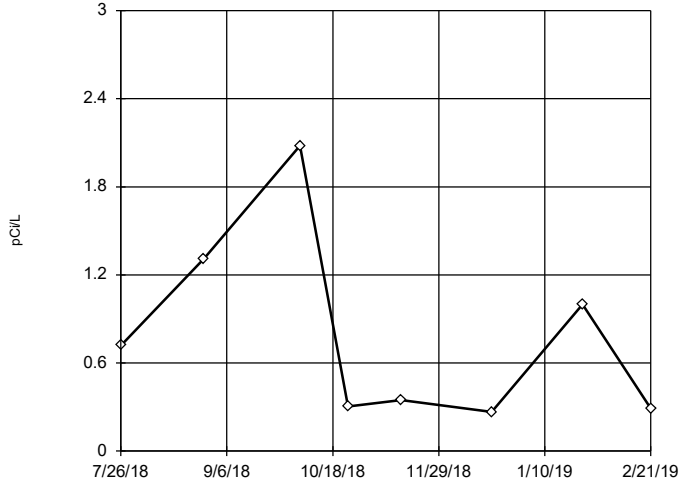
High cutoff = 79.41, low cutoff = 0.02251, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

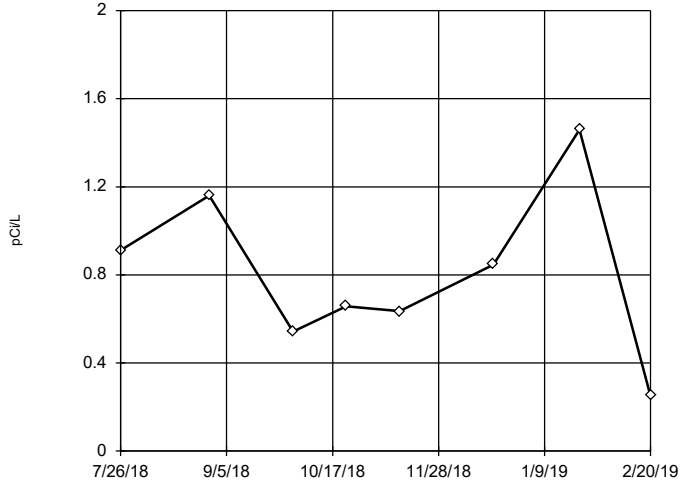
High cutoff = 64.9, low cutoff = 0.005254, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

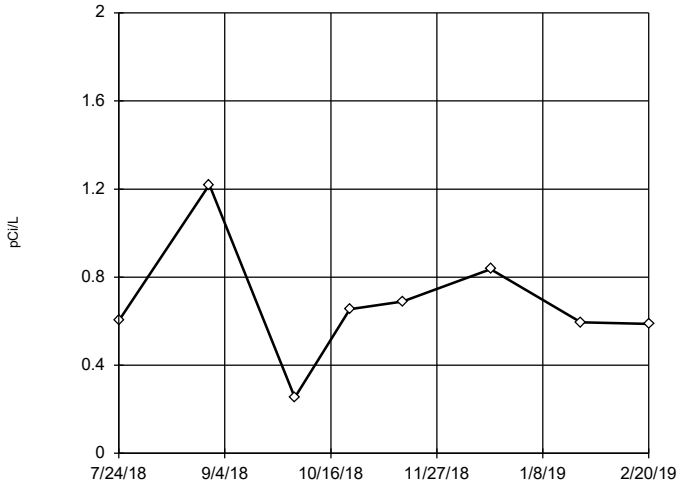
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.11, low cutoff = 0.0003794, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

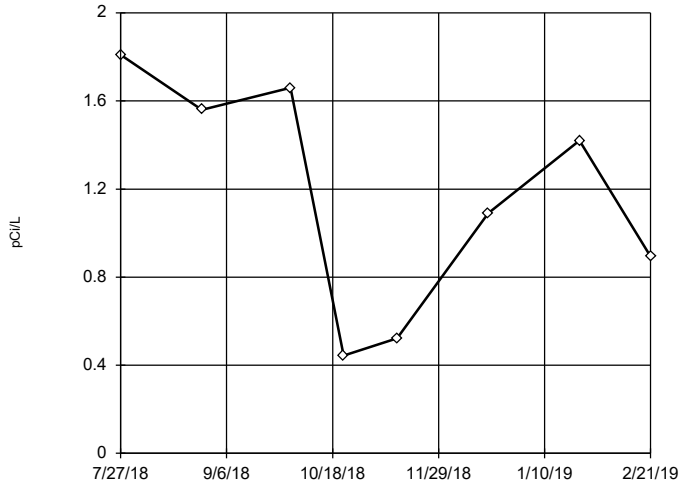
High cutoff = 1.399, low cutoff = 0.2106, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

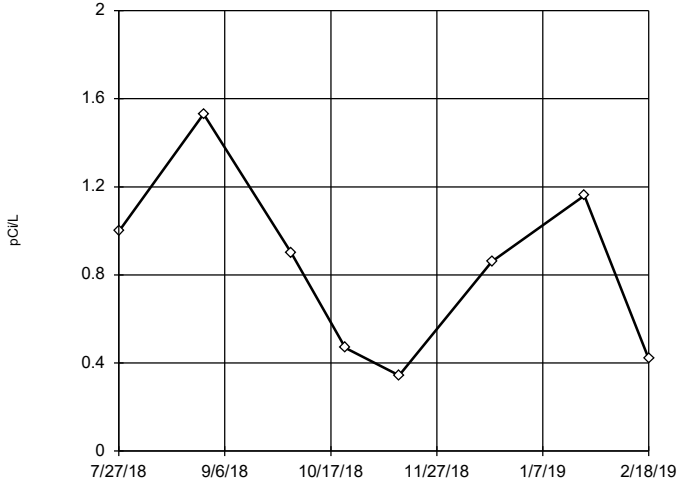
High cutoff = 2.961, low cutoff = -2.375, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

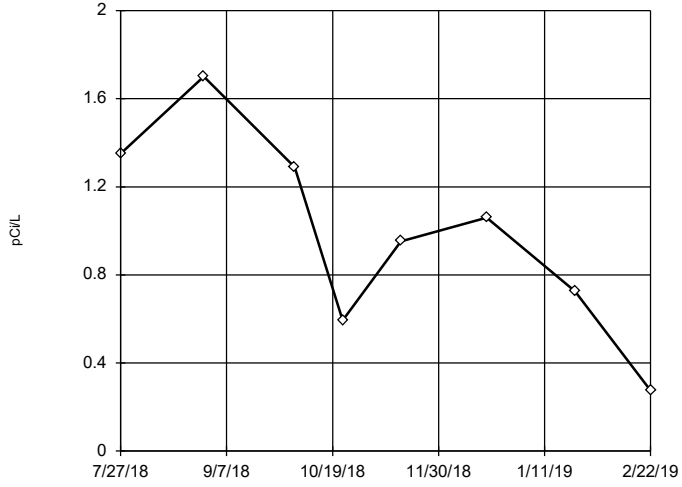
High cutoff = 4.639, low cutoff = -0.2023, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

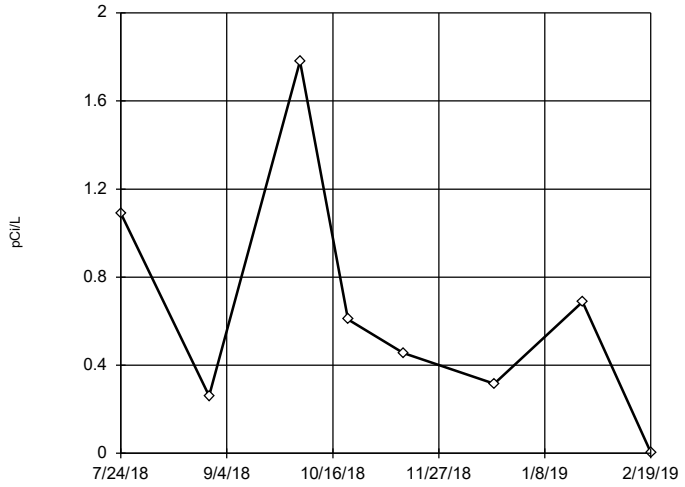
Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 3.302, low cutoff = -1.322, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

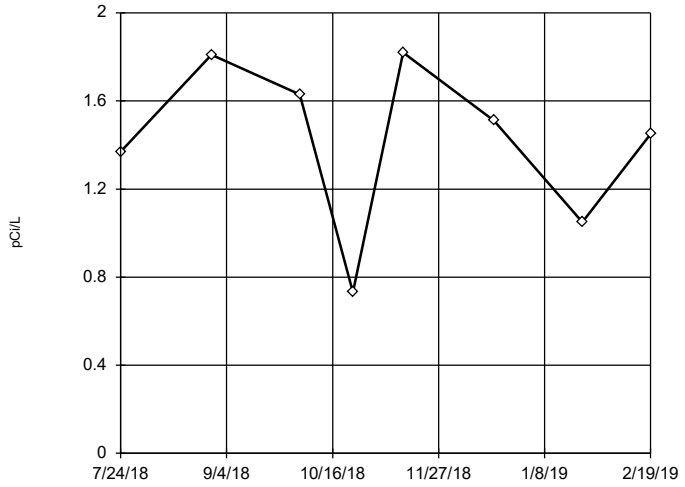
High cutoff = 4.569, low cutoff = -0.4412, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:54 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

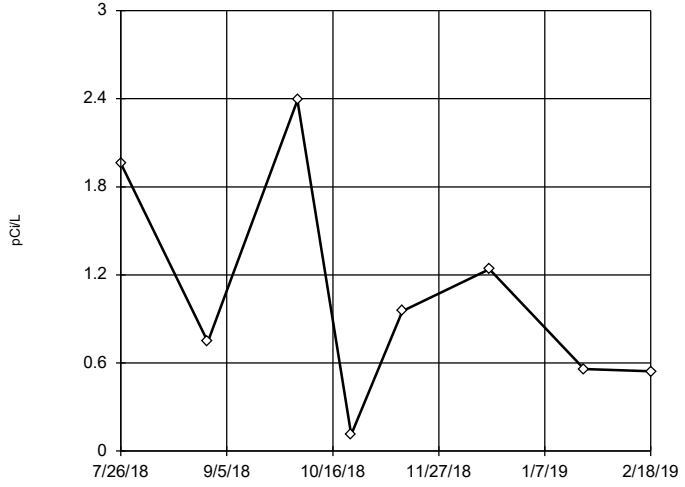
High cutoff = 2.462, low cutoff = -1.994, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

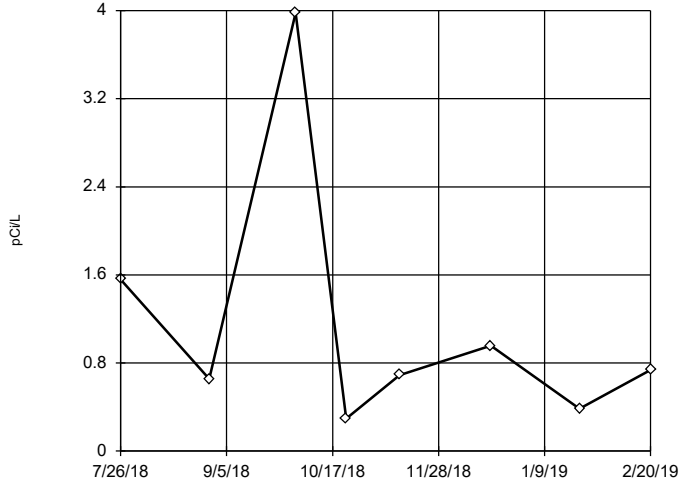
High cutoff = 7.847, low cutoff = -0.6441, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

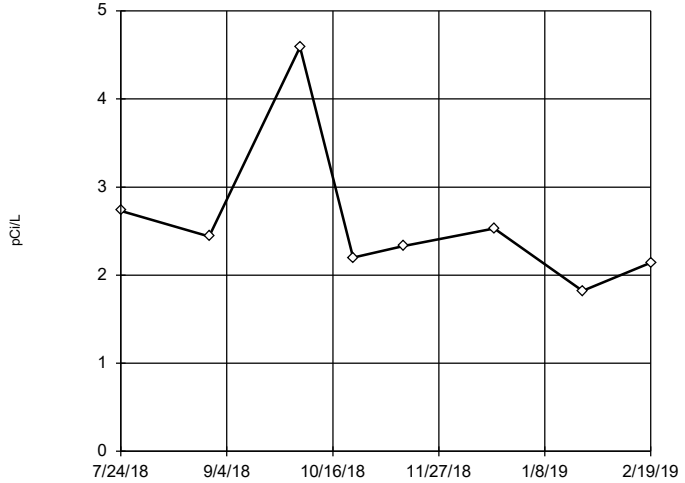
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 17.5, low cutoff = 0.0351, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

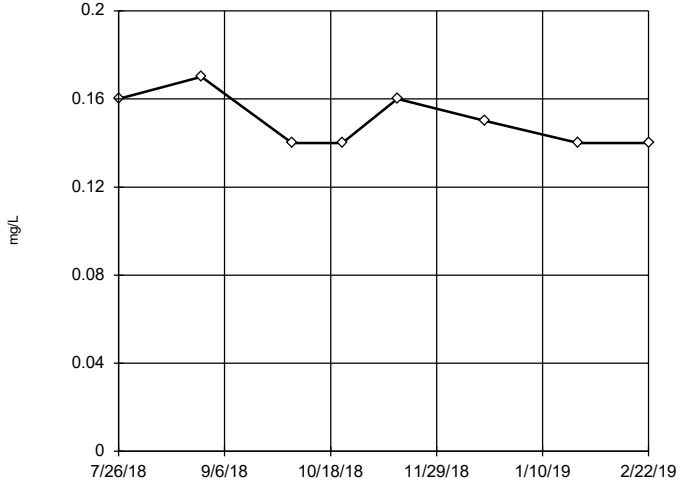
High cutoff = 4.67, low cutoff = 1.221, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

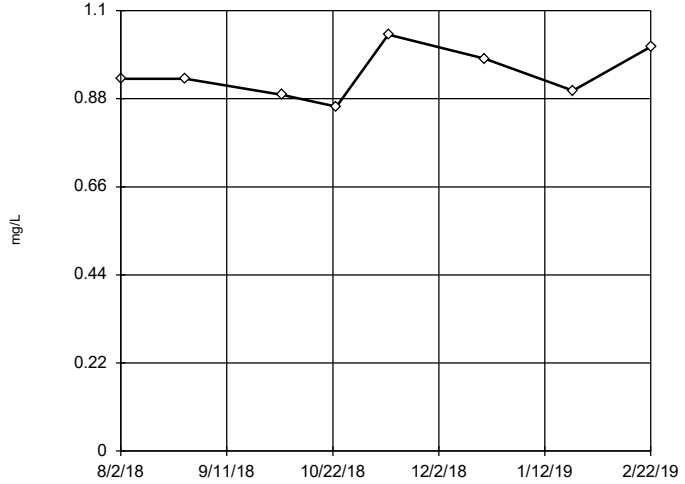
High cutoff = 0.2088, low cutoff = 0.04, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

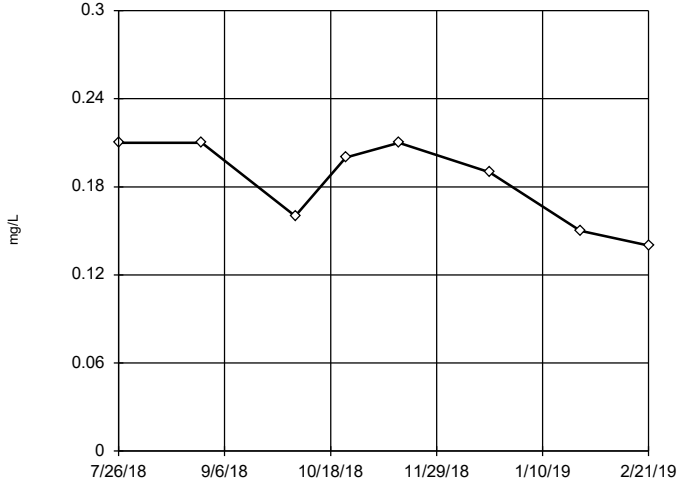
High cutoff = 1.367, low cutoff = 0.6515, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

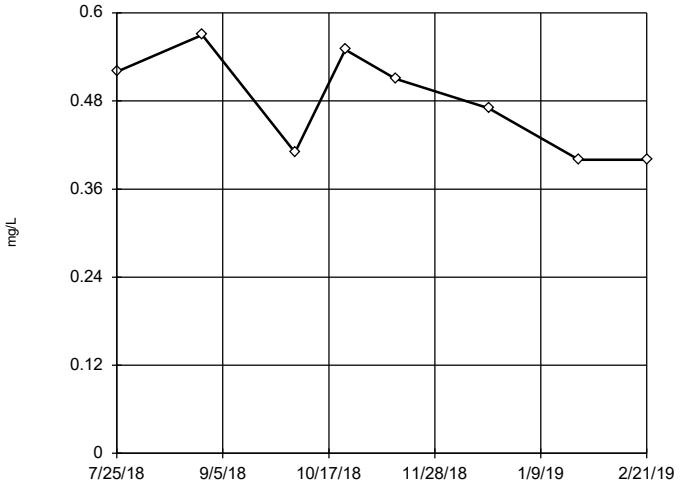
Data were cube transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2956, low cutoff = -0.2342, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were x^4 transformed to achieve best W statistic (graph shown in original units).

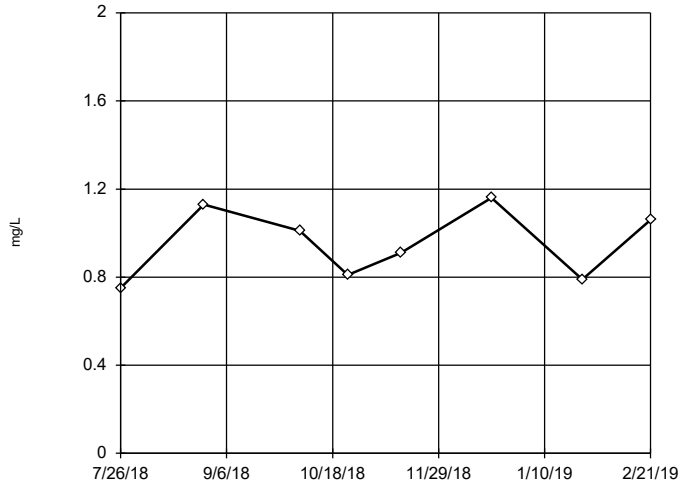
High cutoff = 0.706, low cutoff = -0.6108, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

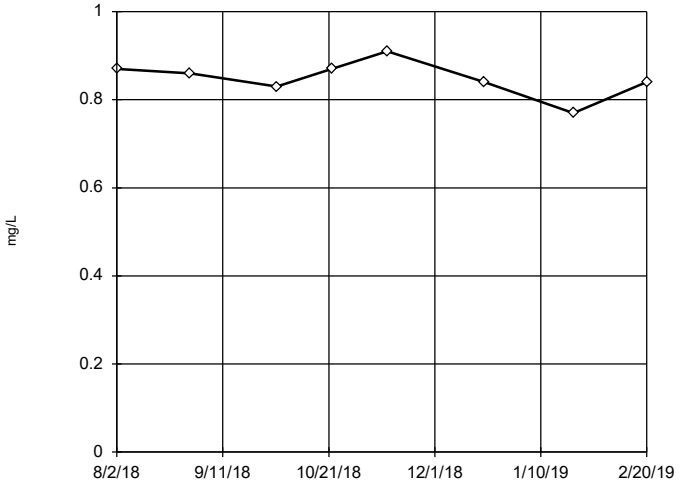
High cutoff = 1.98, low cutoff = -0.085, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

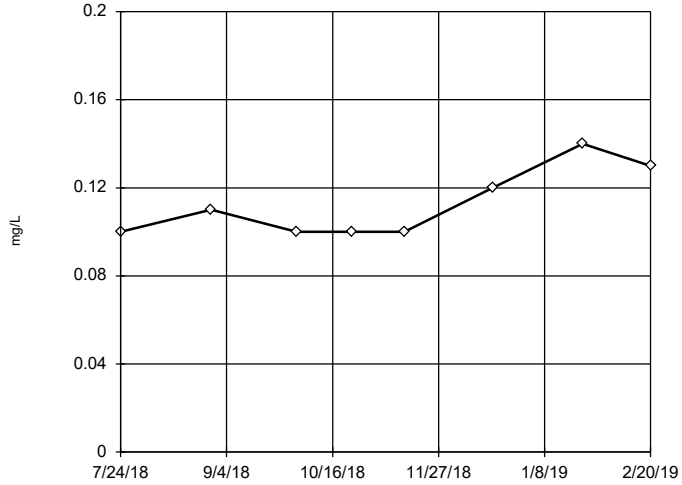
High cutoff = 0.9461, low cutoff = 0.6178, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

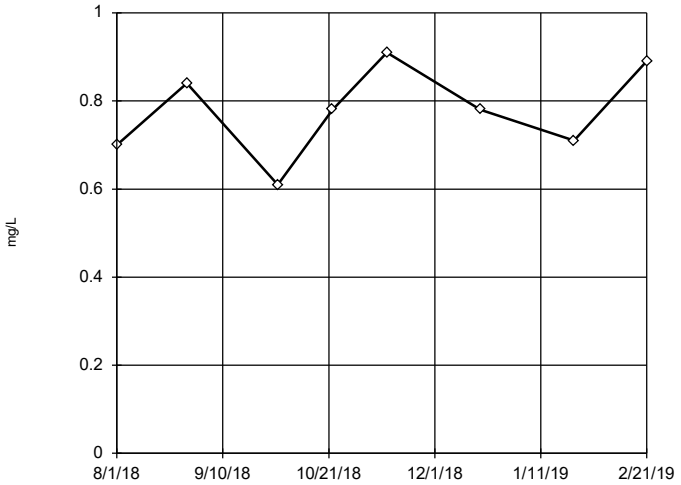
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2434, low cutoff = 0.05132, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

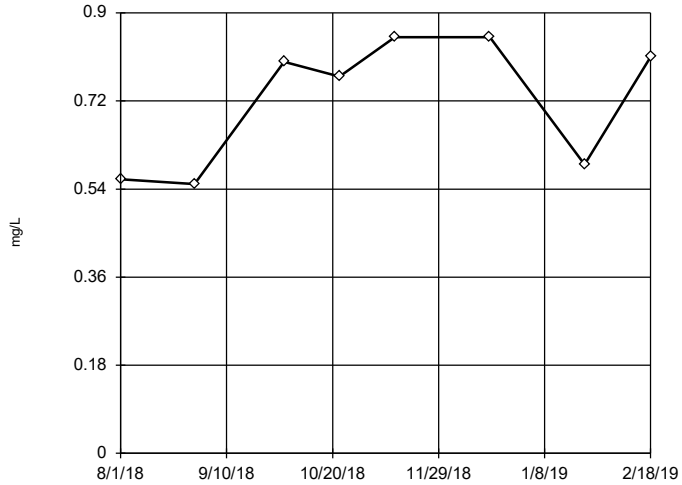
High cutoff = 1.226, low cutoff = -0.5083, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

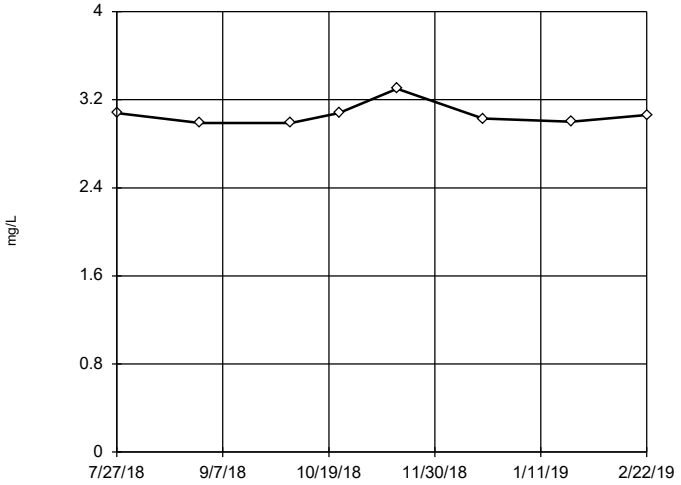
High cutoff = 1.032, low cutoff = -0.972, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

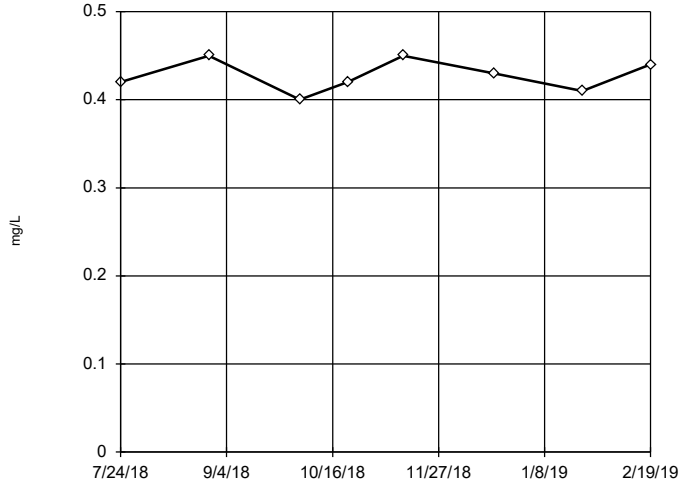
High cutoff = 3.35, low cutoff = 2.754, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

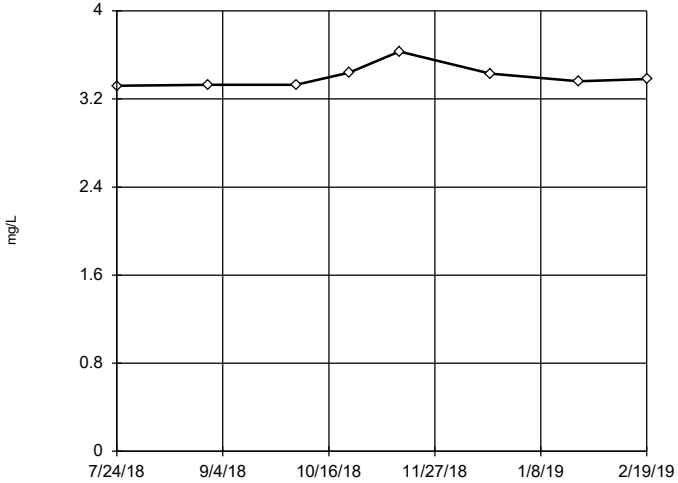
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.5486, low cutoff = 0.3366, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.77, low cutoff = 3.034, based on IQR multiplier of 3.

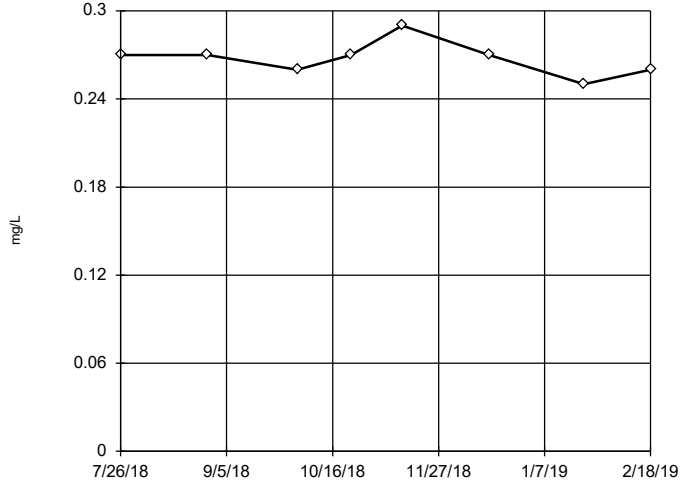
Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3024, low cutoff = 0.2322, based on IQR multiplier of 3.

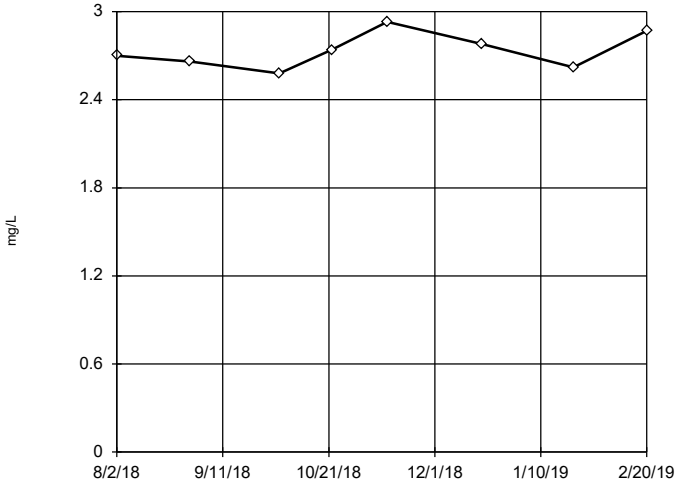
Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.46, low cutoff = 2.155, based on IQR multiplier of 3.

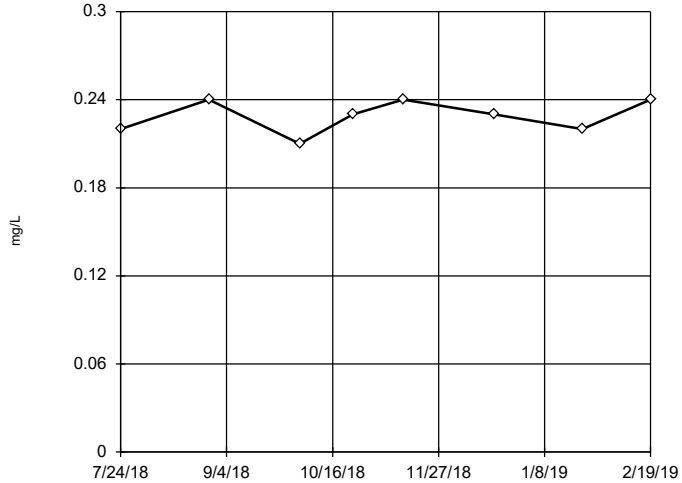
Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

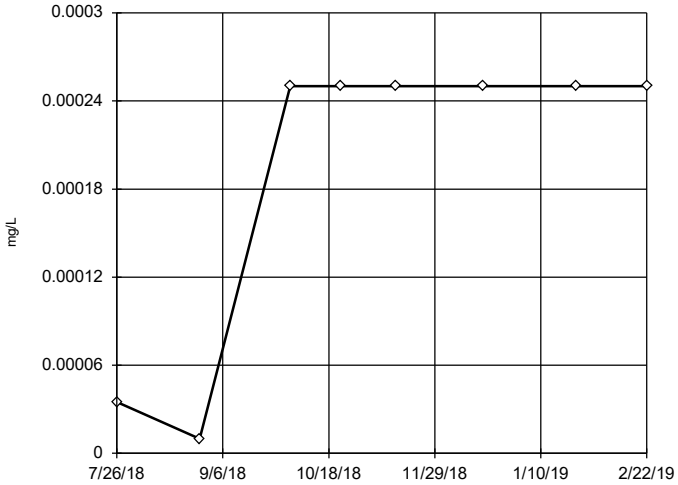
High cutoff = 0.2919, low cutoff = 0.1442, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.004773, low cutoff = 0.0000049, based on IQR multiplier of 3.

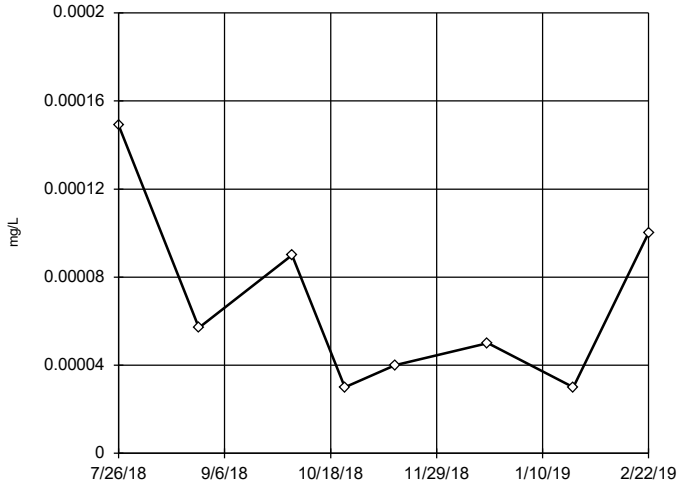
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001949, low cutoff = 0.000001687, based on IQR multiplier of 3.

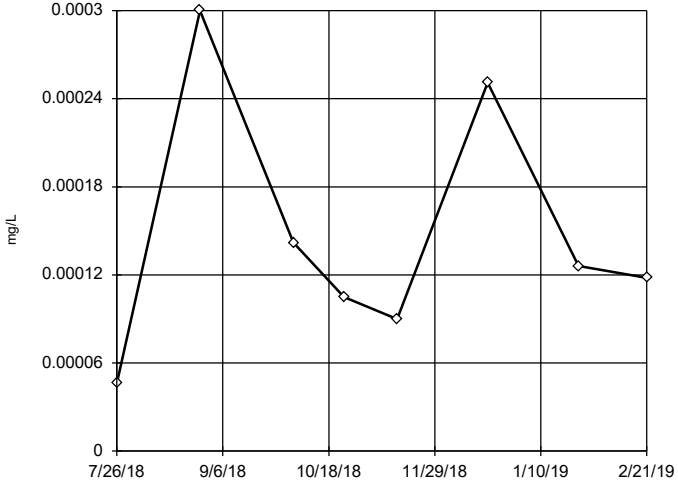
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001383, low cutoff = 0.00001327, based on IQR multiplier of 3.

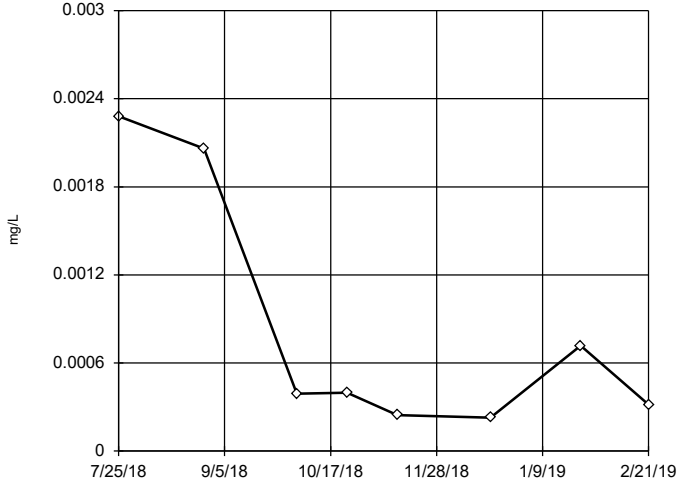
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

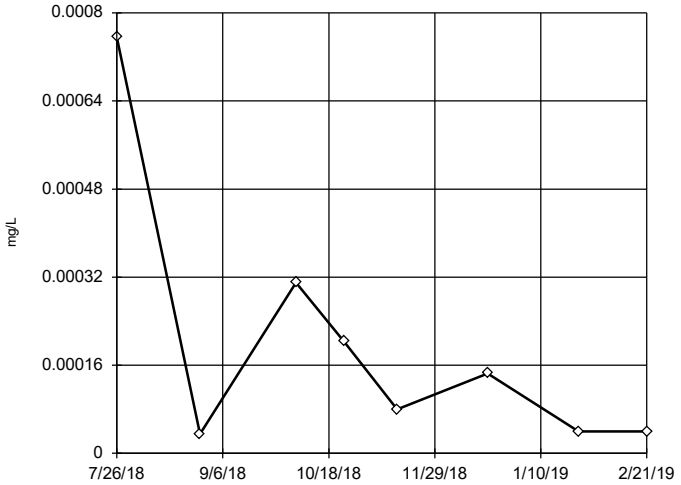
High cutoff = 0.1013, low cutoff = 0.000003339, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.06188, low cutoff = 1.6e-7, based on IQR multiplier of 3.

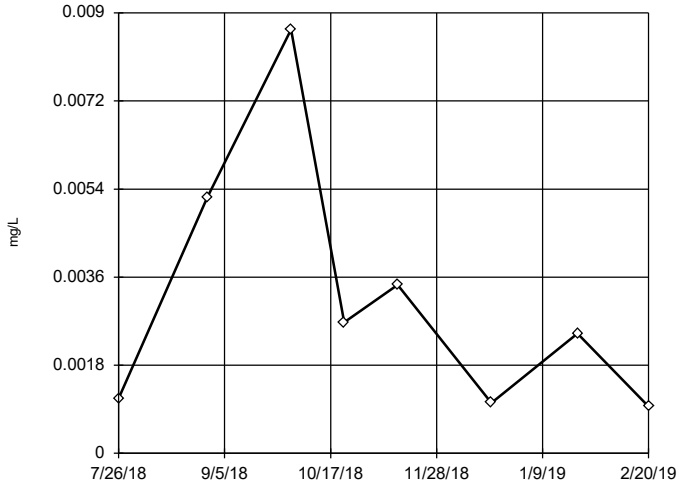
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2612, low cutoff = 0.00001744, based on IQR multiplier of 3.

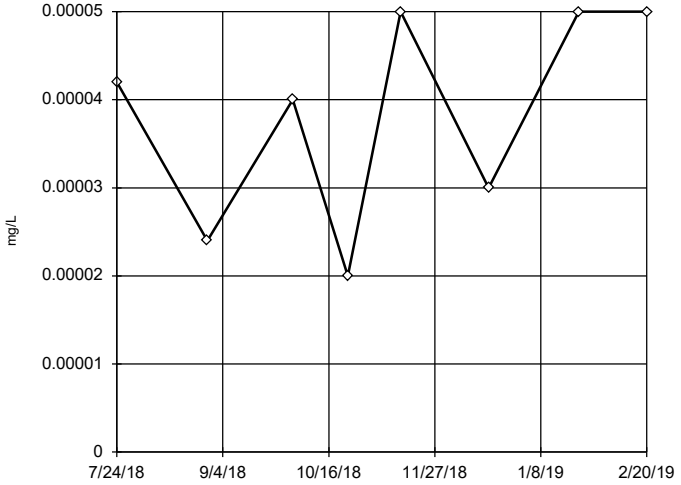
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.000119, low cutoff = -0.000042, based on IQR multiplier of 3.

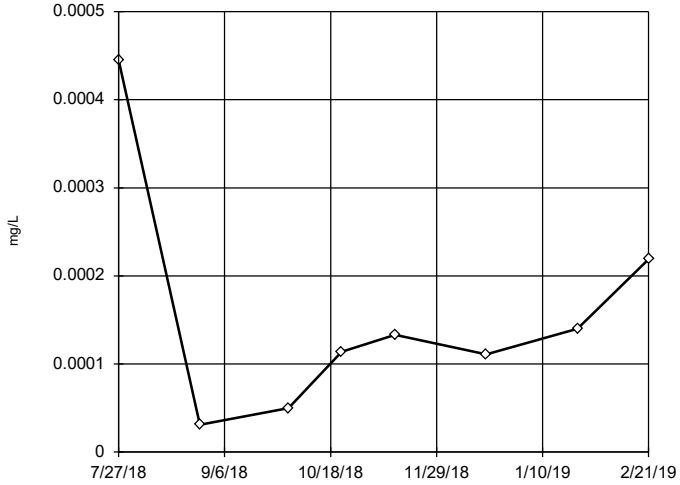
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

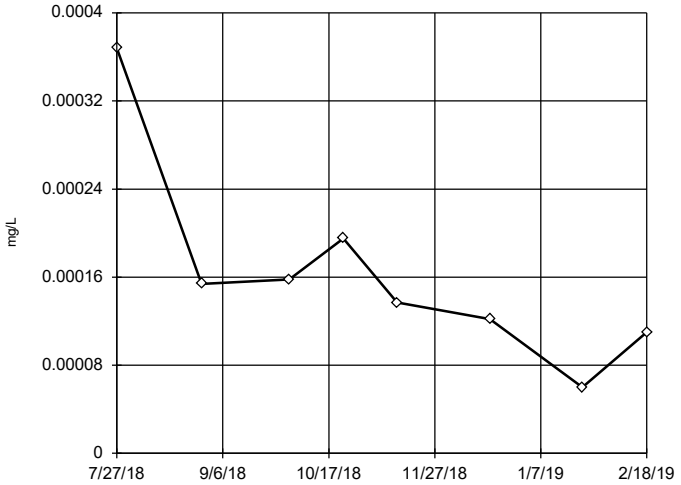
High cutoff = 0.002274, low cutoff = 0.000005738, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0006106, low cutoff = 0.0000333, based on IQR multiplier of 3.

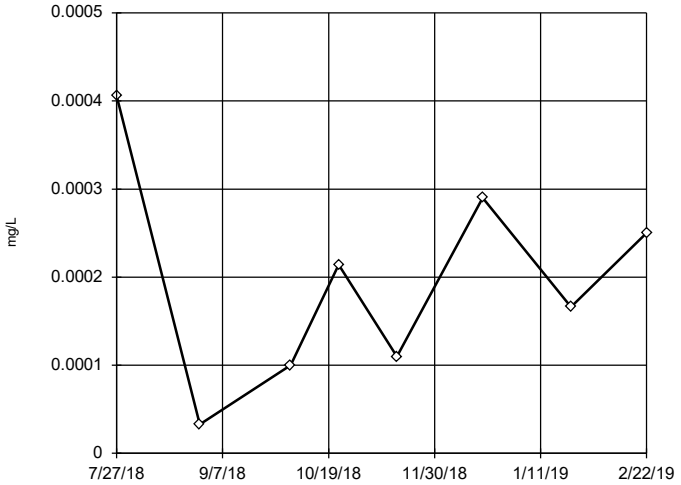
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001221, low cutoff = -0.00006864, based on IQR multiplier of 3.

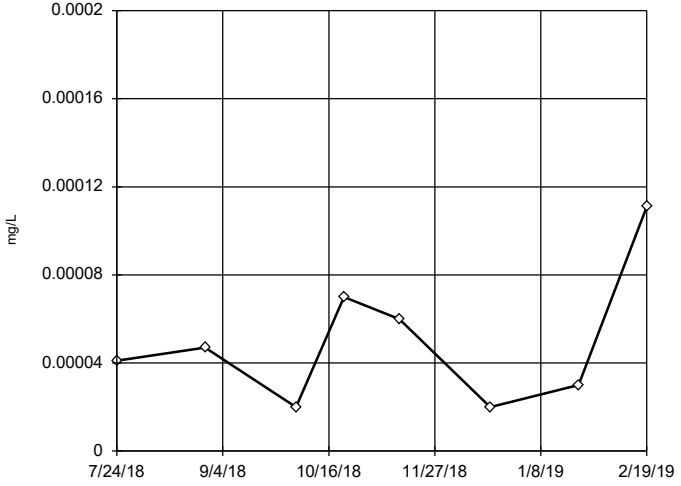
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0012, low cutoff = 0.000001323, based on IQR multiplier of 3.

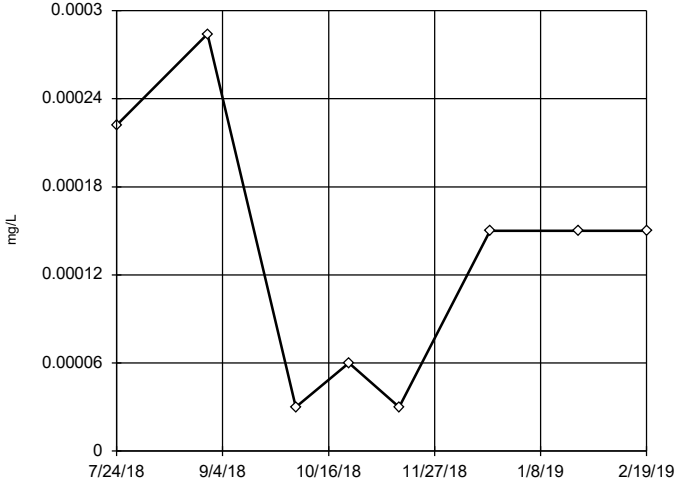
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

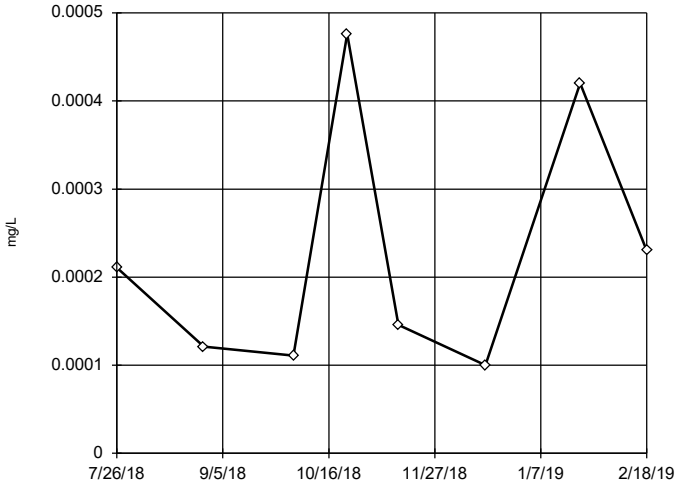
High cutoff = 0.000609, low cutoff = -0.000378, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.005995, low cutoff = 0.000006008, based on IQR multiplier of 3.

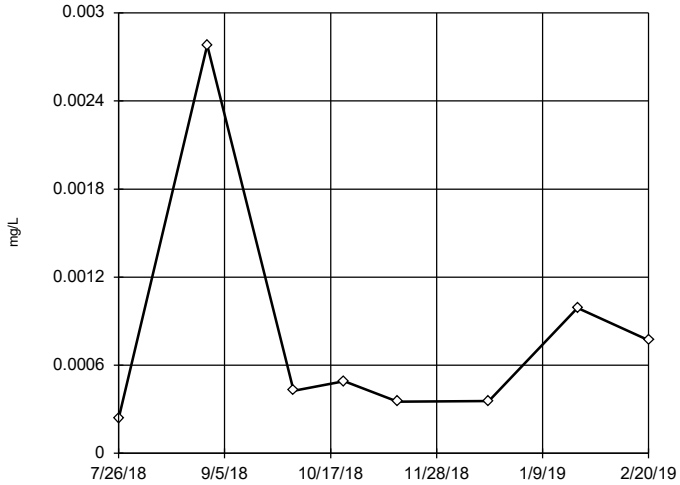
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01304, low cutoff = 0.00002373, based on IQR multiplier of 3.

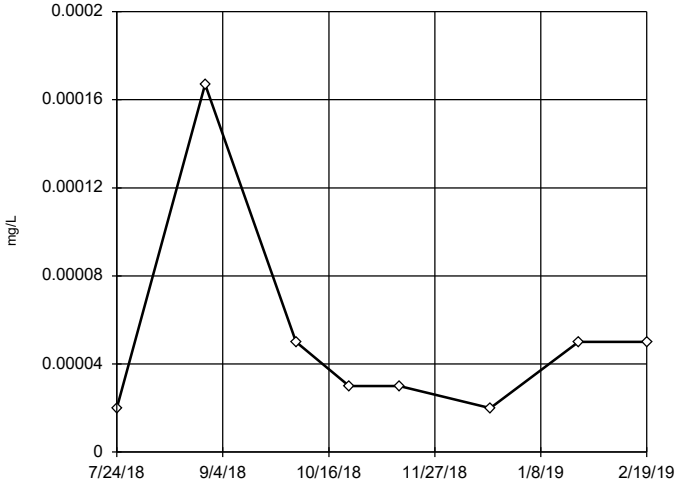
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0004253, low cutoff = 0.00000288, based on IQR multiplier of 3.

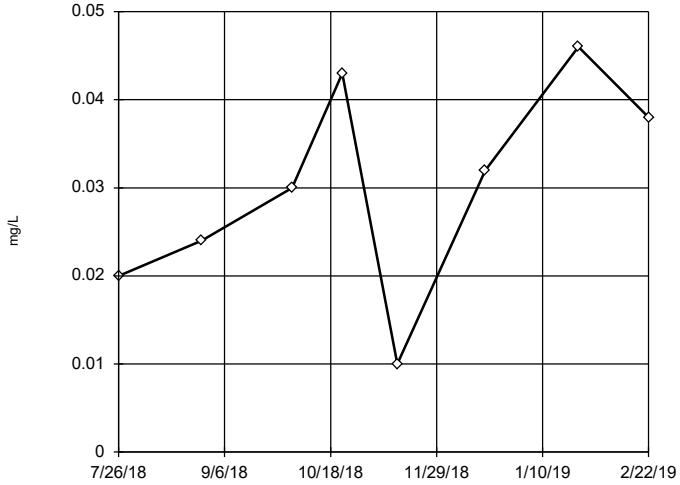
Constituent: Lead Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

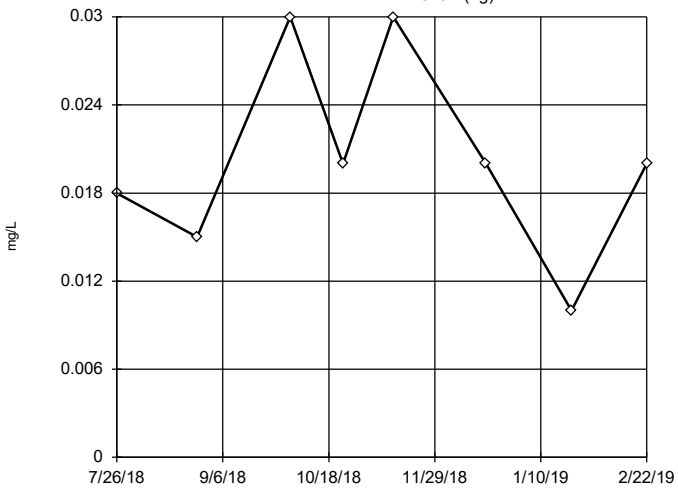
High cutoff = 0.096, low cutoff = -0.0335, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.06462, low cutoff = 0.002995, based on IQR multiplier of 3.

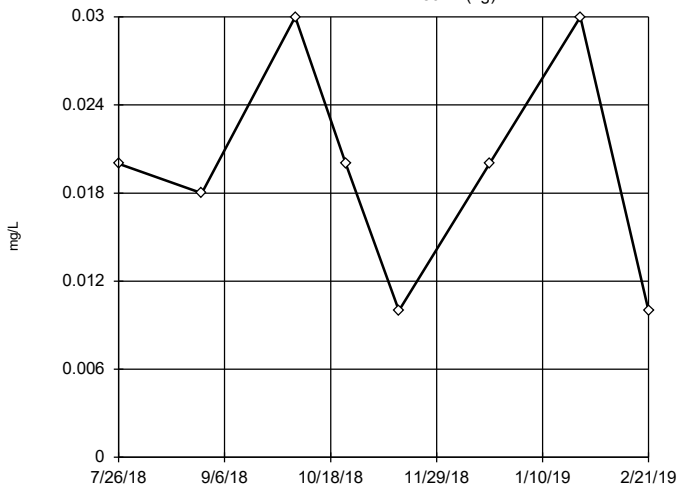
Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.058, low cutoff = -0.019, based on IQR multiplier of 3.

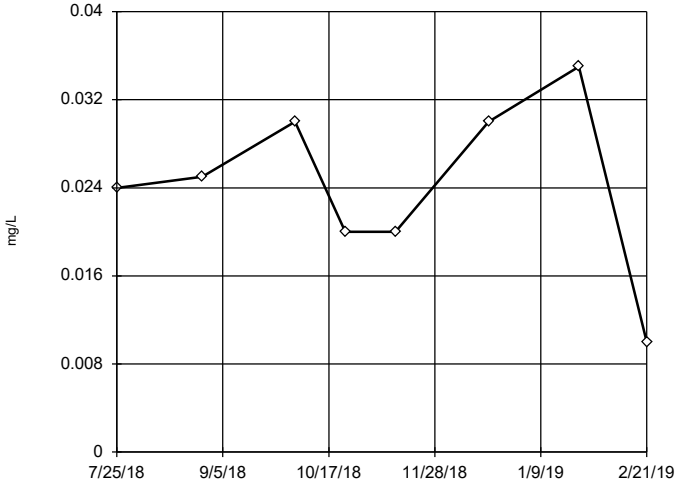
Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.04899, low cutoff = -0.03317, based on IQR multiplier of 3.

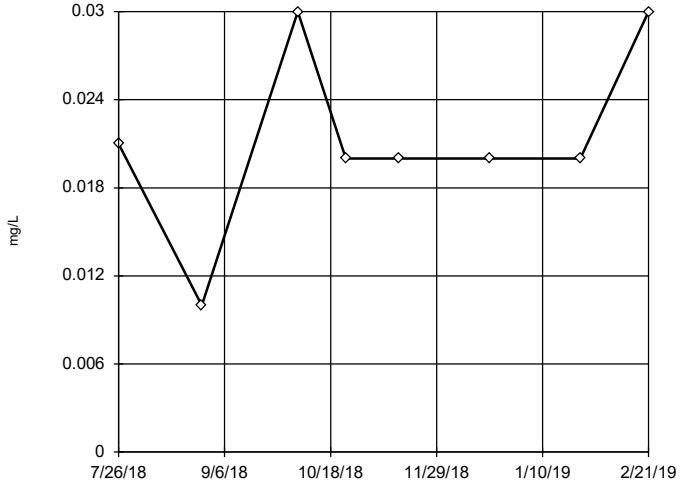
Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

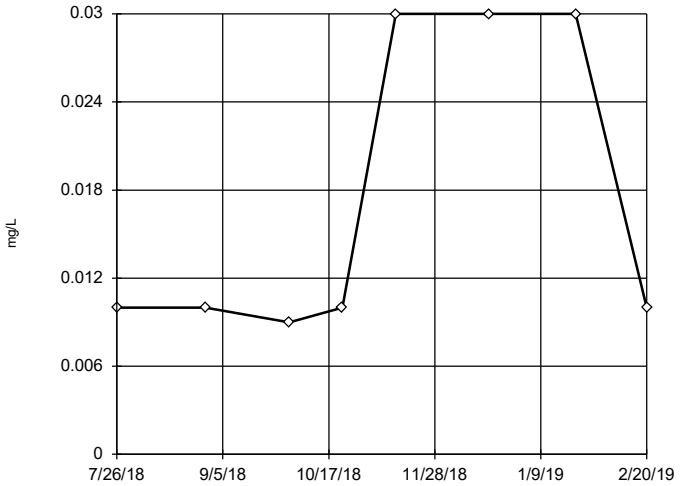
High cutoff = 0.042, low cutoff = 0.0035, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

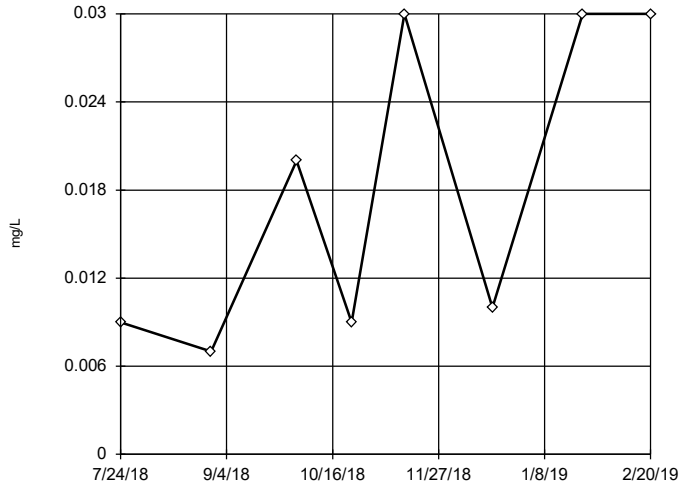
High cutoff = 0.81, low cutoff = 0.0003704, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

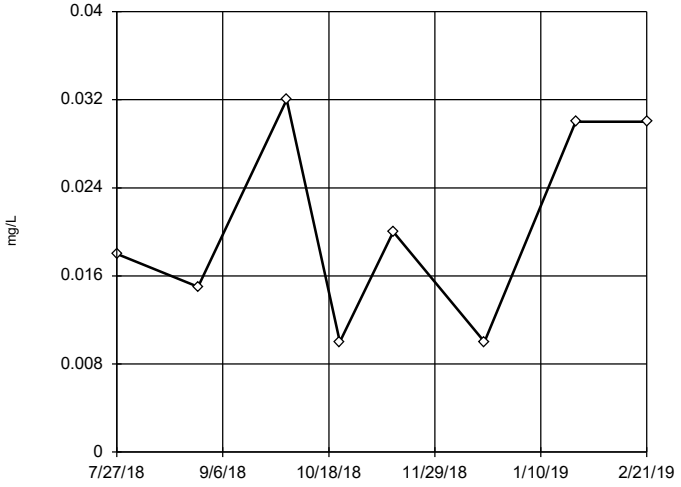
High cutoff = 1.111, low cutoff = 0.000243, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

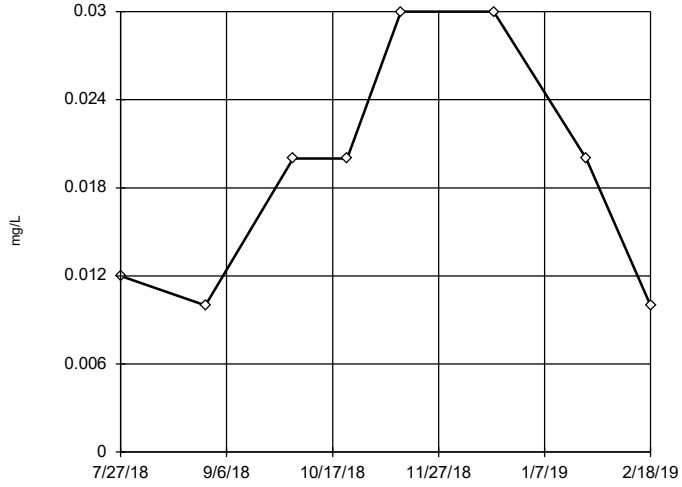
High cutoff = 0.1662, low cutoff = -5.2e-7, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

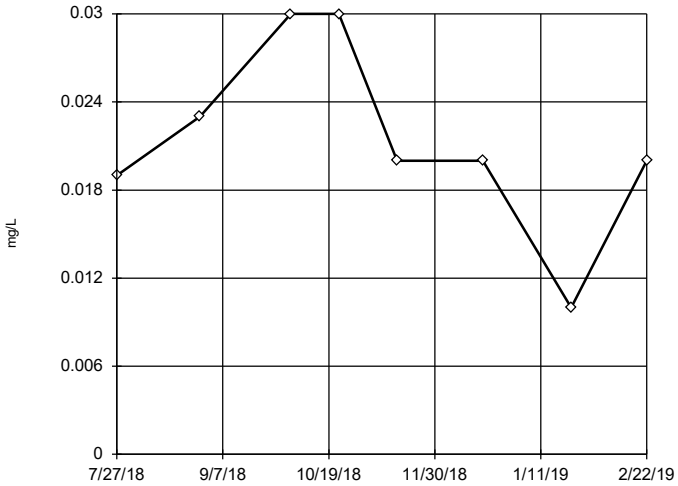
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.09918, low cutoff = -0.002793, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 4/18/2019 4:55 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 0.0475, low cutoff = -0.0015, based on IQR multiplier of 3.

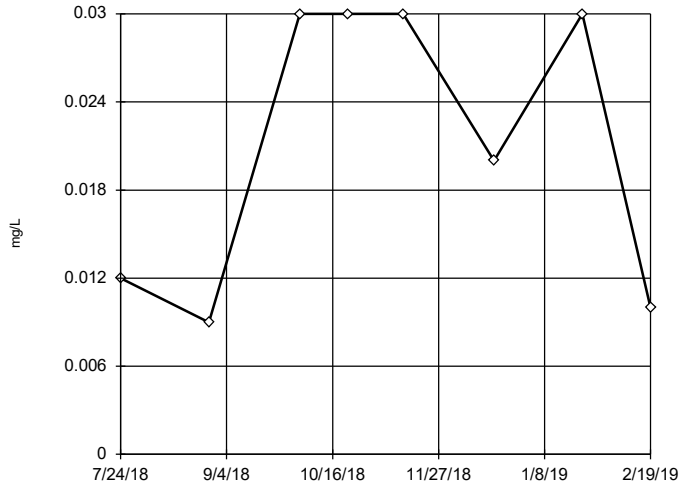
Constituent: Lithium Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.6162, low cutoff = 0.0005333, based on IQR multiplier of 3.

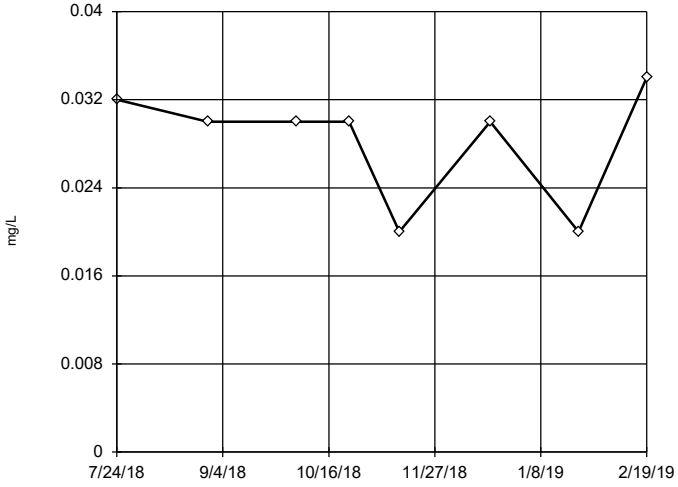
Constituent: Lithium Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.03663, low cutoff = -0.03222, based on IQR multiplier of 3.

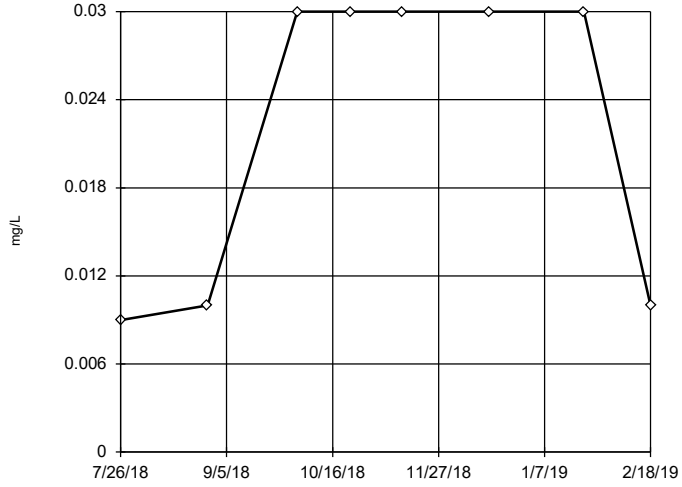
Constituent: Lithium Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

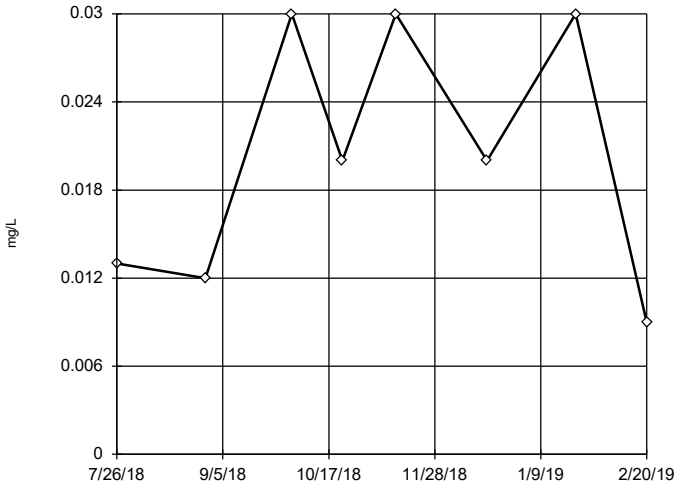
High cutoff = 0.81, low cutoff = 0.0003704, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.4157, low cutoff = 0.0009013, based on IQR multiplier of 3.

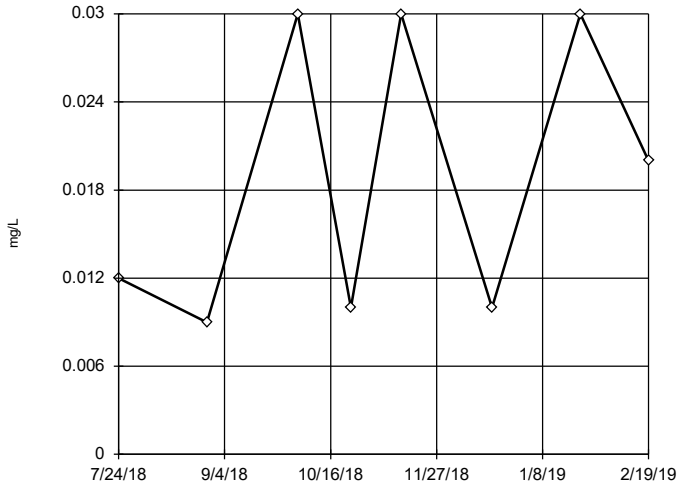
Constituent: Lithium Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.81, low cutoff = 0.0003704, based on IQR multiplier of 3.

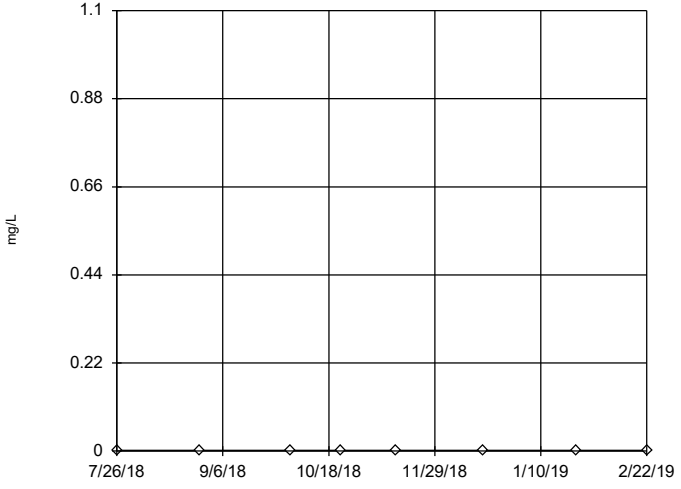
Constituent: Lithium Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

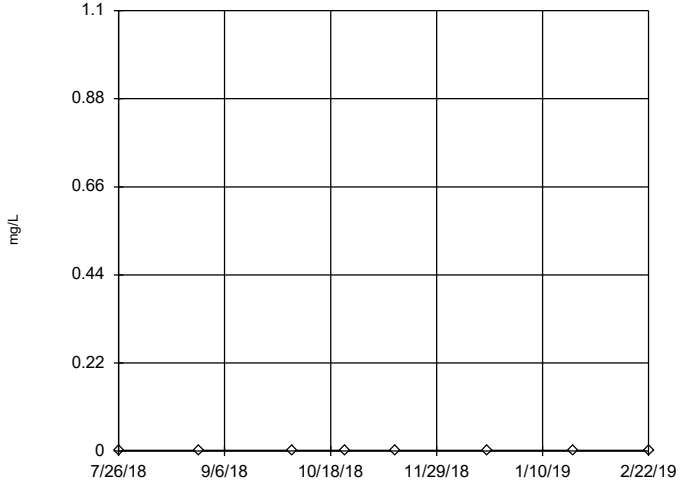
Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

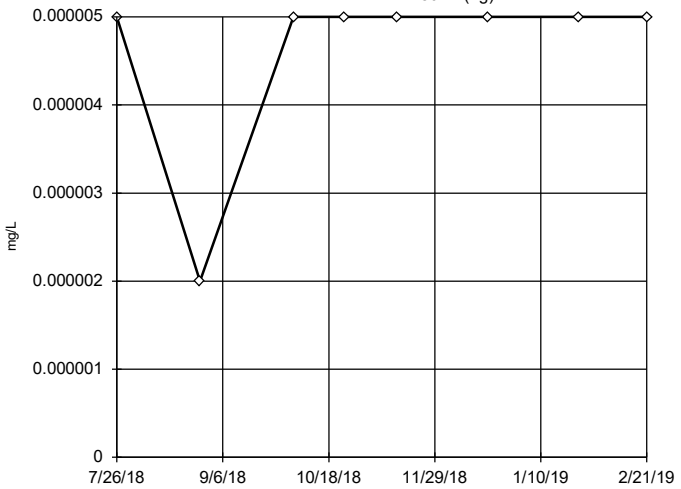
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

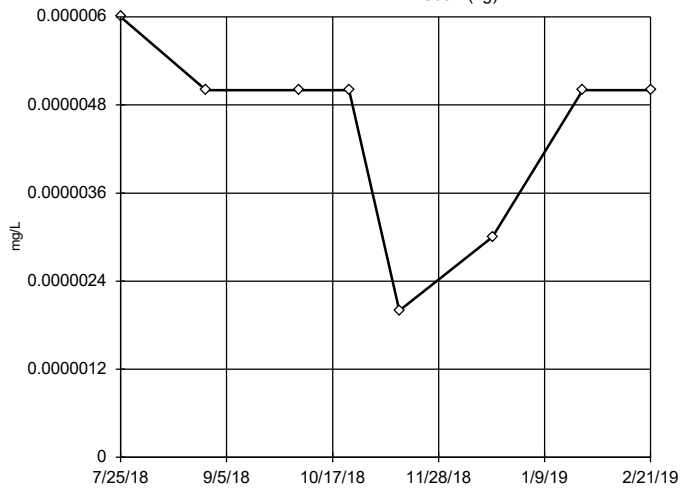
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

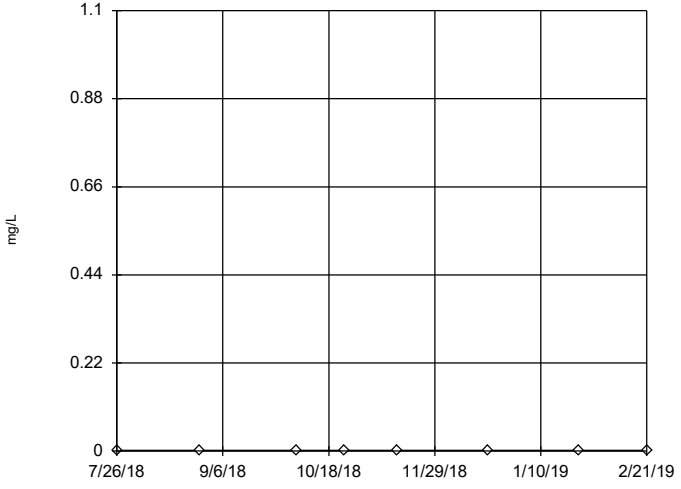
The results were invalidated, because both the lower and upper quartiles represent reporting limits.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

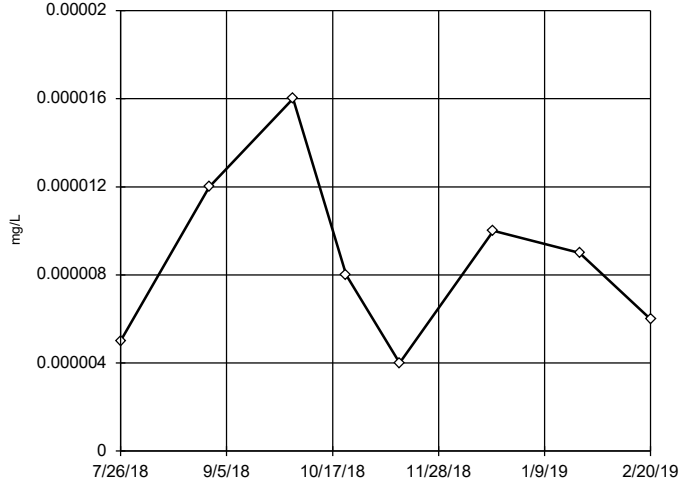
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

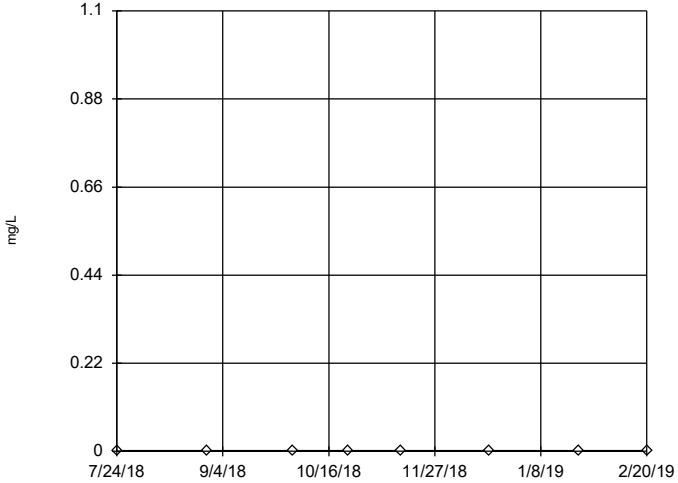
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00008764, low cutoff = 6.8e-7, based on IQR multiplier of 3.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

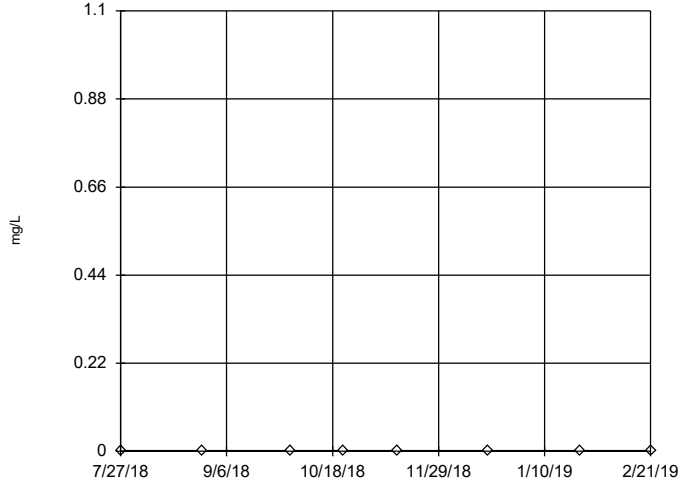
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

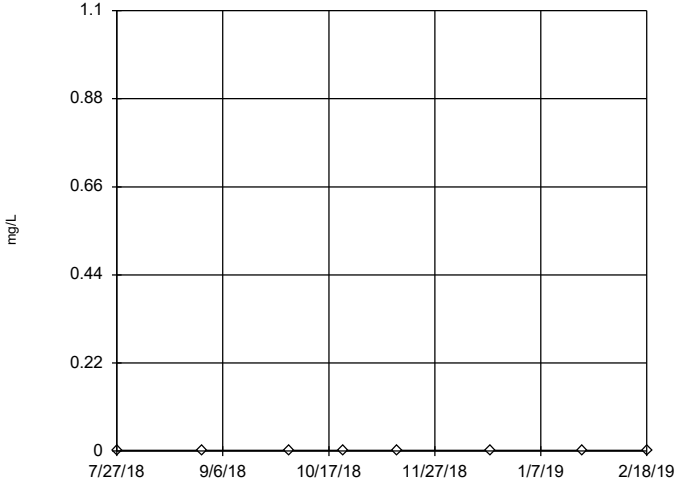
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

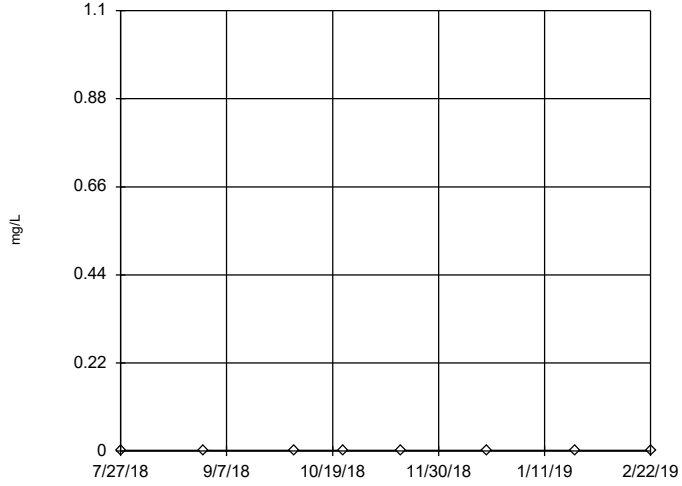
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

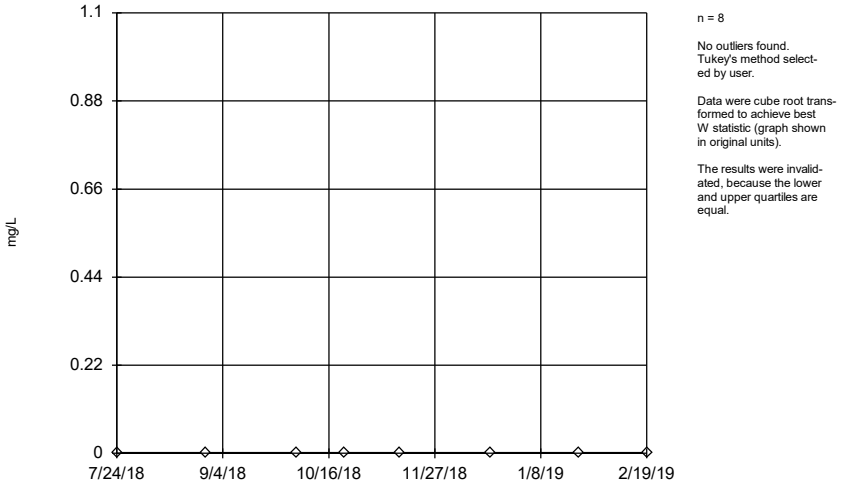
Data were cube root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

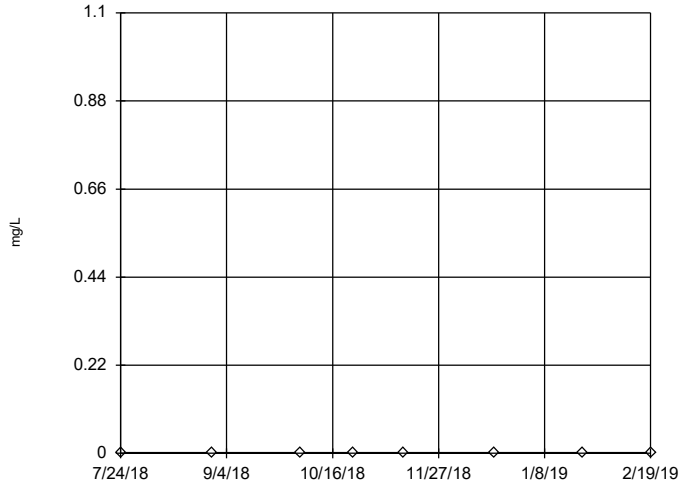
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

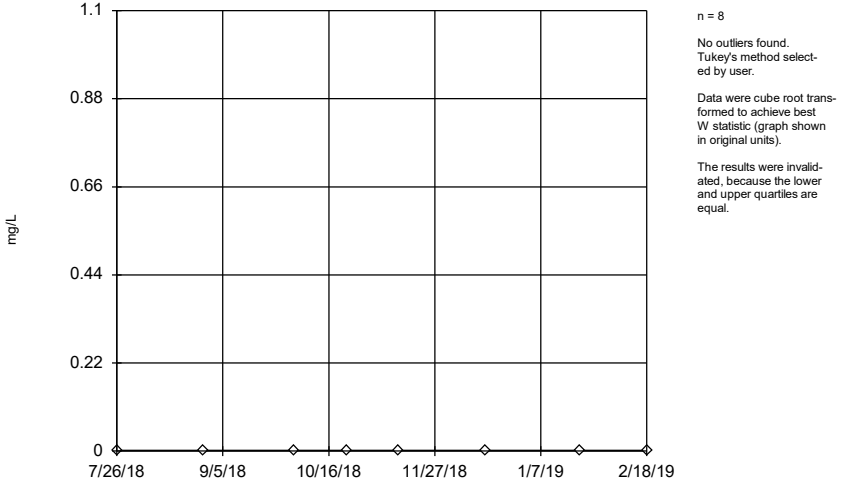
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

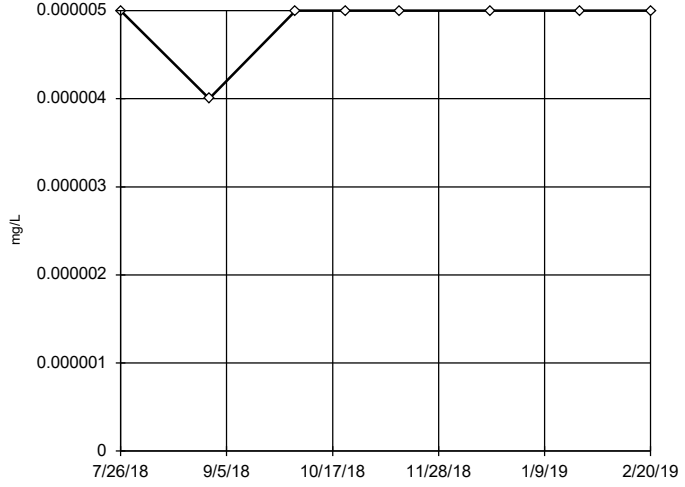
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

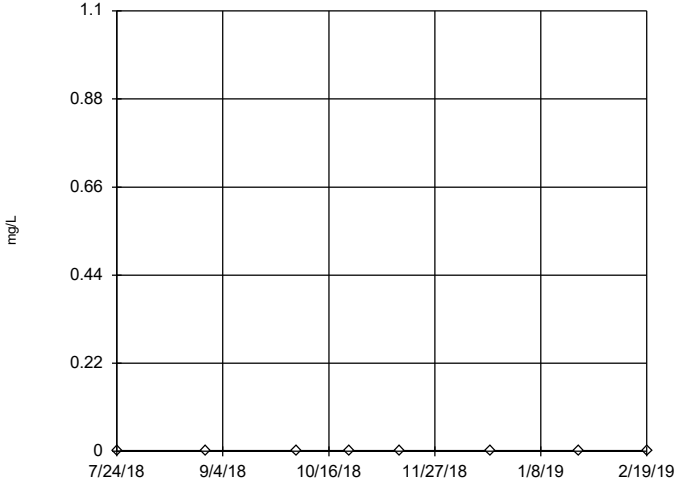
Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

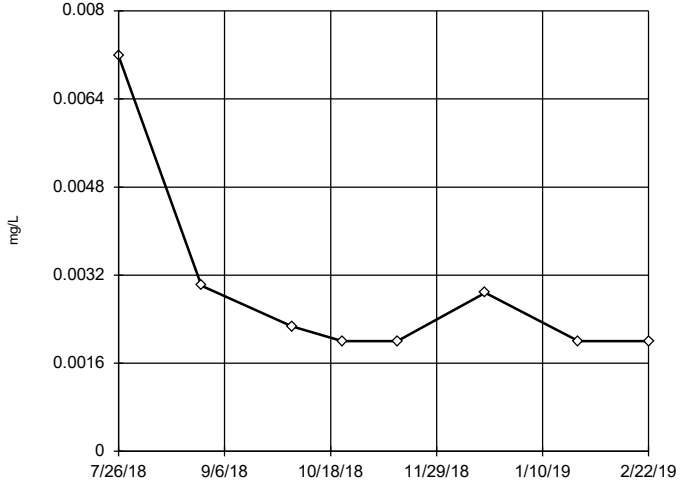
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

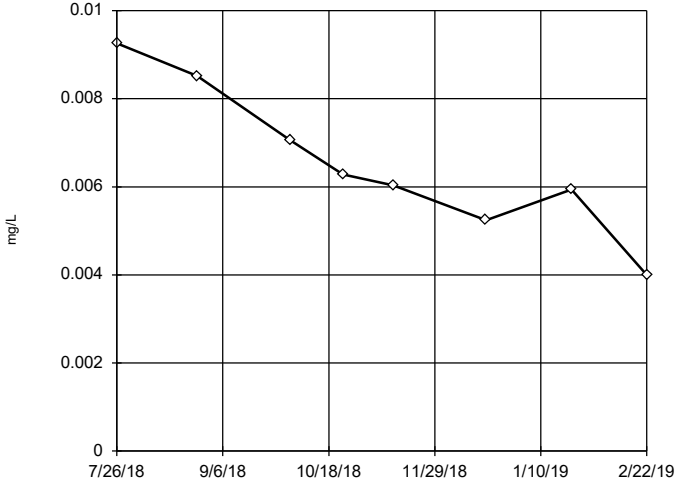
High cutoff = 0.009394, low cutoff = 0.0006269, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

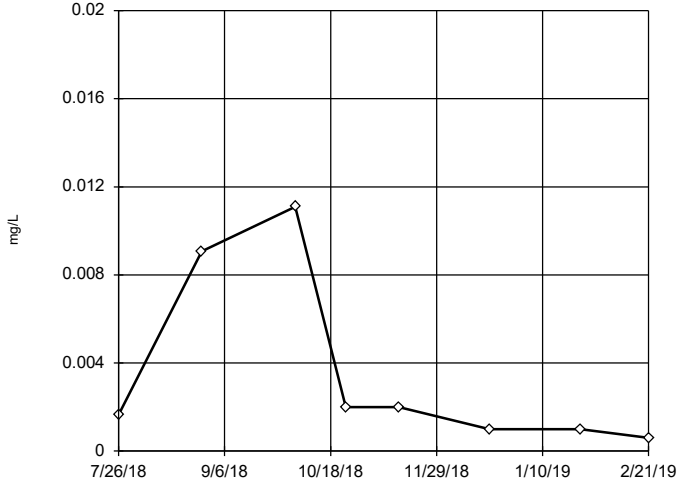
High cutoff = 0.01757, low cutoff = 0.00154, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

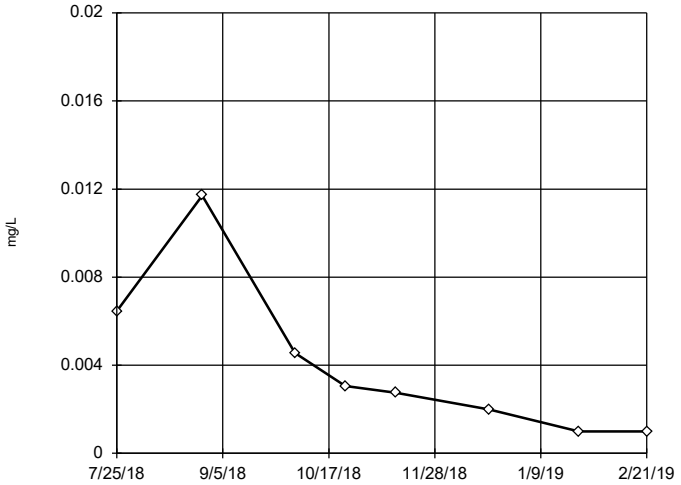
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3291, low cutoff = 0.00001294, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

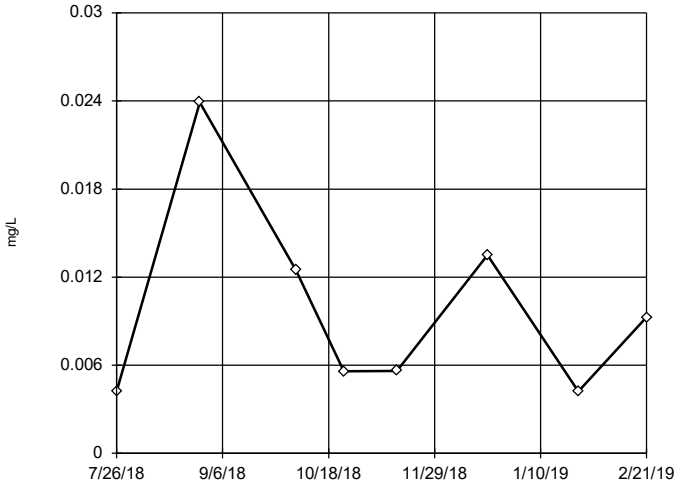
High cutoff = 0.3068, low cutoff = 0.00002502, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

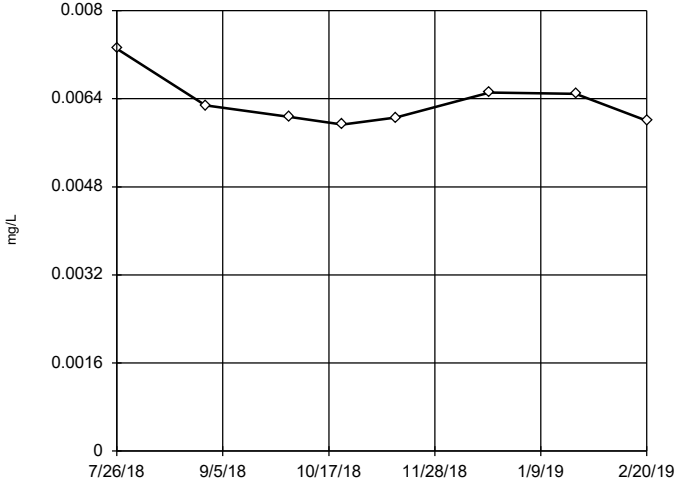
High cutoff = 0.2485, low cutoff = 0.0002539, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

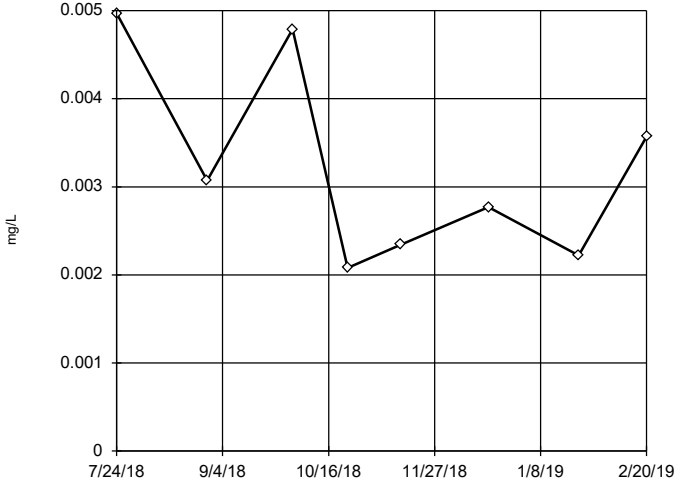
High cutoff = 0.008142, low cutoff = 0.004814, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

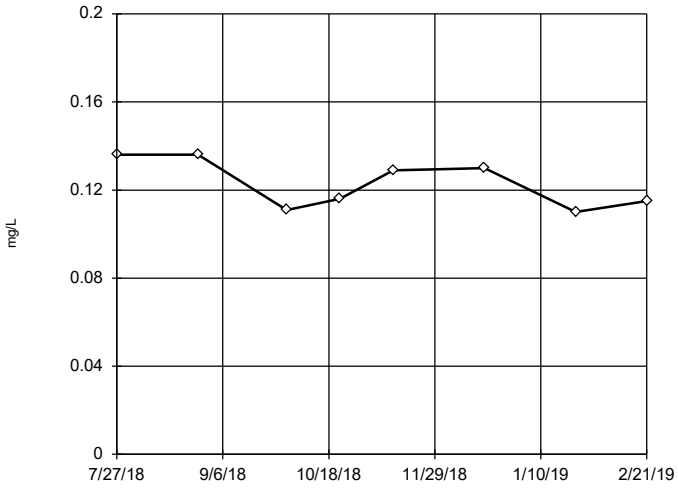
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0247, low cutoff = 0.0003816, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

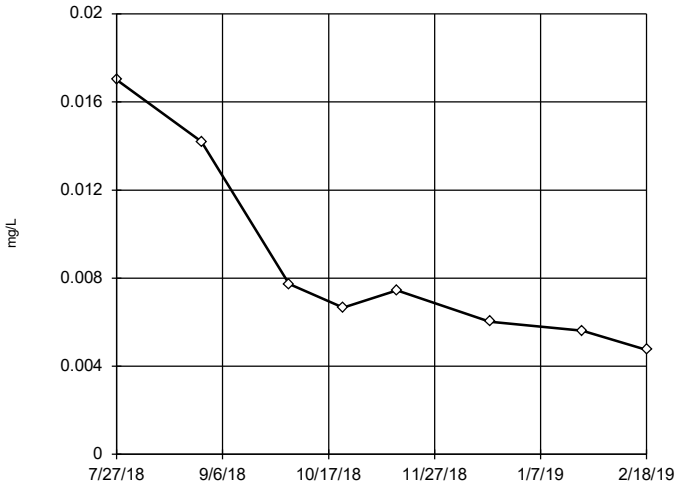
High cutoff = 0.2167, low cutoff = 0.06931, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

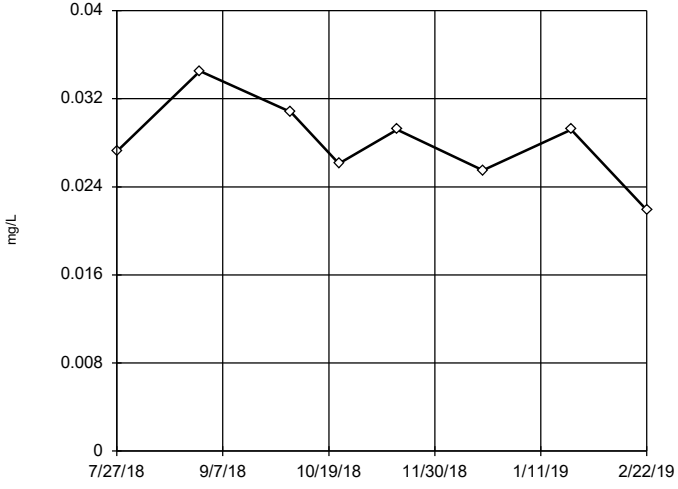
High cutoff = 0.06123, low cutoff = 0.0009953, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

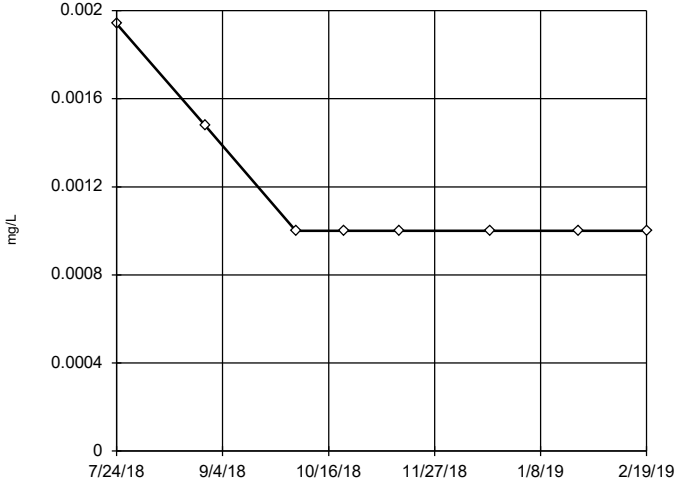
High cutoff = 0.04448, low cutoff = 0.01511, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

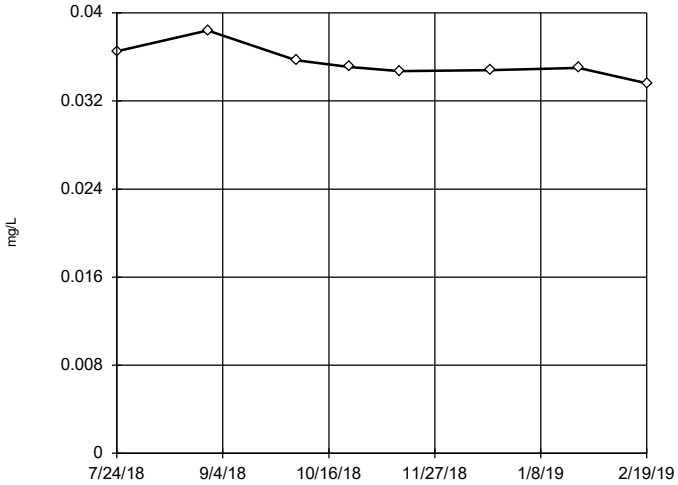
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00219, low cutoff = 0.0005554, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

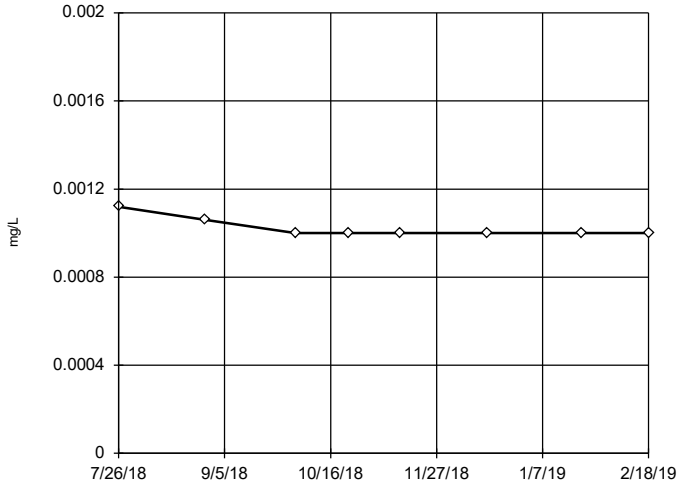
High cutoff = 0.04046, low cutoff = 0.031, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

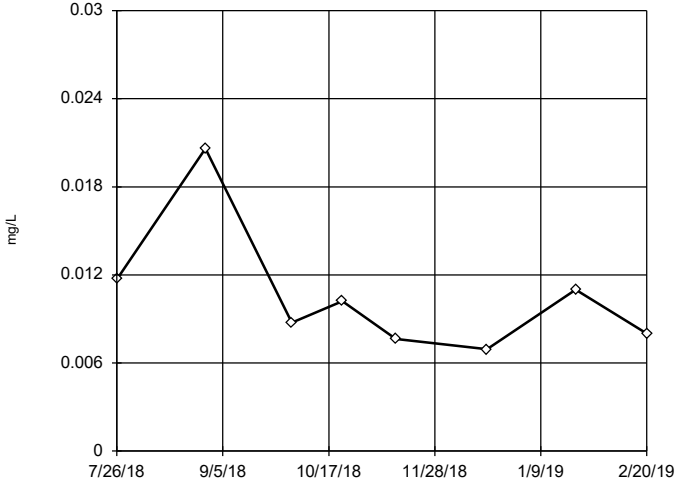
High cutoff = 0.001124, low cutoff = 0.0009163, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

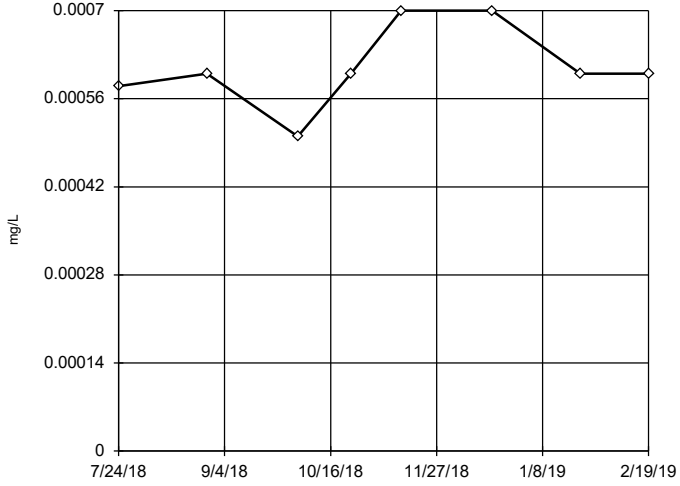
High cutoff = 0.03466, low cutoff = 0.002559, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

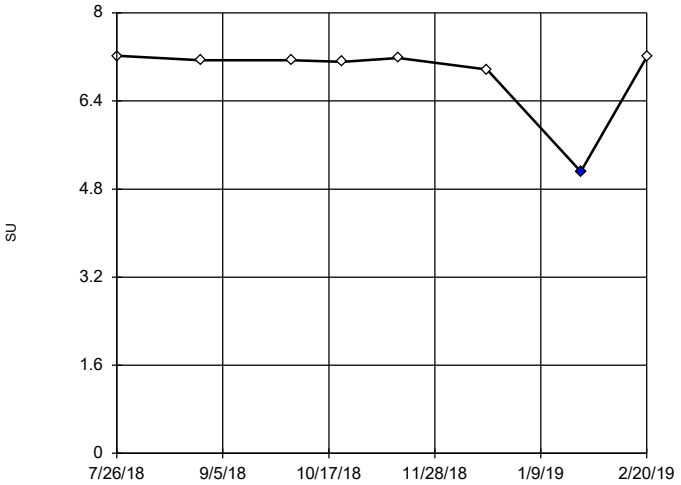
Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0008482, low cutoff = 0.0004351, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 4/18/2019 4:56 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 7.561, low cutoff = 6.468, based on IQR multiplier of 3.

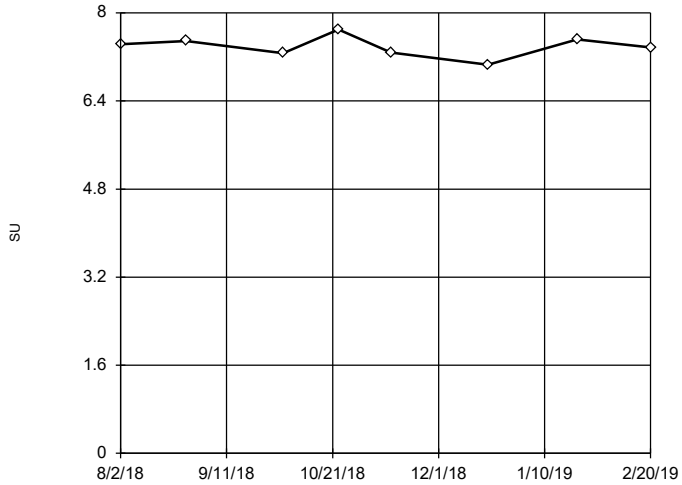
Constituent: pH Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

High cutoff = 8.122, low cutoff = 6.479, based on IQR multiplier of 3.

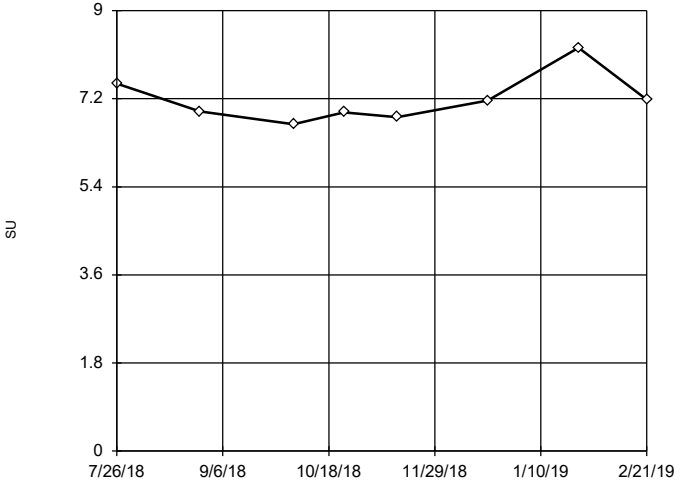
Constituent: pH Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 8.968, low cutoff = 5.625, based on IQR multiplier of 3.

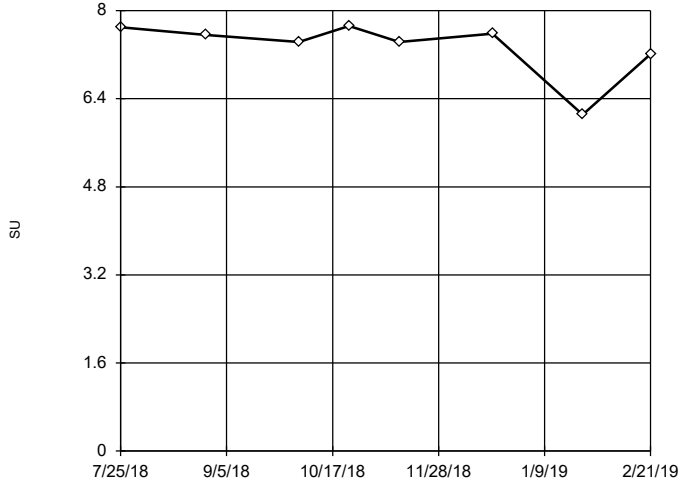
Constituent: pH Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

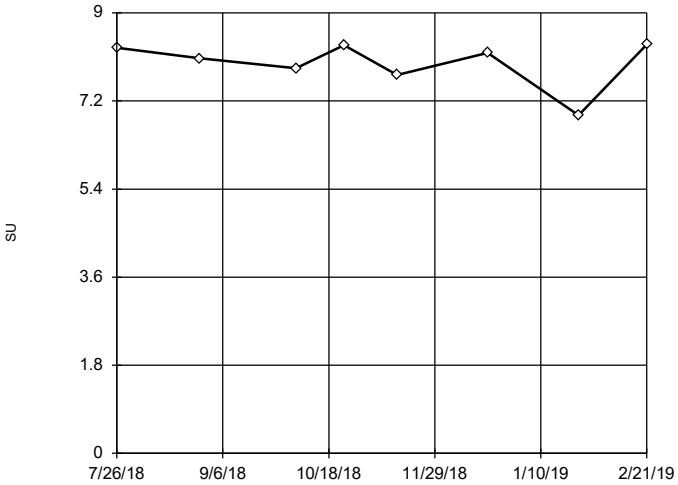
High cutoff = 8.326, low cutoff = 5.223, based on IQR multiplier of 3.

Constituent: pH Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.297, low cutoff = -6.691, based on IQR multiplier of 3.

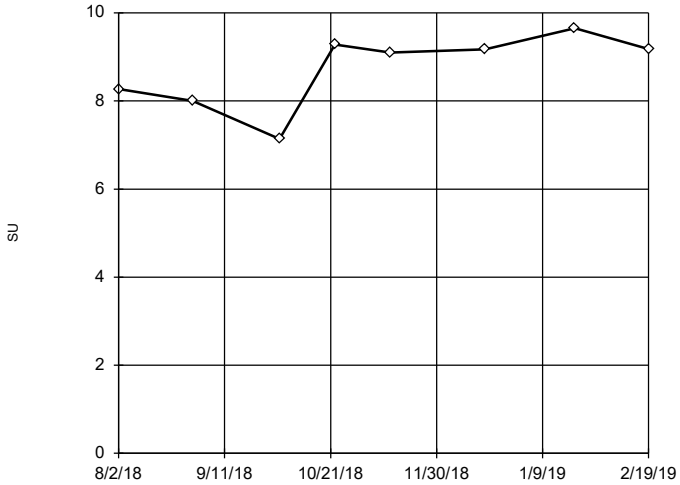
Constituent: pH Analysis Run 4/18/2019 4:56 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 10.82, low cutoff = -9.404, based on IQR multiplier of 3.

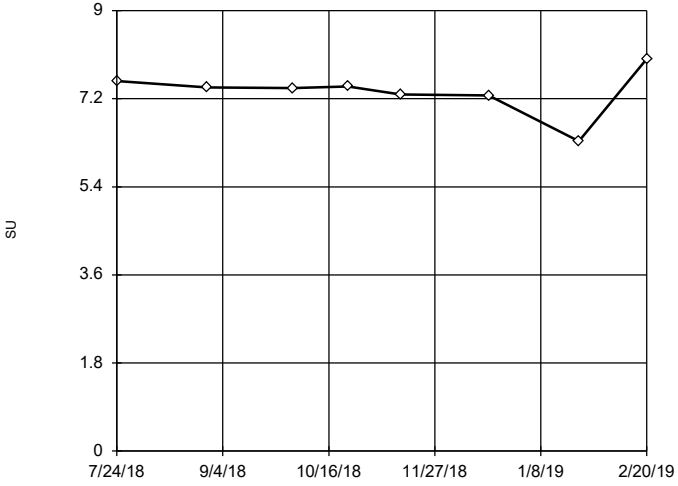
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 8.033, low cutoff = 6.239, based on IQR multiplier of 3.

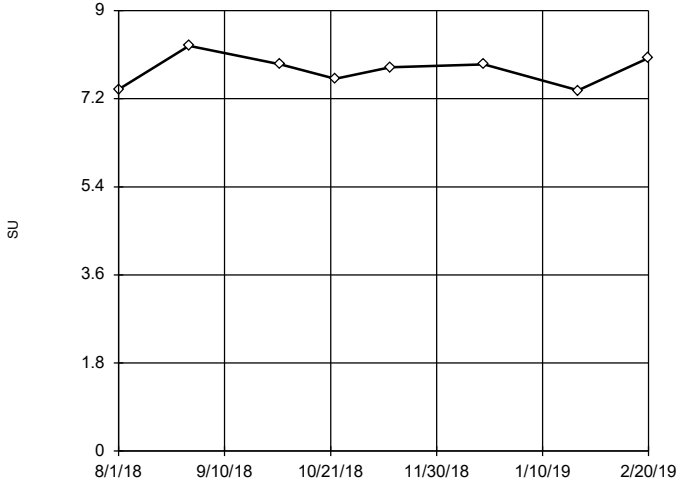
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were x^4 transformed to achieve best W statistic (graph shown in original units).

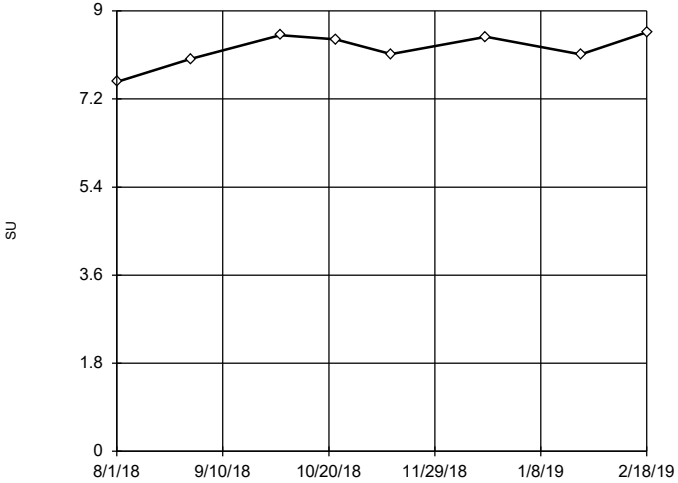
High cutoff = 9.014, low cutoff = 4.936, based on IQR multiplier of 3.

Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.347, low cutoff = -5.134, based on IQR multiplier of 3.

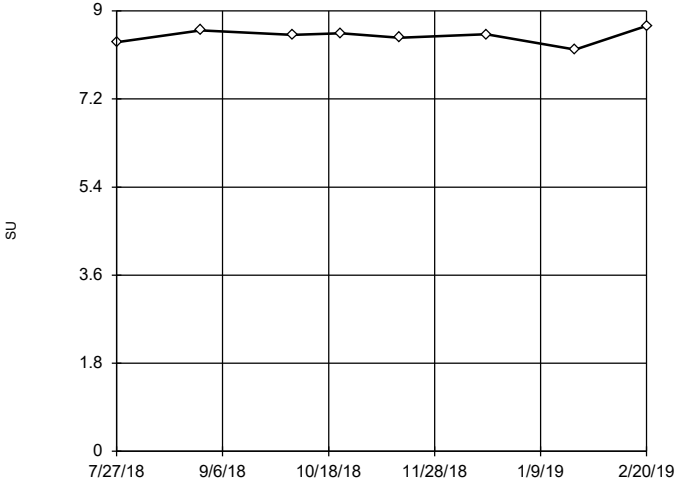
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 8.987, low cutoff = 7.782, based on IQR multiplier of 3.

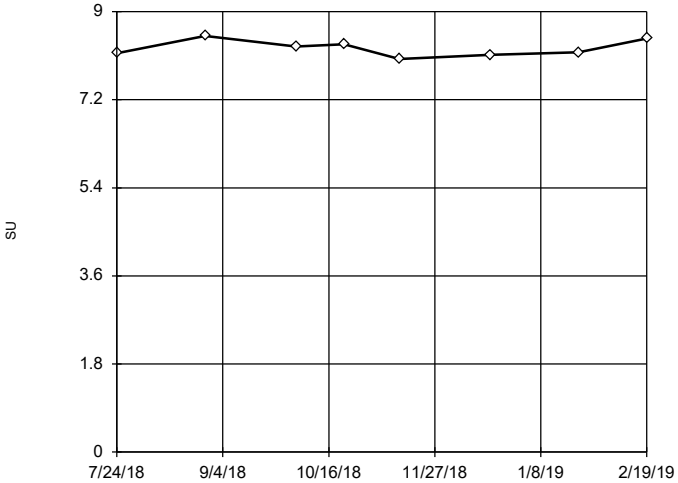
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.203, low cutoff = 7.416, based on IQR multiplier of 3.

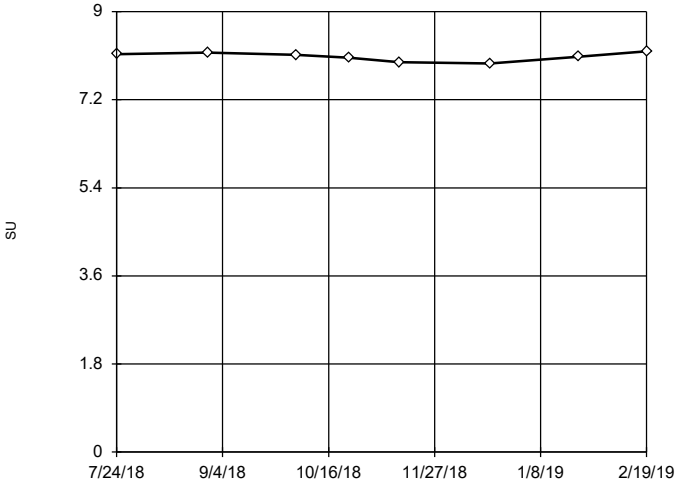
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

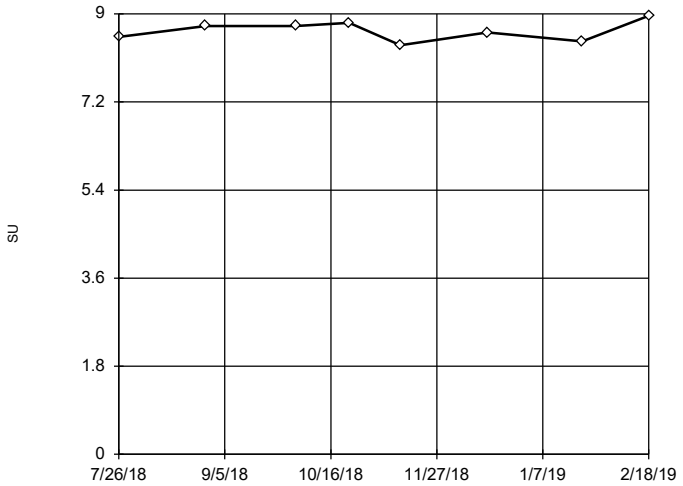
High cutoff = 8.482, low cutoff = 7.548, based on IQR multiplier of 3.

Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.58, low cutoff = 7.427, based on IQR multiplier of 3.

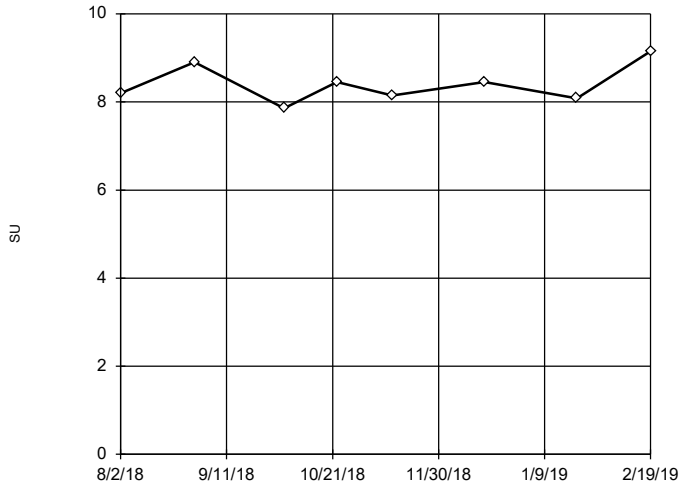
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 10.58, low cutoff = 6.649, based on IQR multiplier of 3.

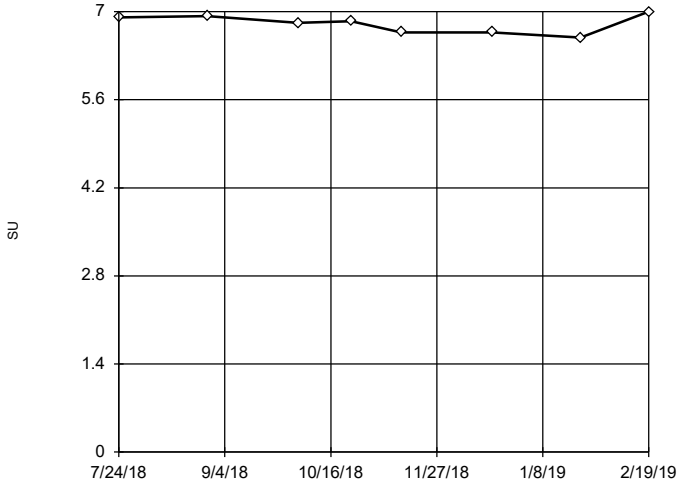
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 7.48, low cutoff = 5.324, based on IQR multiplier of 3.

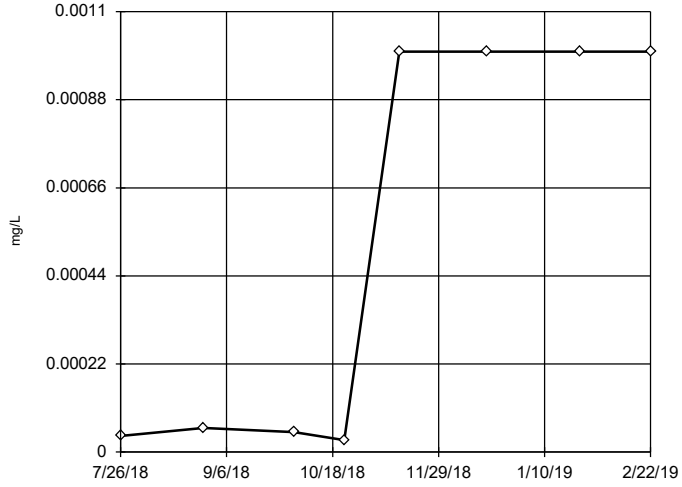
Constituent: pH Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

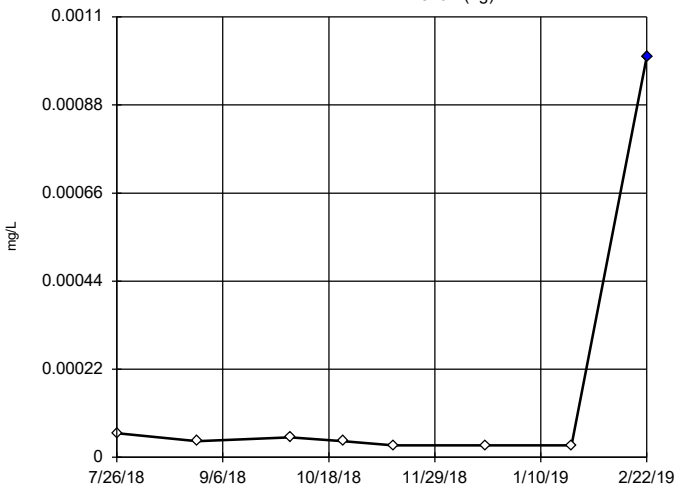
High cutoff = 11.18, low cutoff = 4.0e-9, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0003333, low cutoff = 0.00000493, based on IQR multiplier of 3.

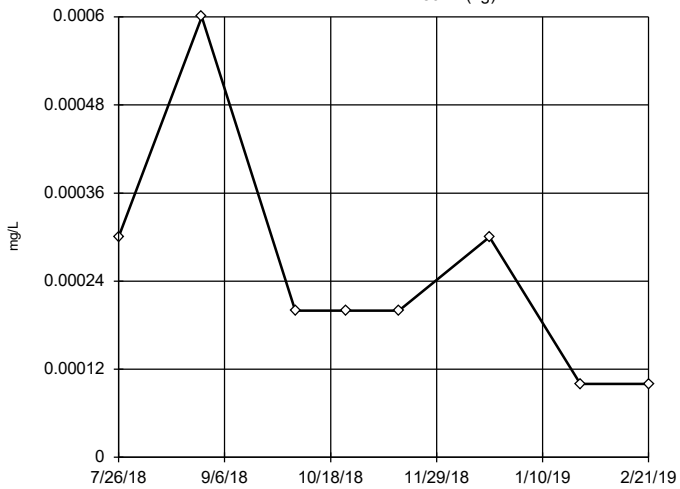
Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.002864, low cutoff = 0.00001481, based on IQR multiplier of 3.

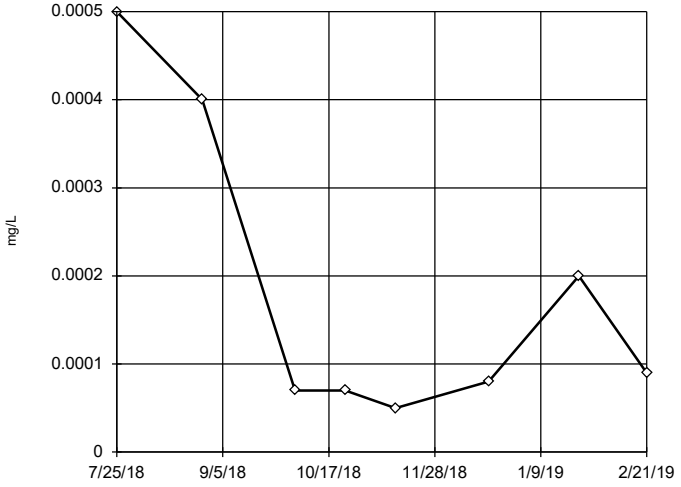
Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01866, low cutoff = 0.000001061, based on IQR multiplier of 3.

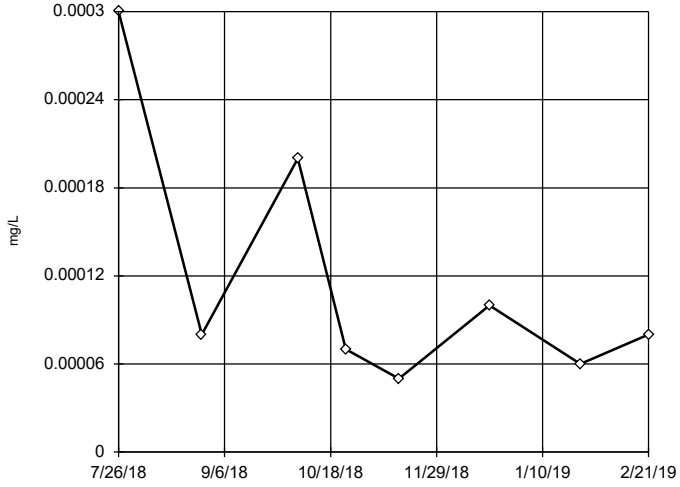
Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

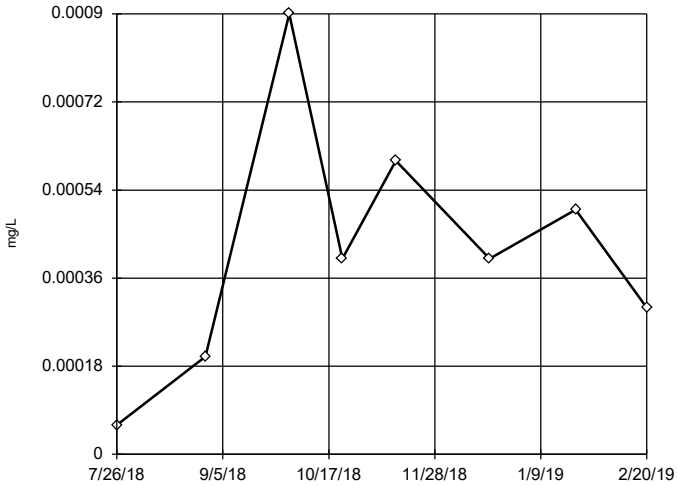
High cutoff = 0.00147, low cutoff = 0.000006237, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

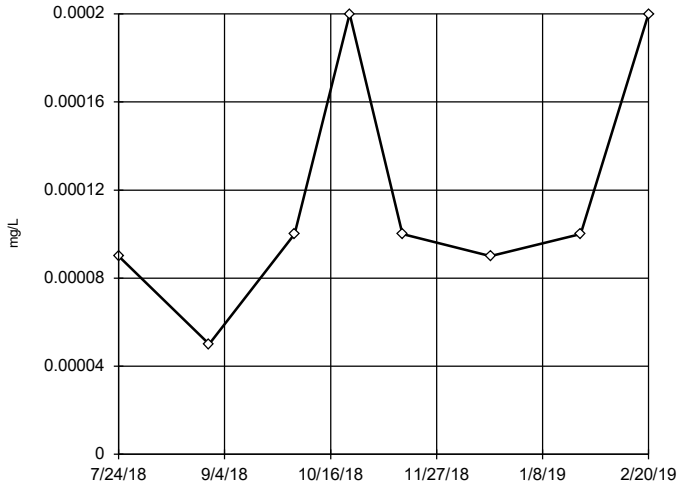
High cutoff = 0.002164, low cutoff = -0.00005414, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

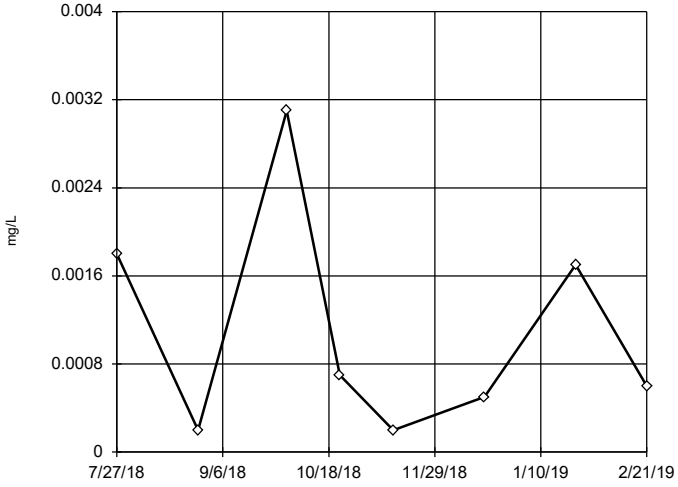
High cutoff = 0.0005487, low cutoff = 0.0000232, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

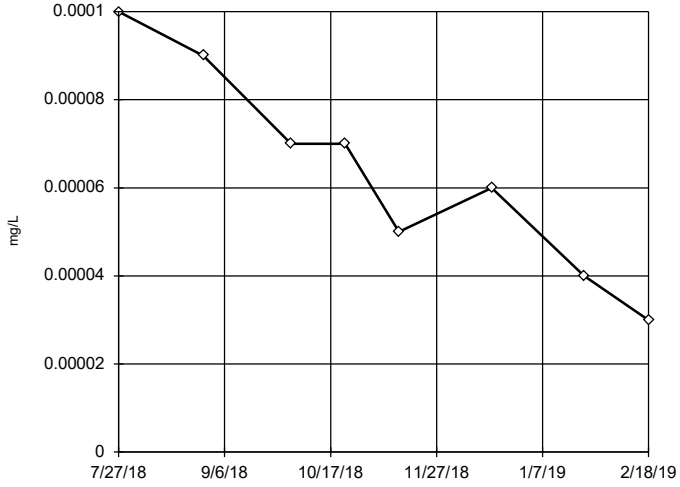
High cutoff = 0.2961, low cutoff = 0.000001868, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

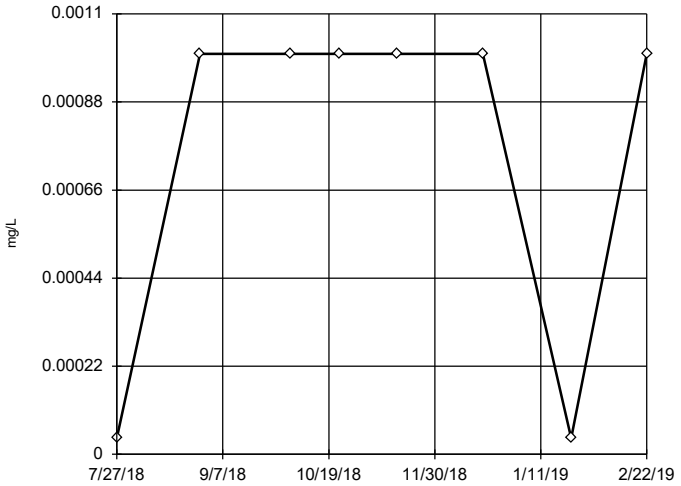
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0002438, low cutoff = 1.2e-10, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

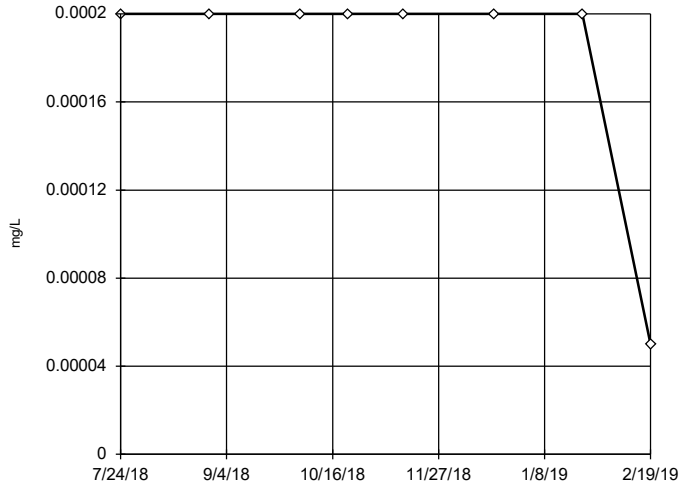
High cutoff = 0.00158, low cutoff = -0.0009984, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

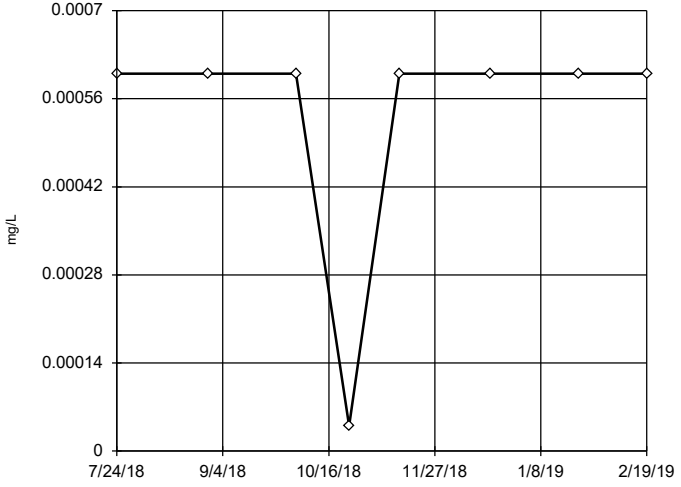
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

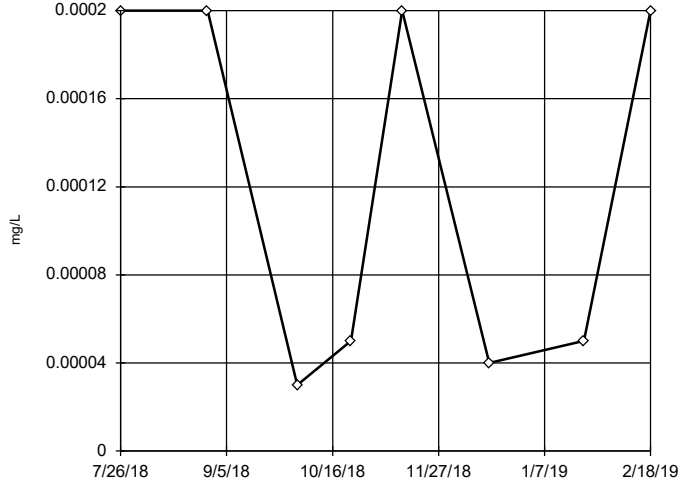
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

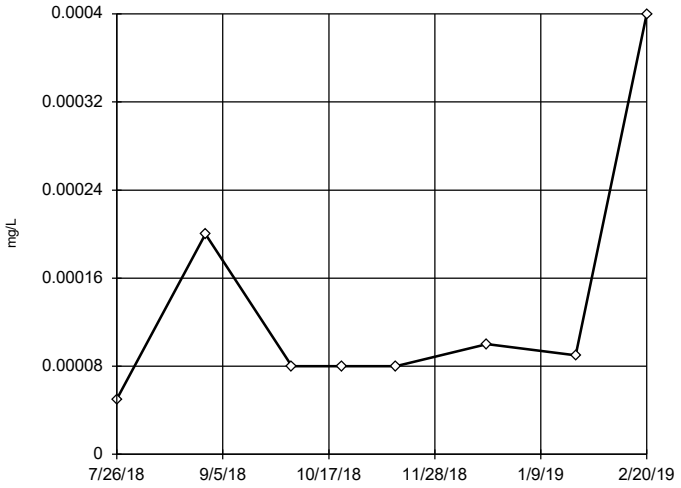
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01789, low cutoff = 5.0e-7, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0007813, low cutoff = 0.00001448, based on IQR multiplier of 3.

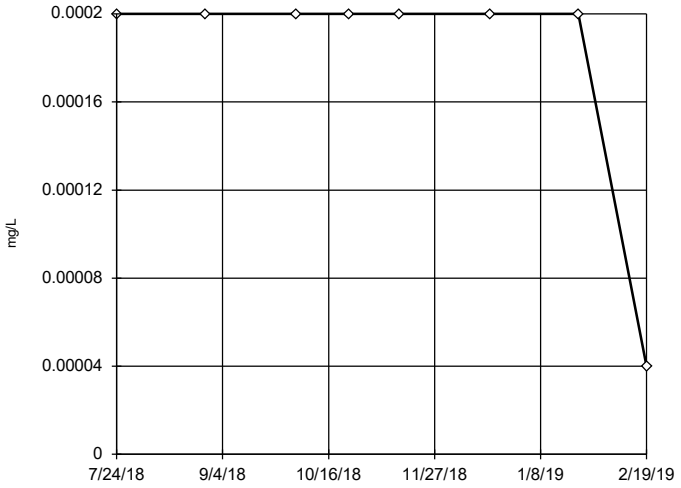
Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

The results were invalidated, because the lower and upper quartiles are equal.

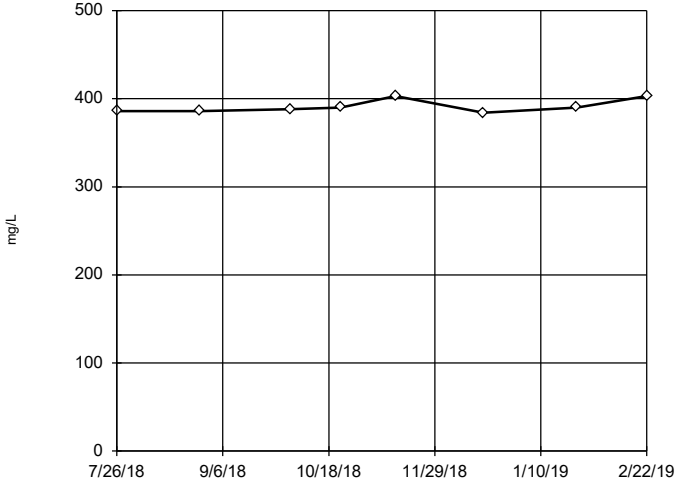
Constituent: Selenium Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 429.5, low cutoff = 356.3, based on IQR multiplier of 3.

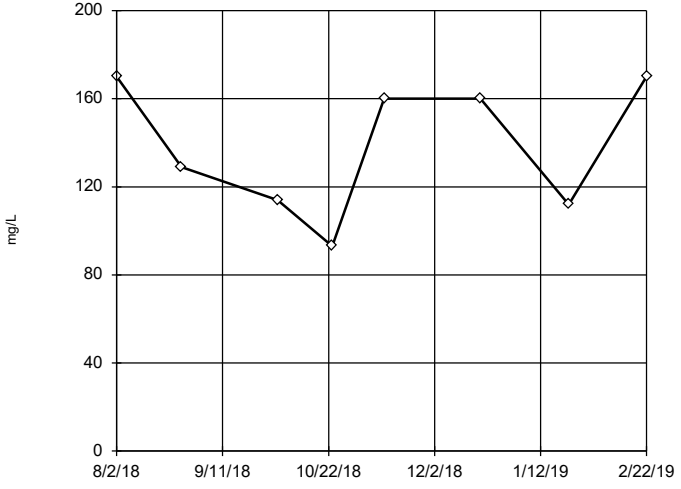
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

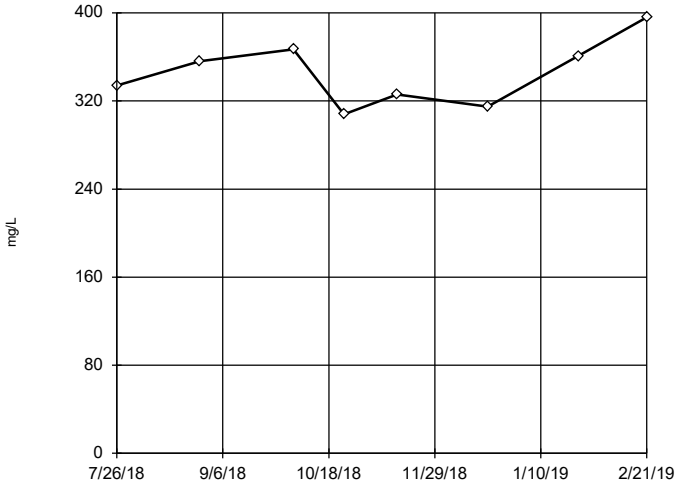
High cutoff = 410.7, low cutoff = 24.02, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 533.4, low cutoff = 218.7, based on IQR multiplier of 3.

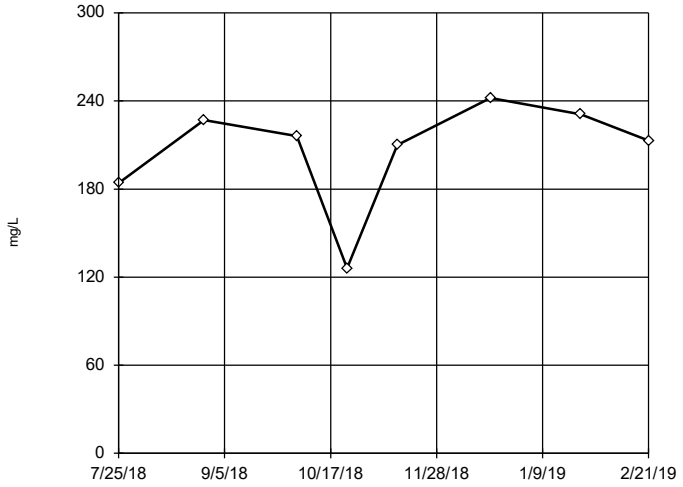
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 270.4, low cutoff = -238.5, based on IQR multiplier of 3.

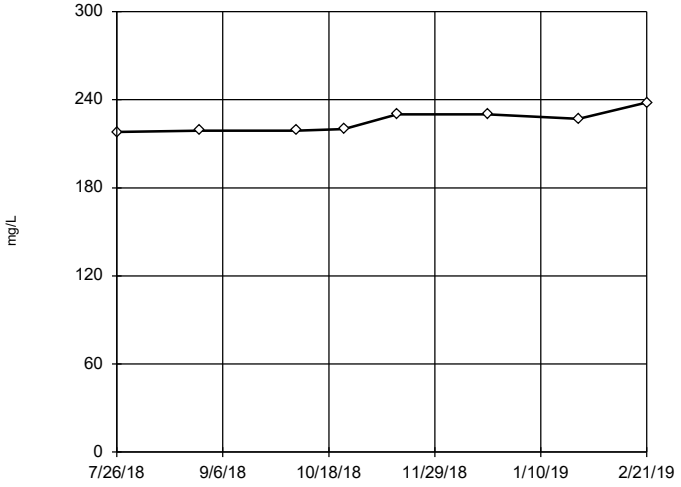
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 266.4, low cutoff = 189.1, based on IQR multiplier of 3.

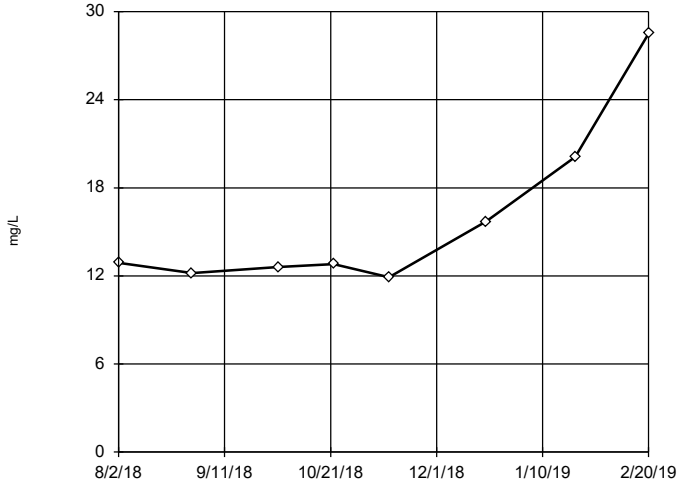
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

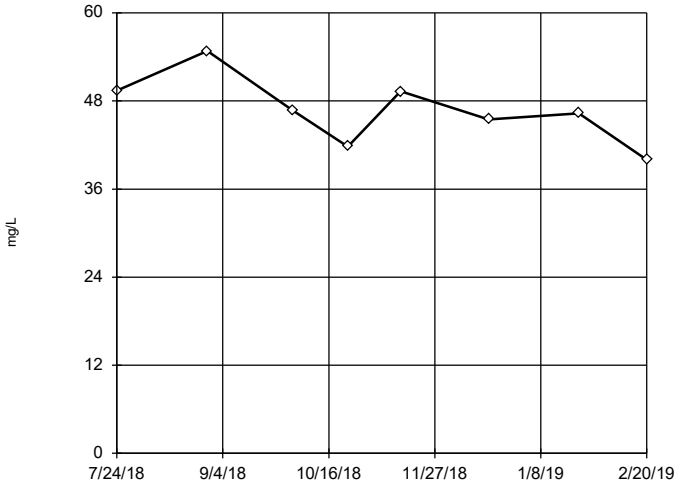
High cutoff = 52.25, low cutoff = 4.215, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 71.51, low cutoff = 30.1, based on IQR multiplier of 3.

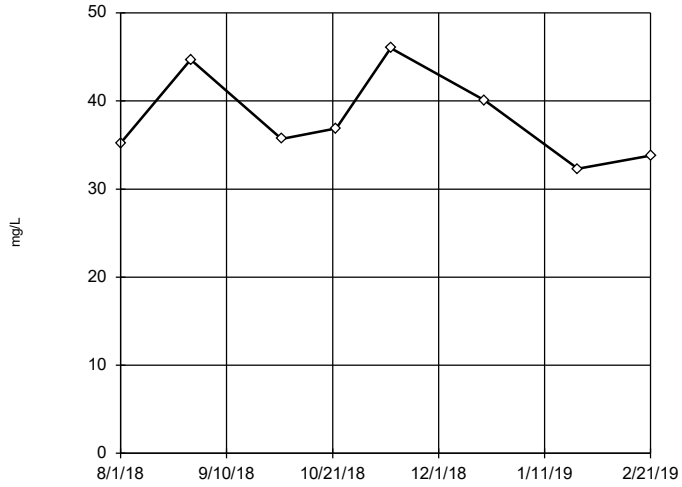
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 78.29, low cutoff = 18.65, based on IQR multiplier of 3.

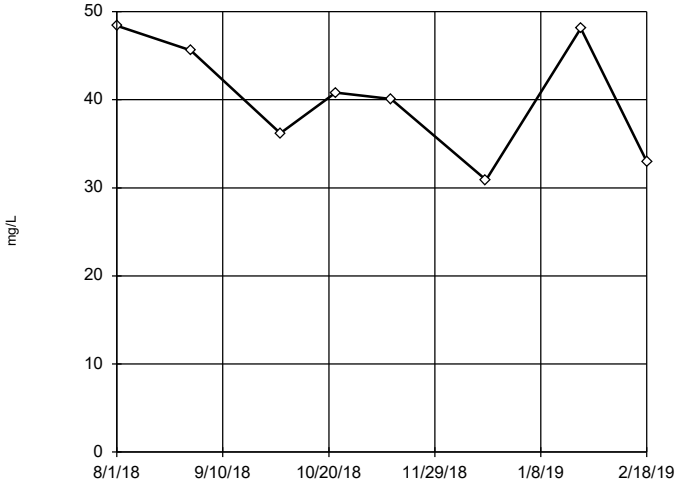
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 94.76, low cutoff = 8.941, based on IQR multiplier of 3.

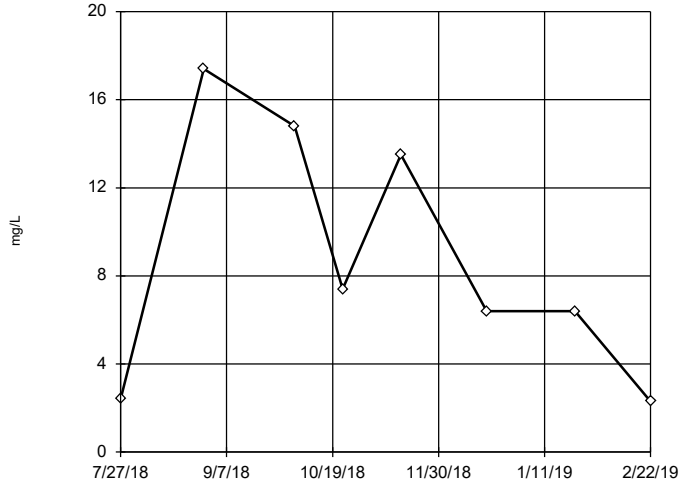
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

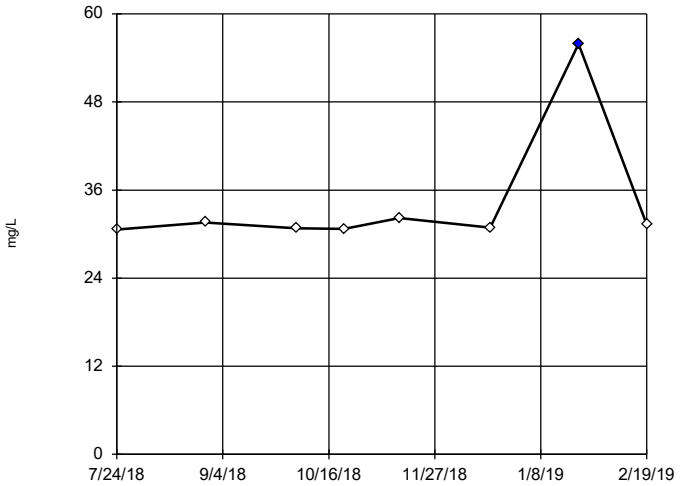
High cutoff = 79.64, low cutoff = -9.759, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 35.61, low cutoff = 27.55, based on IQR multiplier of 3.

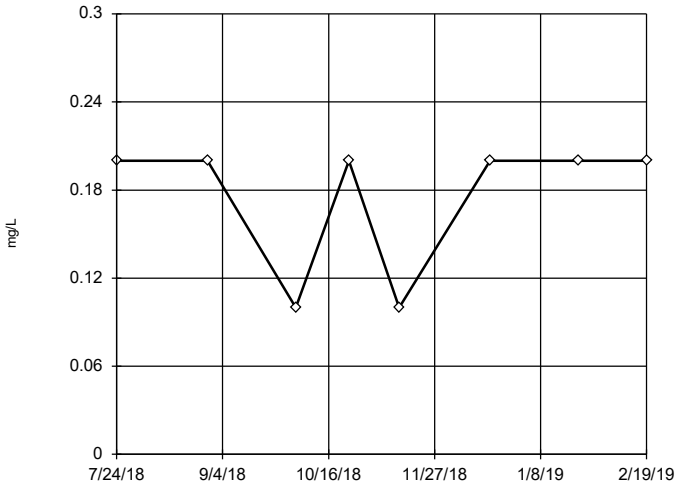
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2326, low cutoff = -0.1989, based on IQR multiplier of 3.

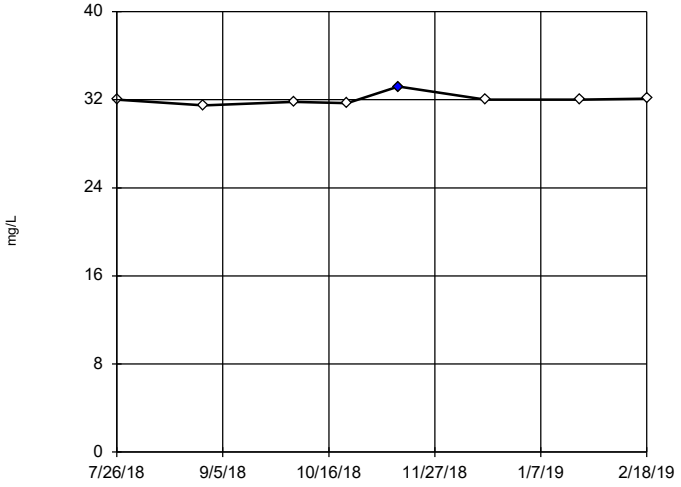
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 32.97, low cutoff = 30.87, based on IQR multiplier of 3.

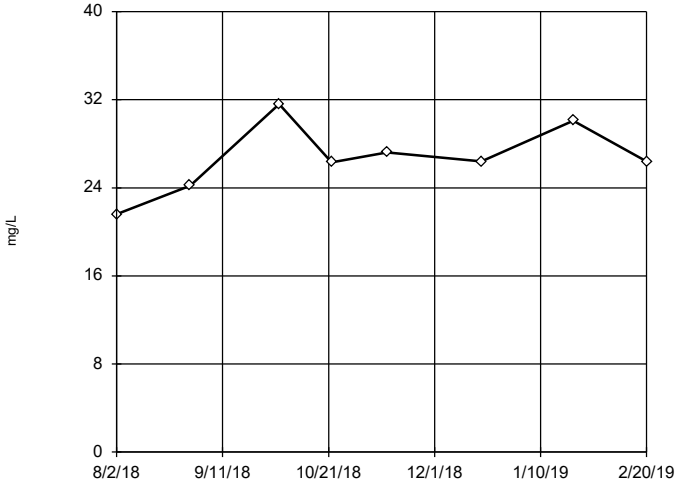
Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

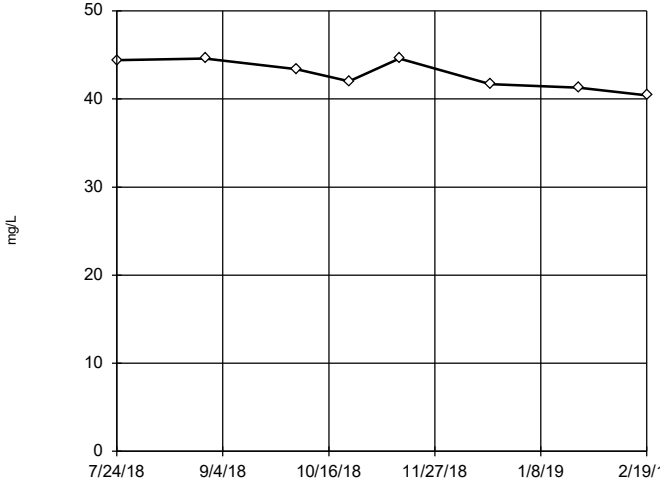
High cutoff = 38.85, low cutoff = 15.05, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

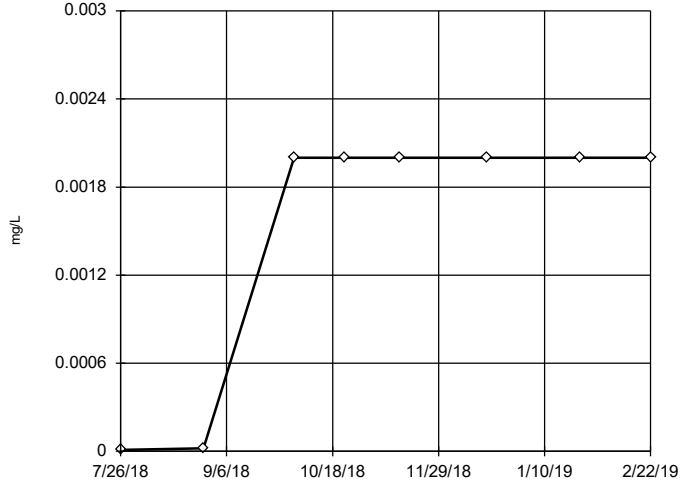
High cutoff = 54.87, low cutoff = 33.66, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

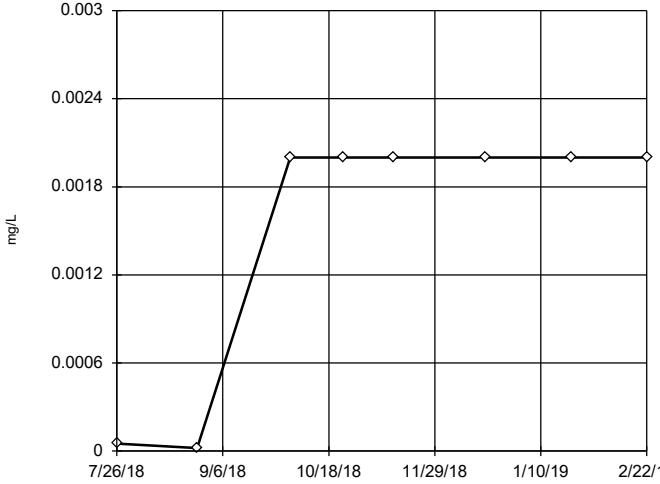
High cutoff = 2, low cutoff = 2.0e-7, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

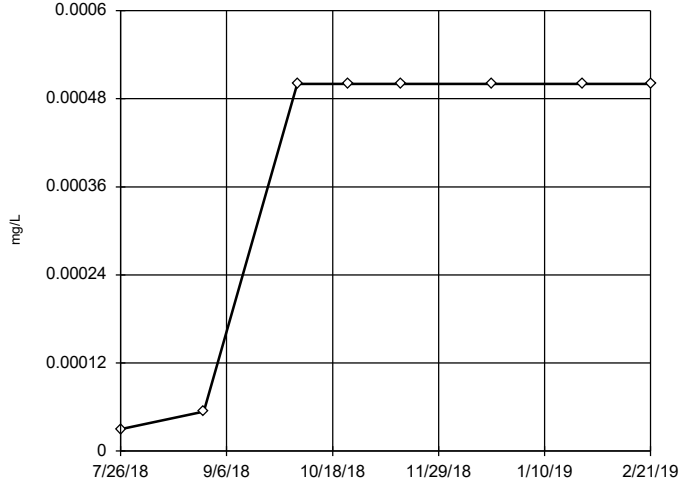
High cutoff = 0.4912, low cutoff = 0.0000013, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 8

No outliers found. Tukey's method selected by user.

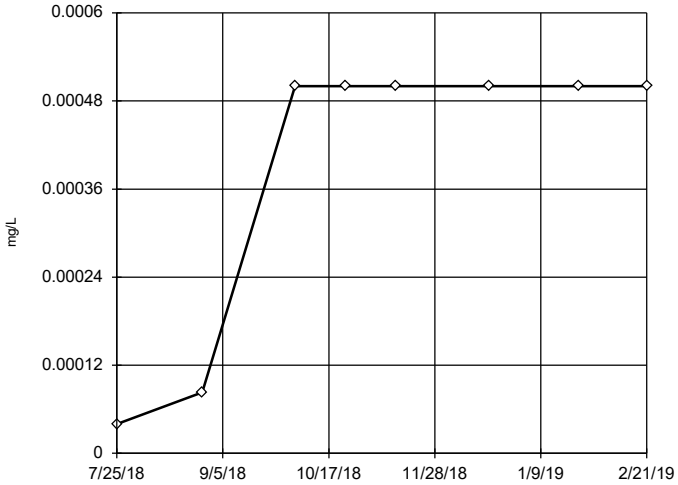
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01409, low cutoff = 0.000005832, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:57 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

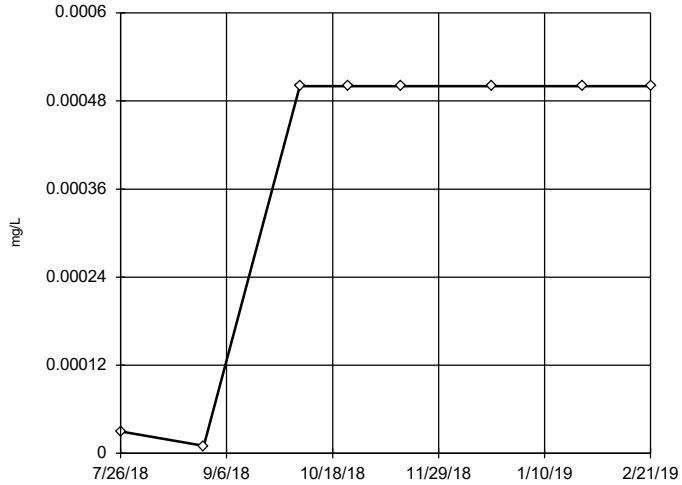
High cutoff = 0.007393, low cutoff = 0.00001378, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

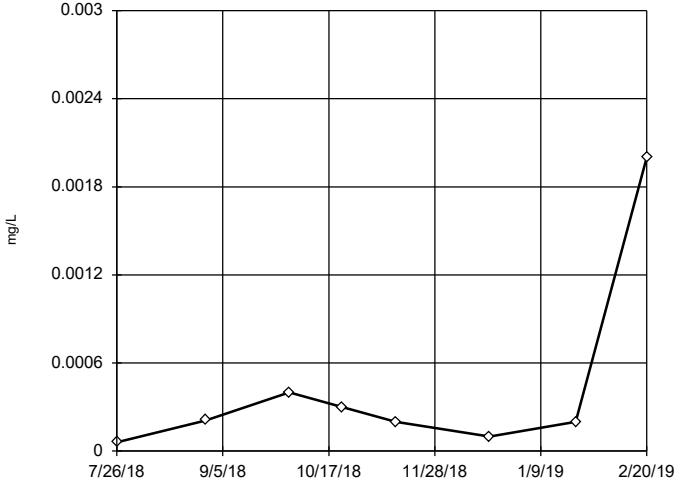
High cutoff = 0.03402, low cutoff = 0.0000018, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

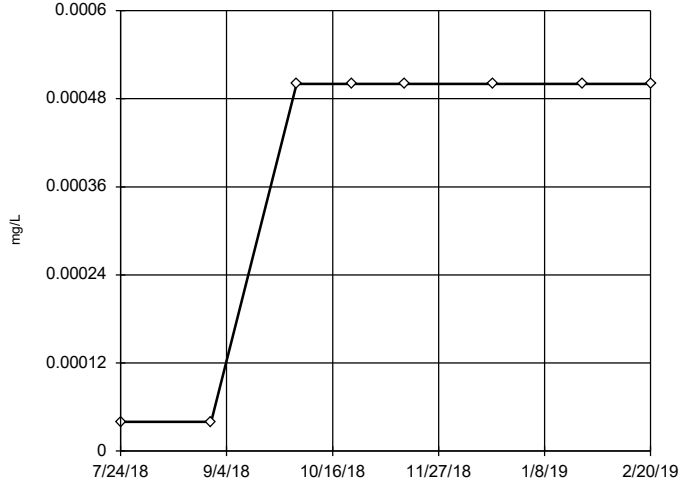
High cutoff = 0.005091, low cutoff = 0.000009623, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 8

No outliers found. Tukey's method selected by user.

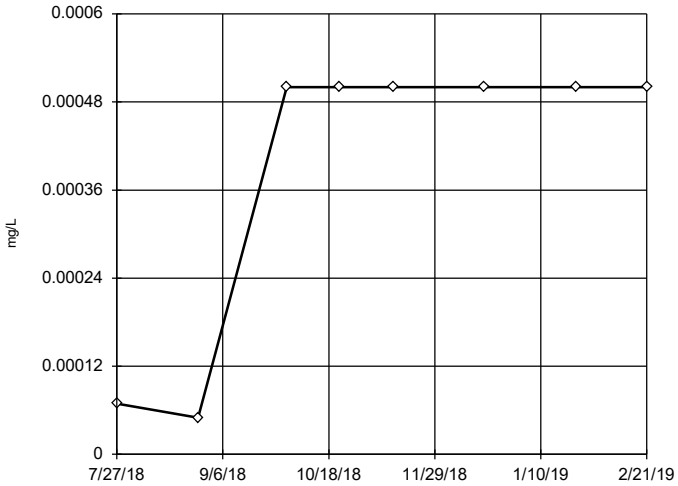
Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.002154, low cutoff = -0.00009431, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1804A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

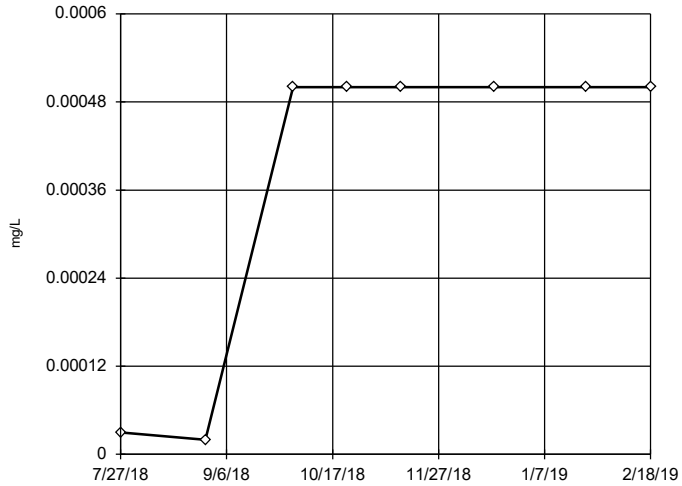
High cutoff = 0.009753, low cutoff = 0.000009522, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1806A



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

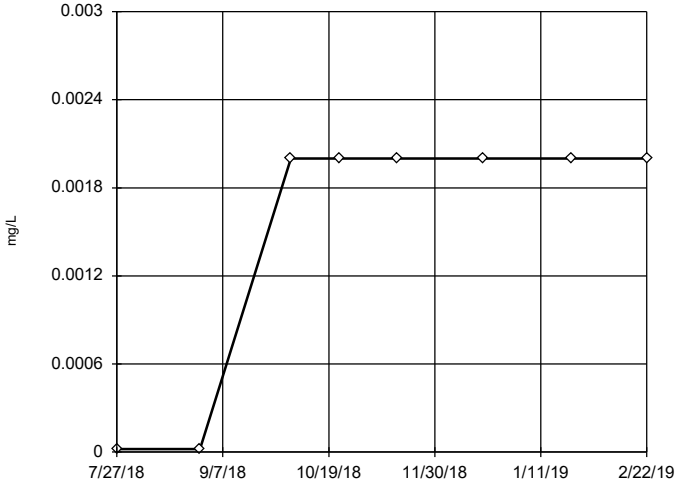
High cutoff = 0.03402, low cutoff = 0.0000018, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 8

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

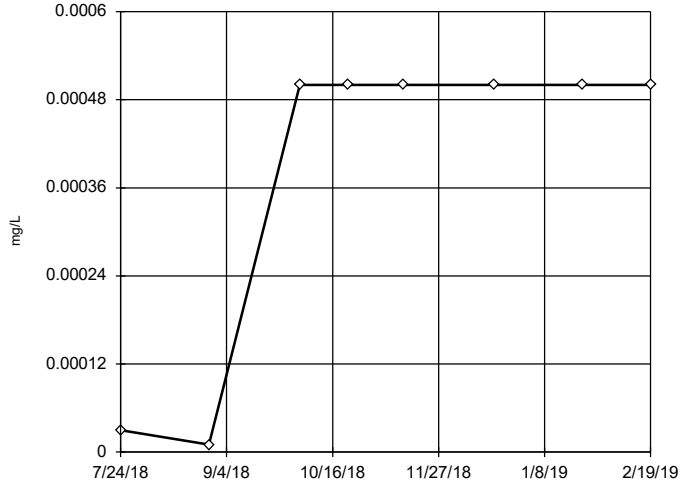
High cutoff = 0.00497, low cutoff = -0.00196, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 8

No outliers found. Tukey's method selected by user.

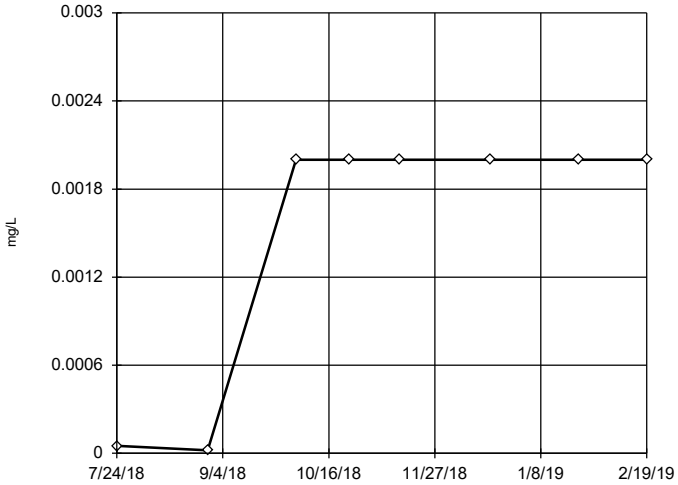
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.03402, low cutoff = 0.0000018, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-5



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

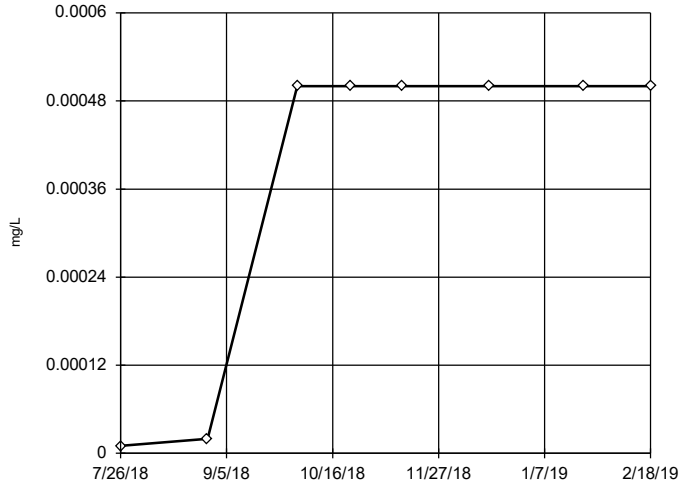
High cutoff = 0.506, low cutoff = 0.00000125, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-7



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

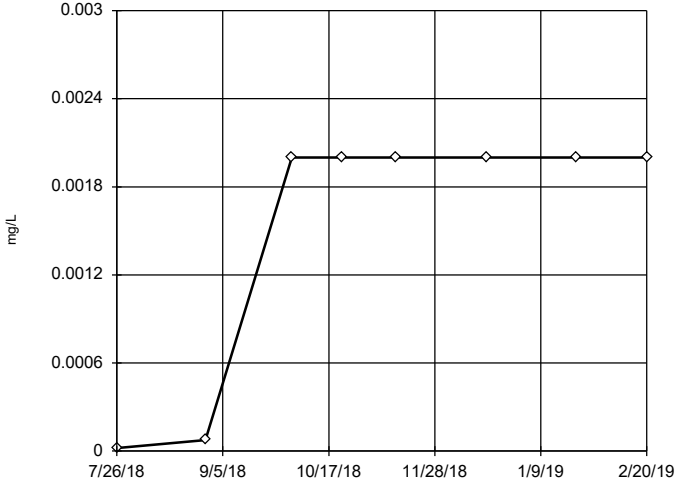
High cutoff = 0.0625, low cutoff = 8.0e-7, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 8

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

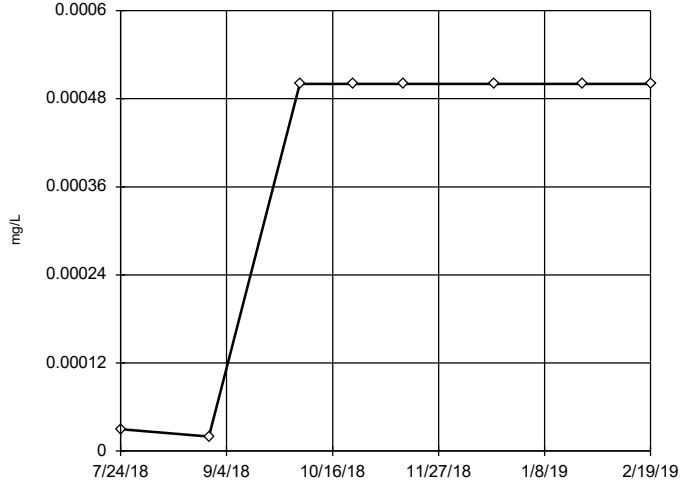
High cutoff = 0.27, low cutoff = 0.000002888, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 8

No outliers found. Tukey's method selected by user.

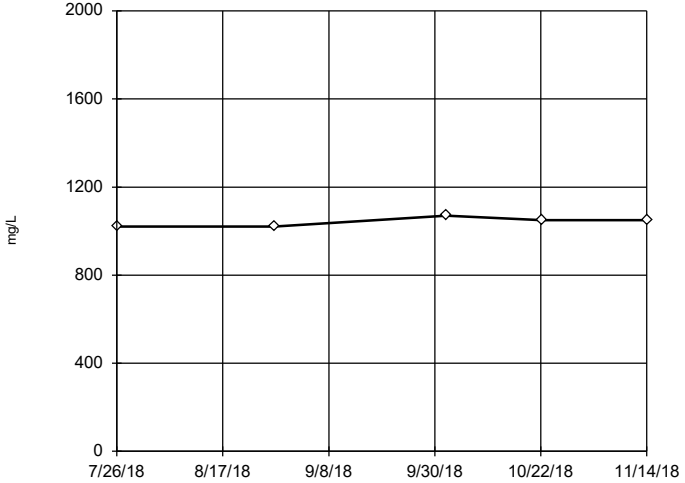
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.03402, low cutoff = 0.0000018, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1809A (bg)



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

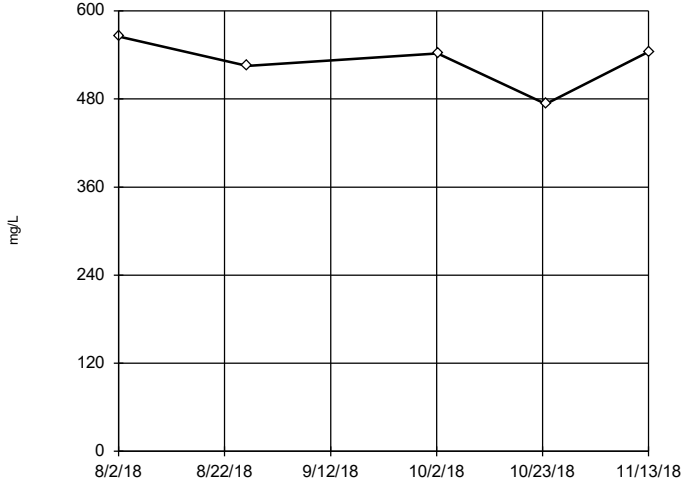
High cutoff = 1149, low cutoff = 790.2, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1810A (bg)



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

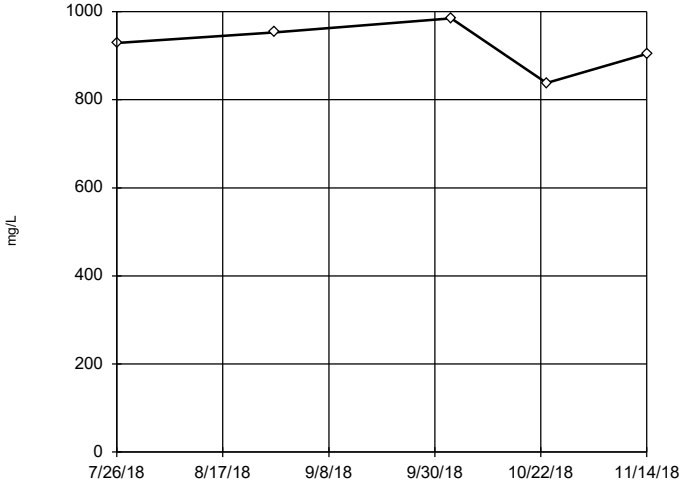
High cutoff = 640, low cutoff = -534.8, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1807A (bg)



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

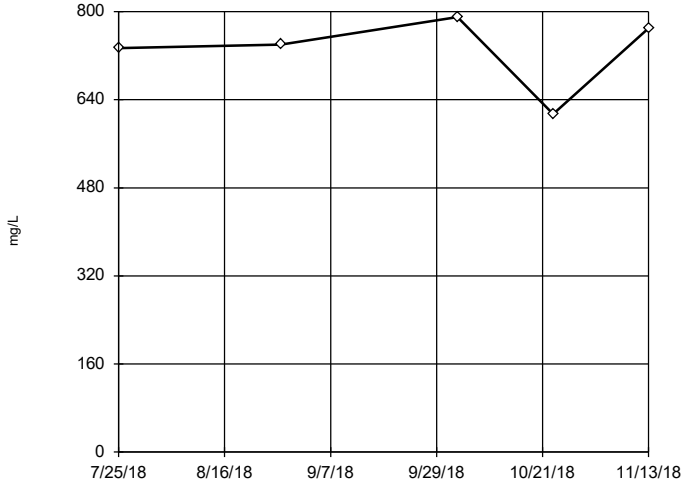
High cutoff = 1121, low cutoff = -944.4, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1808A (bg)



n = 5

No outliers found. Tukey's method selected by user.

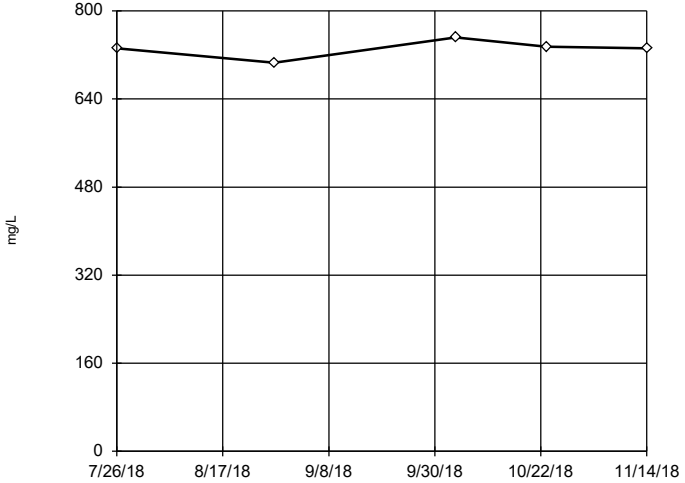
Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 915.3, low cutoff = -797.5, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1807B (bg)



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

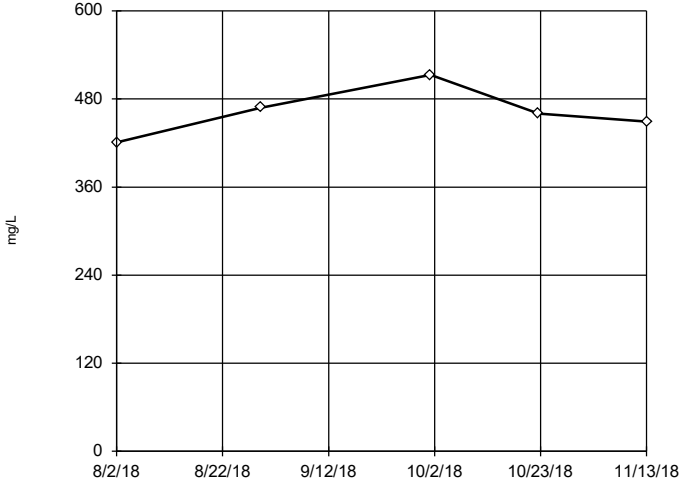
High cutoff = 799.2, low cutoff = 602, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-9



n = 5

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

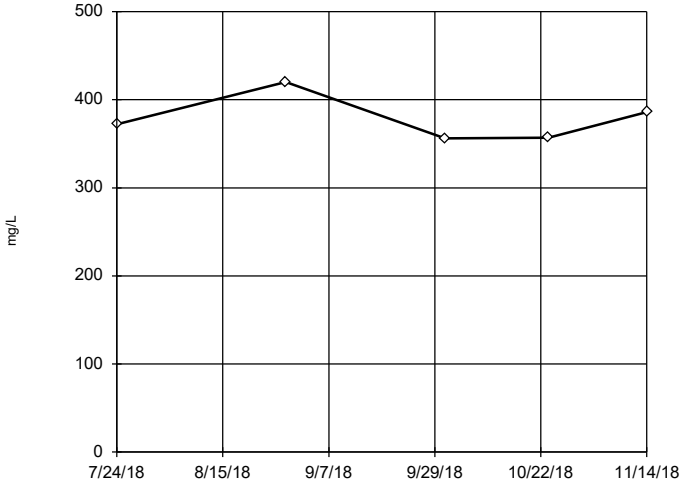
High cutoff = 701.3, low cutoff = 303.7, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1801A



n = 5

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

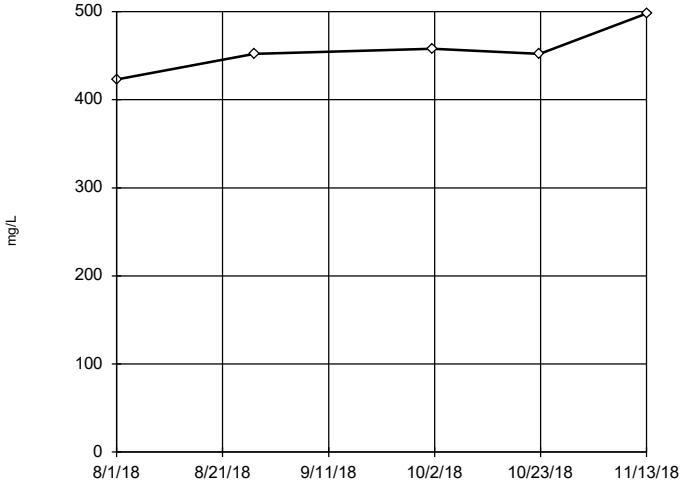
High cutoff = 580.1, low cutoff = 247.4, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1804A



n = 5

No outliers found. Tukey's method selected by user.

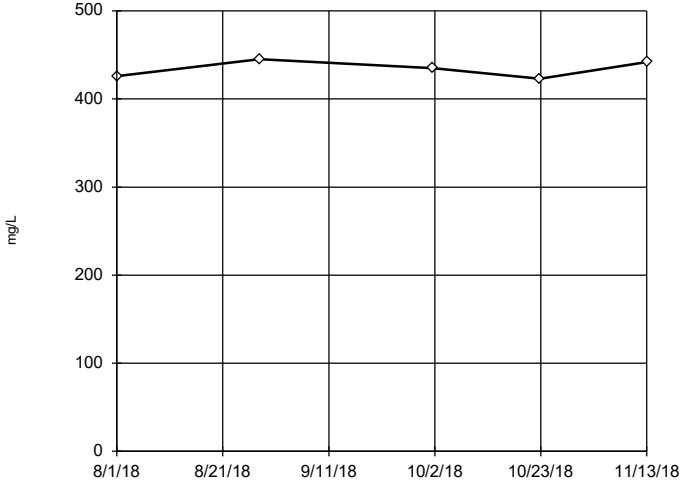
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 622.3, low cutoff = 335.6, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-1806A



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

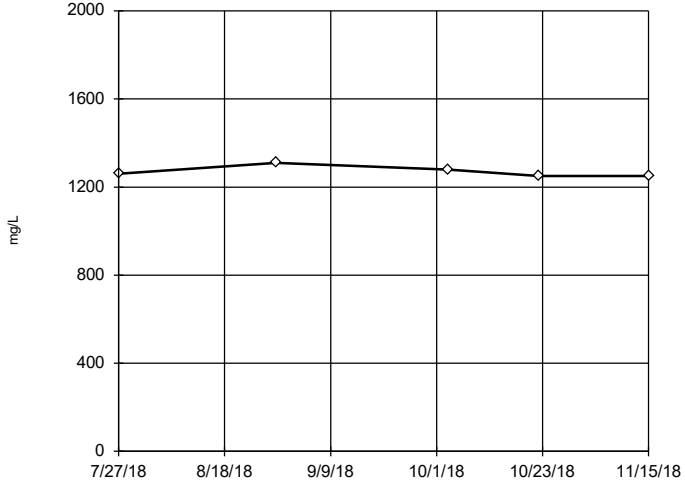
High cutoff = 484.2, low cutoff = 288.6, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-2



n = 5

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

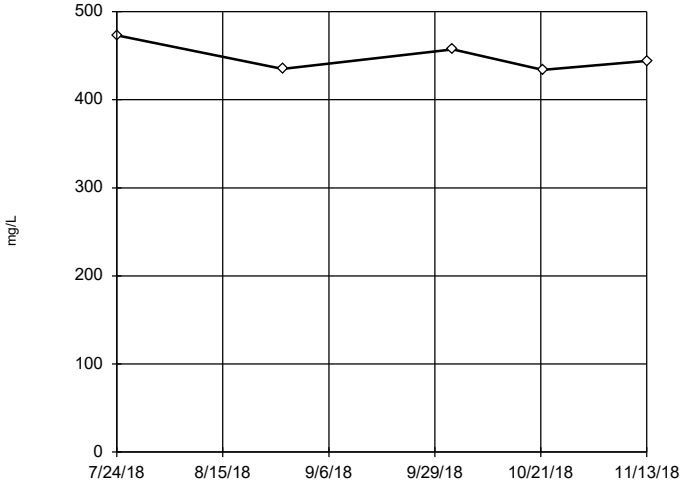
High cutoff = 1440, low cutoff = 1124, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-1



n = 5

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

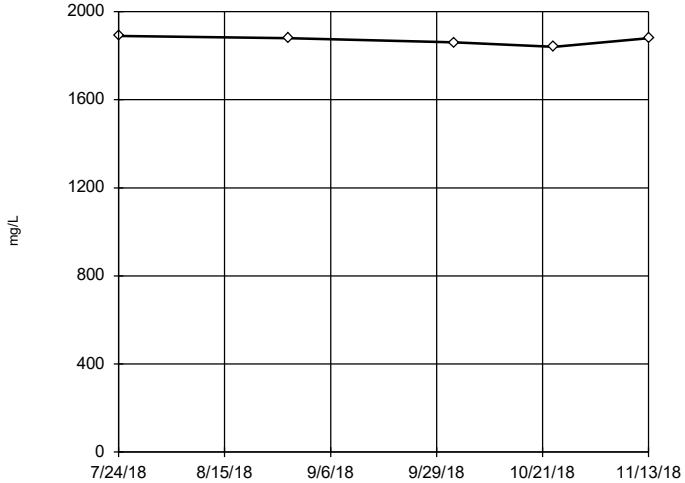
High cutoff = 569.6, low cutoff = 354.6, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-5



n = 5

No outliers found. Tukey's method selected by user.

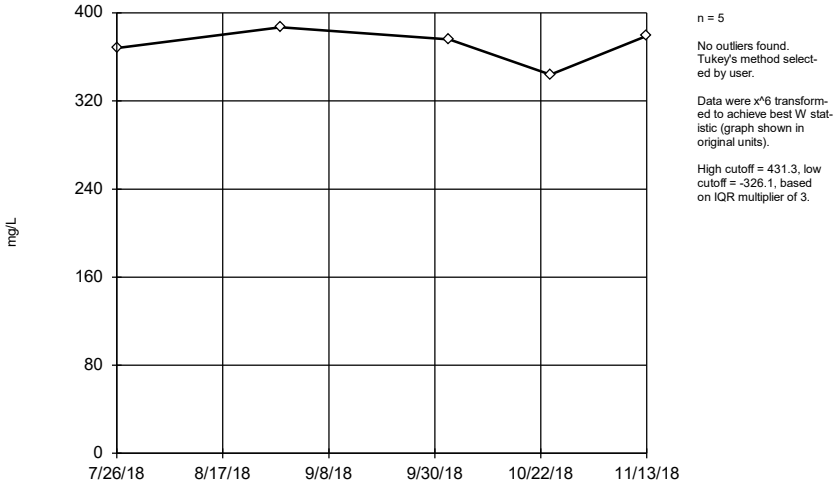
Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1974, low cutoff = 1719, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive
Amos FAP Client: Geosyntec Data: Amos FAP

Tukey's Outlier Screening

FAP-MW-7



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 431.3, low cutoff = -326.1, based on IQR multiplier of 3.

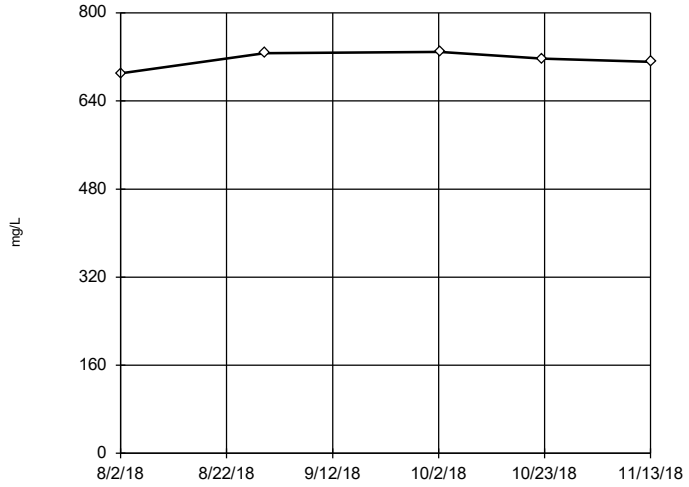
Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-8



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 788.2, low cutoff = 549.8, based on IQR multiplier of 3.

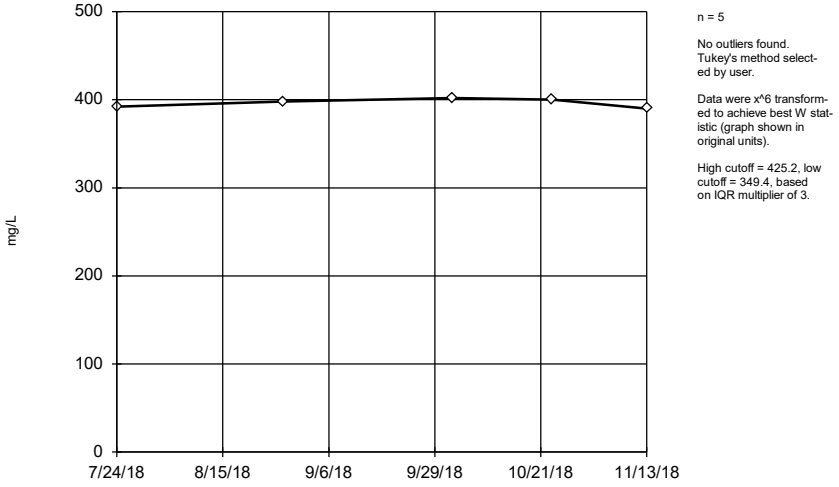
Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Tukey's Outlier Screening

FAP-MW-6



n = 5

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 425.2, low cutoff = 349.4, based on IQR multiplier of 3.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 4:58 AM View: Descriptive

Amos FAP Client: Geosyntec Data: Amos FAP

FIGURE D: TREND TESTS

Trend Test Summary Table - Significant Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 8:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	**FAP-MW-1810A (bg)**	**-12.81**	**-24**	**-21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**FAP-MW-1807B (bg)**	**29.65**	**22**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary Table - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 8:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	FAP-MW-1809A (bg)	-0.01635	-10	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1810A (bg)	0.01265	1	21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1807A (bg)	0.02119	2	21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1808A (bg)	-0.02126	-2	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1807B (bg)	-0.01671	-2	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-9	-0.04482	-9	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1801A	-0.2284	-8	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1804A	-0.03444	-4	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1806A	-0.01358	-3	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-2	-0.001713	0	21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-1	-0.05373	-10	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-5	-0.007	-2	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-7	-0.01383	0	21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-8	-0.0749	-14	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	FAP-MW-6	-0.07878	-12	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1809A (bg)	12.13	11	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1810A (bg)	12.8	14	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1807A (bg)	15.33	6	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1808A (bg)	1.971	6	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1807B (bg)	2.323	16	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-9	0.03687	1	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1801A	-11.87	-10	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1804A	-25.91	-18	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1806A	-8.439	-10	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-2	-0.8331	-15	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-1	-0.8673	-11	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-5	-0.648	-5	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-7	0.05532	2	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-8	0.5554	10	21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	FAP-MW-6	-12.71	-9	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-1809A (bg)	4.081	12	21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**FAP-MW-1810A (bg)**	**-12.81**	**-24**	**-21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	FAP-MW-1807A (bg)	3.009	6	21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-1808A (bg)	-2.363	-4	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-1807B (bg)	-1.316	-6	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-9	0.4359	10	21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-1801A	-1.044	-4	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-1804A	-1.541	-8	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-1806A	-16	-14	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-2	-15.29	-4	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-1	-0.743	-4	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-5	7.371	3	21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-7	-0.1309	-4	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-8	9.629	16	21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	FAP-MW-6	-3.765	-16	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1809A (bg)	-0.03724	-11	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1810A (bg)	0.1367	5	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1807A (bg)	-0.09185	-17	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1808A (bg)	-0.3023	-17	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1807B (bg)	0.1137	4	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-9	-0.0717	-8	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1801A	0.05492	14	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1804A	0.2644	7	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-1806A	0.3342	11	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-2	0.01241	2	21	No	8	0	n/a	n/a	0.01	NP

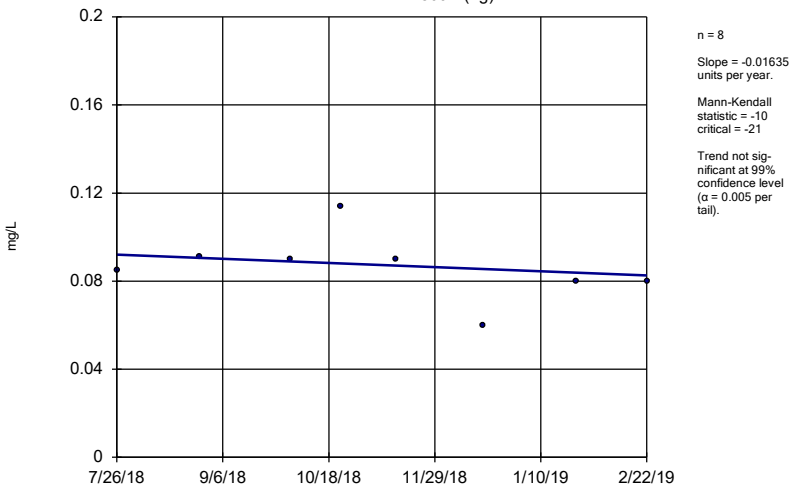
Trend Test Summary Table - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 8:53 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Fluoride (mg/L)	FAP-MW-1	0.01233	2	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-5	0.1028	11	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-7	-0.008816	-7	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-8	0.2817	8	21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	FAP-MW-6	0.01233	5	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1809A (bg)	-0.4372	-9	-21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1810A (bg)	-0.1779	-2	-21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1807A (bg)	0.7476	6	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1808A (bg)	-0.8677	-13	-21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1807B (bg)	-0.6488	-2	-21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-9	2.679	14	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1801A	-0.6828	-10	-21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1804A	0.1683	1	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1806A	0.8389	12	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-2	0.1179	2	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-1	-0.01705	0	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-5	-0.1645	-6	-21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-7	0.3197	3	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-8	0.5943	3	21	No	8	0	n/a	n/a	0.01	NP
pH (SU)	FAP-MW-6	-0.5521	-9	-21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1809A (bg)	18.34	13	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1810A (bg)	0	0	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1807A (bg)	64.73	6	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1808A (bg)	48.24	6	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**FAP-MW-1807B (bg)**	**29.65**	**22**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	FAP-MW-9	16.68	14	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1801A	-15.84	-16	-21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1804A	-5.449	-4	-21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1806A	-26.5	-12	-21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-2	-20.64	-13	-21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-1	1.286	12	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-5	5.6e-9	2	21	No	8	50	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-7	0.8834	11	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-8	10.64	11	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	FAP-MW-6	-7.303	-19	-21	No	8	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1809A (bg)	110.8	4	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1810A (bg)	-104.9	-2	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1807A (bg)	-155.8	-2	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1808A (bg)	91.4	2	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1807B (bg)	6.083	1	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-9	22.57	0	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1801A	-21.46	0	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1804A	212.1	7	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1806A	19.9	0	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-2	-151.1	-5	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-1	-88.38	-4	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-5	-127.8	-5	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-7	-5.857	0	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-8	-23.06	0	12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	FAP-MW-6	3.145	0	12	No	5	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

FAP-MW-1809A (bg)



n = 8

Slope = -0.01635 units per year.

Mann-Kendall statistic = -10
critical = -21

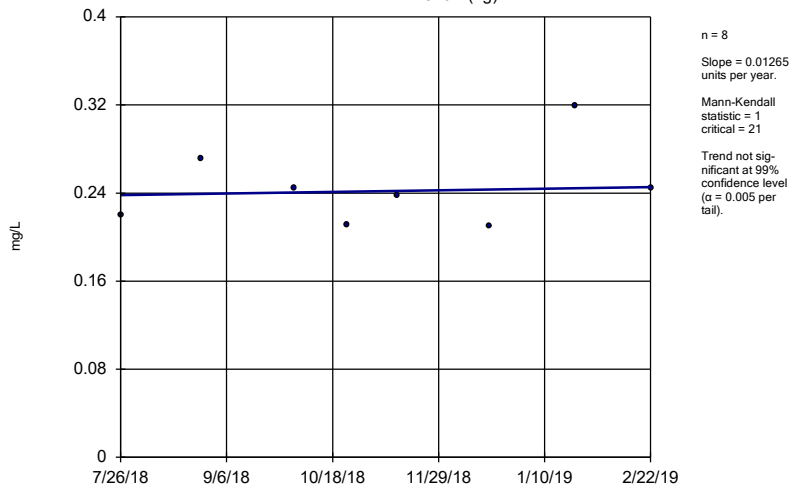
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1810A (bg)



n = 8

Slope = 0.01265 units per year.

Mann-Kendall statistic = 1
critical = 21

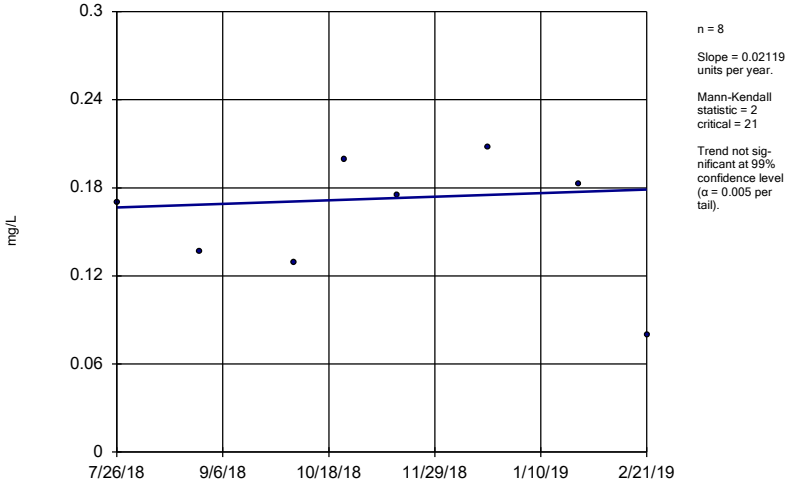
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807A (bg)



n = 8

Slope = 0.02119 units per year.

Mann-Kendall statistic = 2
critical = 21

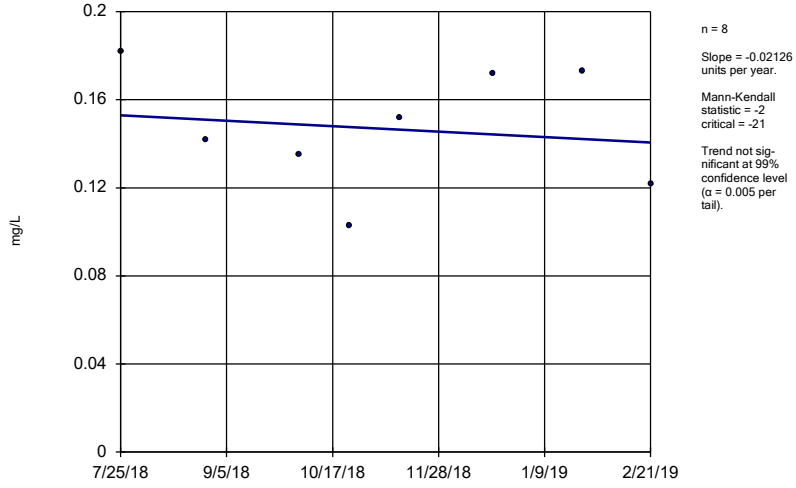
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1808A (bg)



n = 8

Slope = -0.02126 units per year.

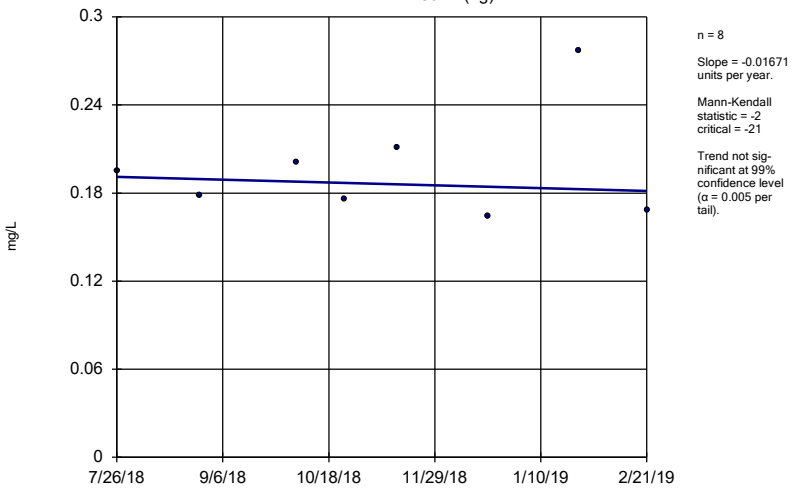
Mann-Kendall statistic = -2
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1807B (bg)



n = 8

Slope = -0.01671 units per year.

Mann-Kendall statistic = -2
critical = -21

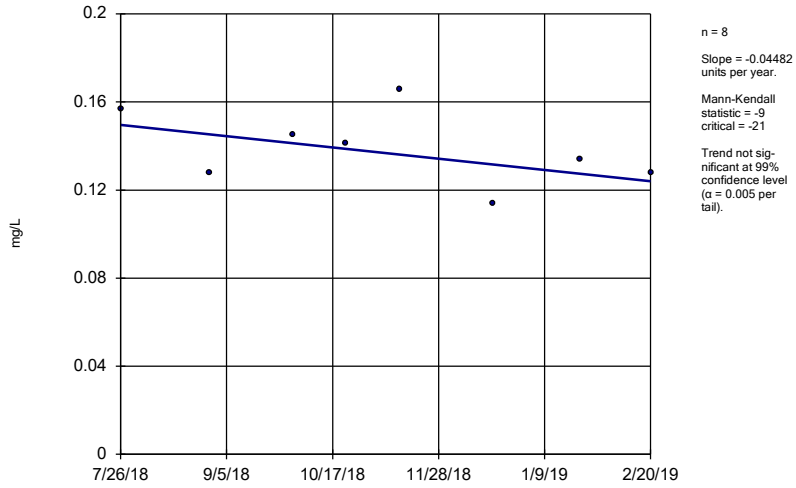
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-9



n = 8

Slope = -0.04482 units per year.

Mann-Kendall statistic = -9
critical = -21

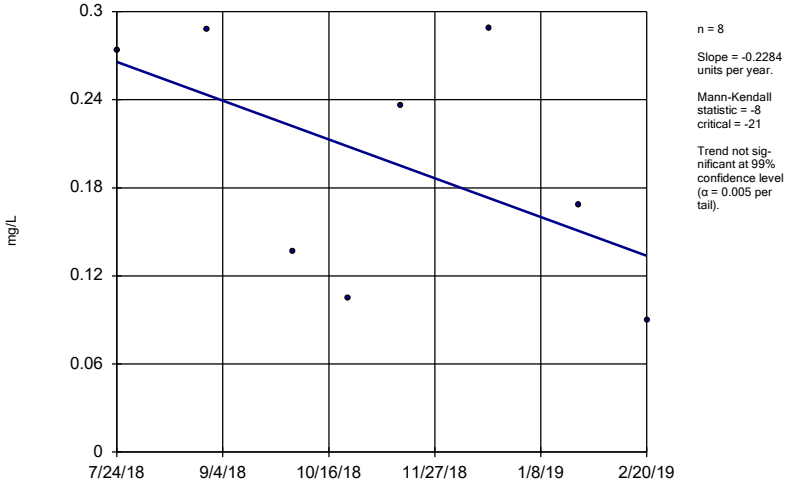
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1801A



n = 8

Slope = -0.2284 units per year.

Mann-Kendall statistic = -8
critical = -21

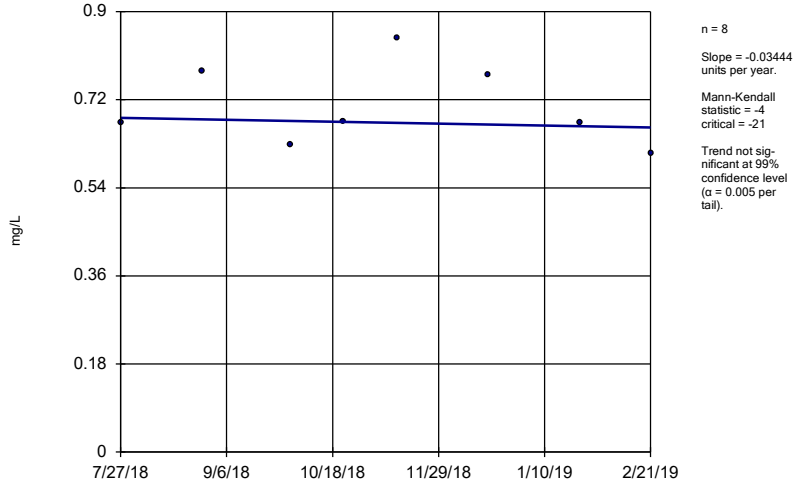
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1804A



n = 8

Slope = -0.03444 units per year.

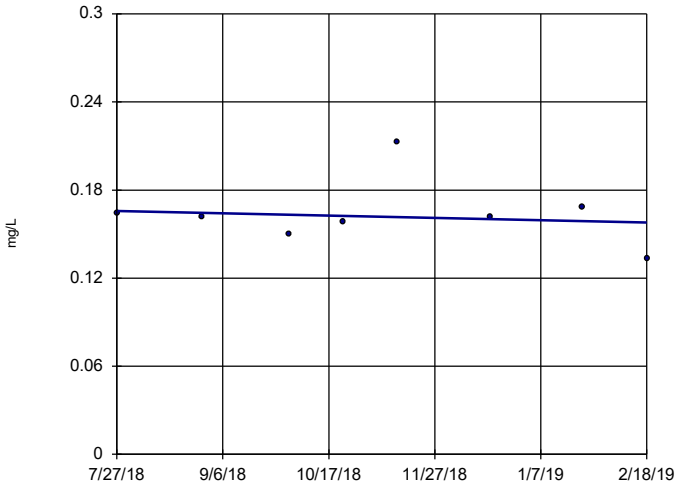
Mann-Kendall statistic = -4
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1806A



n = 8

Slope = -0.01358 units per year.

Mann-Kendall statistic = -3
critical = -21

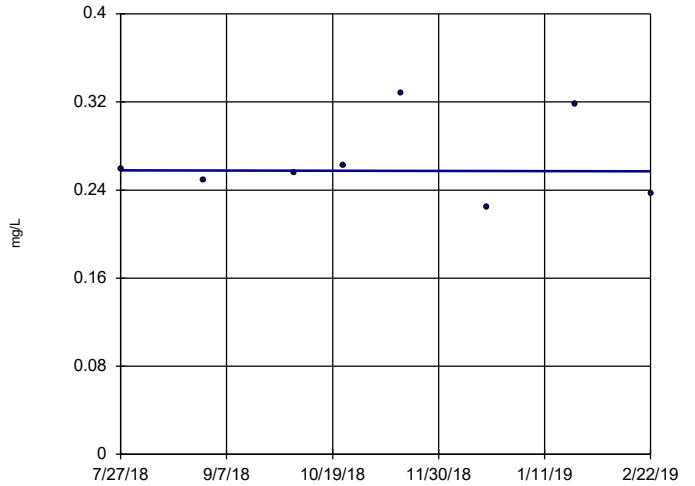
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-2



n = 8

Slope = -0.001713 units per year.

Mann-Kendall statistic = 0
critical = 21

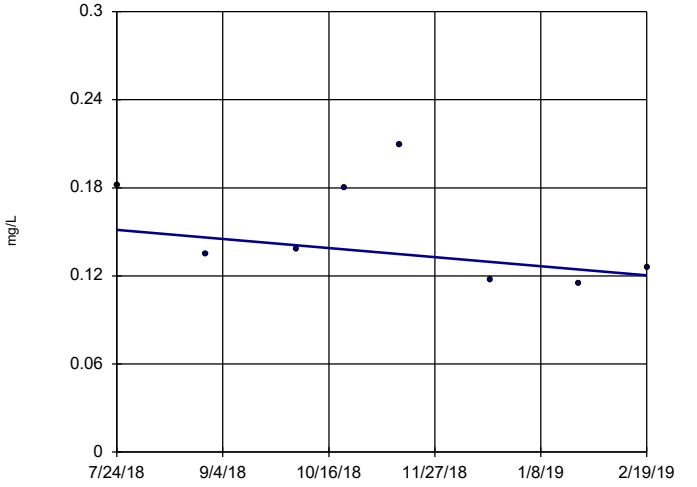
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1



n = 8

Slope = -0.05373 units per year.

Mann-Kendall statistic = -10
critical = -21

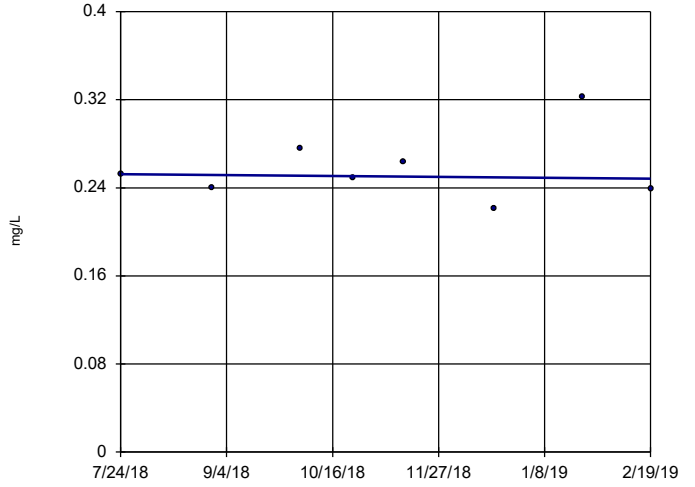
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-5



n = 8

Slope = -0.007 units per year.

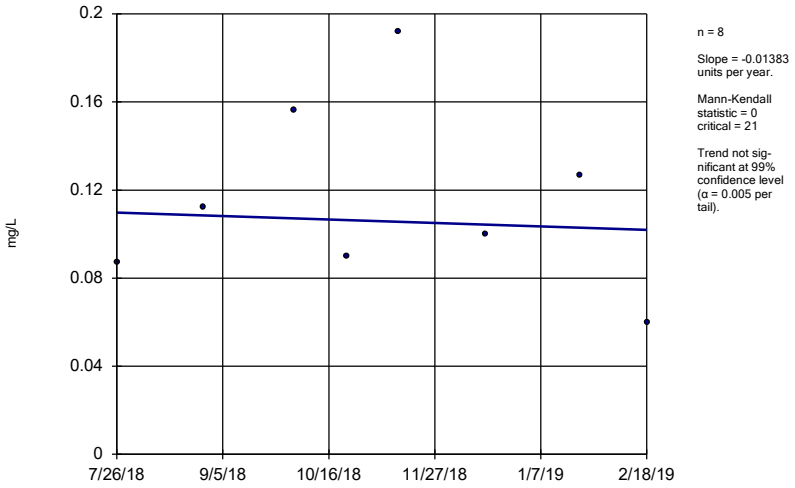
Mann-Kendall statistic = -2
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-7



n = 8

Slope = -0.01383 units per year.

Mann-Kendall statistic = 0
critical = 21

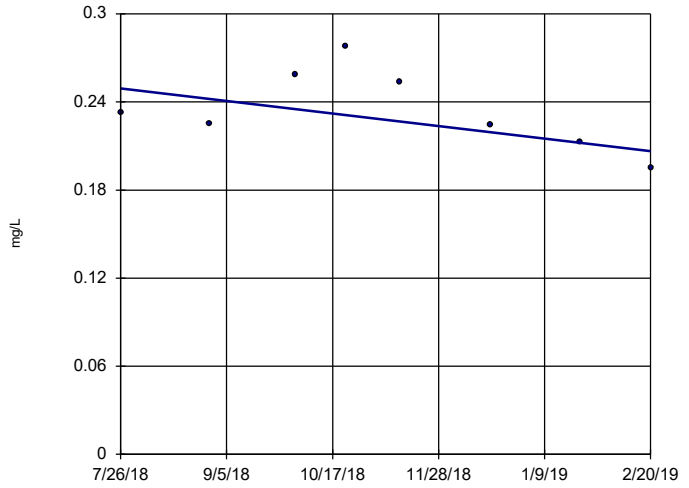
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-8



n = 8

Slope = -0.0749 units per year.

Mann-Kendall statistic = -14
critical = -21

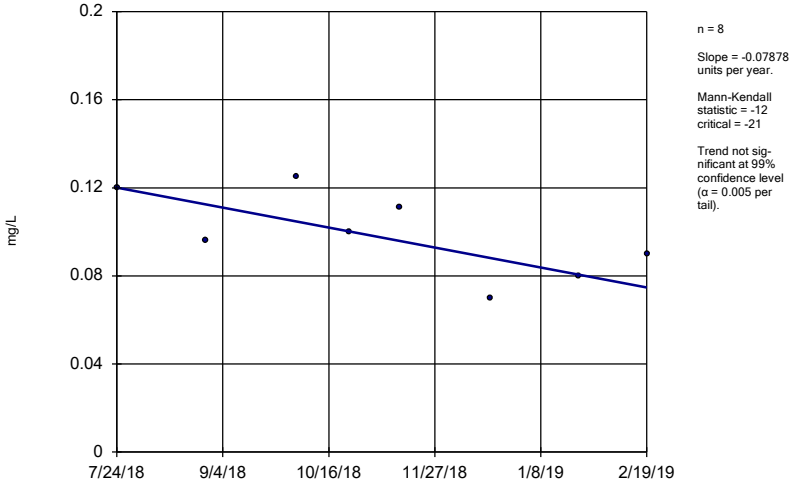
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-6



n = 8

Slope = -0.07878 units per year.

Mann-Kendall statistic = -12
critical = -21

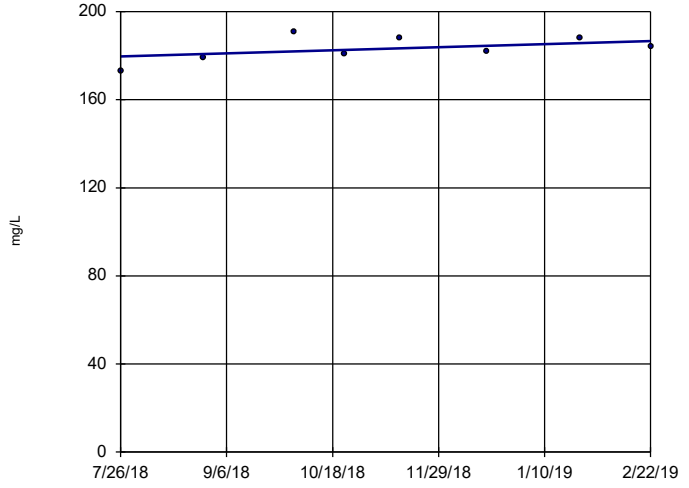
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1809A (bg)



n = 8

Slope = 12.13 units per year.

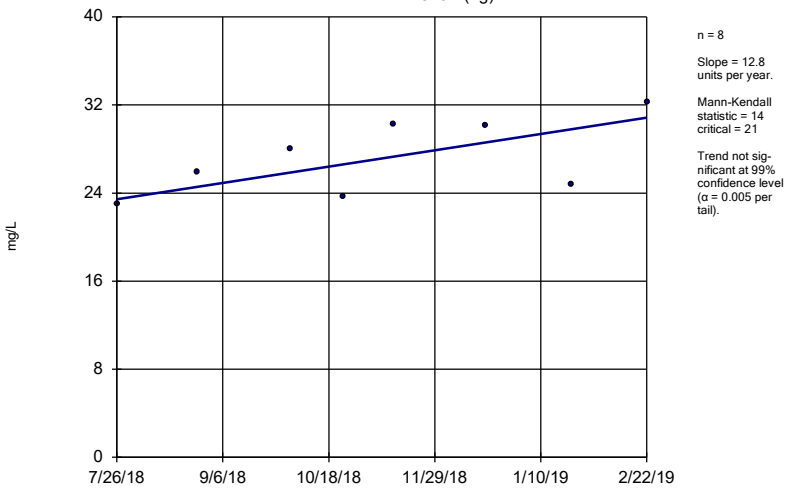
Mann-Kendall statistic = 11
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1810A (bg)



n = 8

Slope = 12.8 units per year.

Mann-Kendall statistic = 14 critical = 21

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

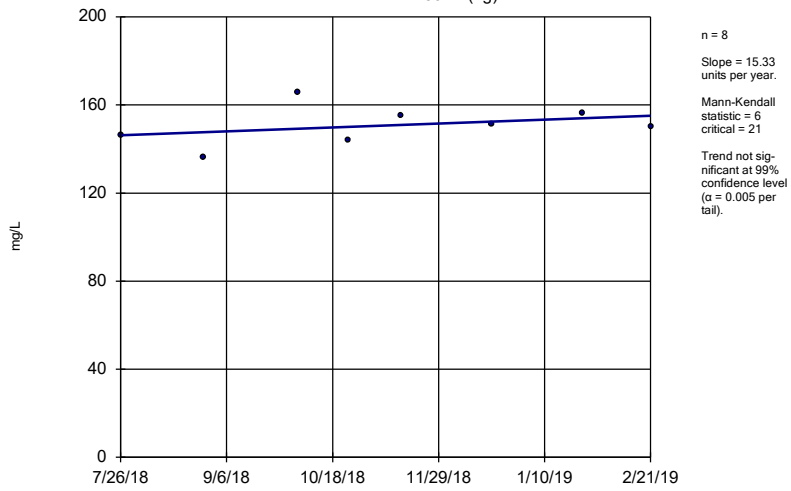
Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807A (bg)



n = 8

Slope = 15.33 units per year.

Mann-Kendall statistic = 6 critical = 21

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

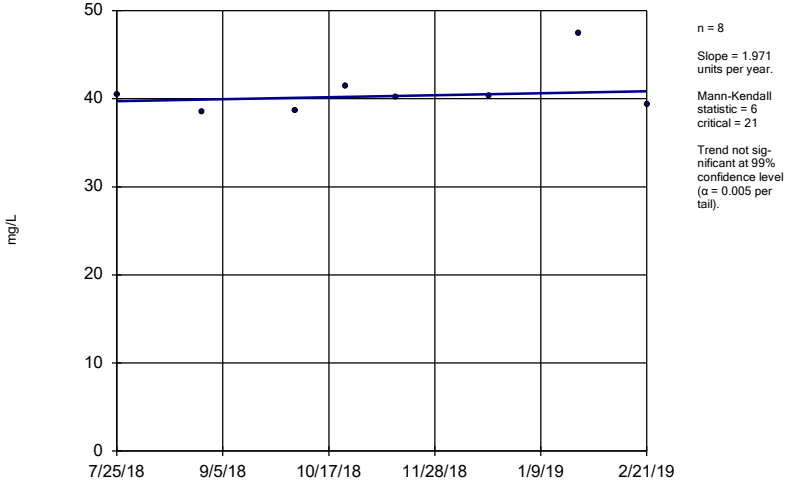
Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1808A (bg)



n = 8

Slope = 1.971 units per year.

Mann-Kendall statistic = 6 critical = 21

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

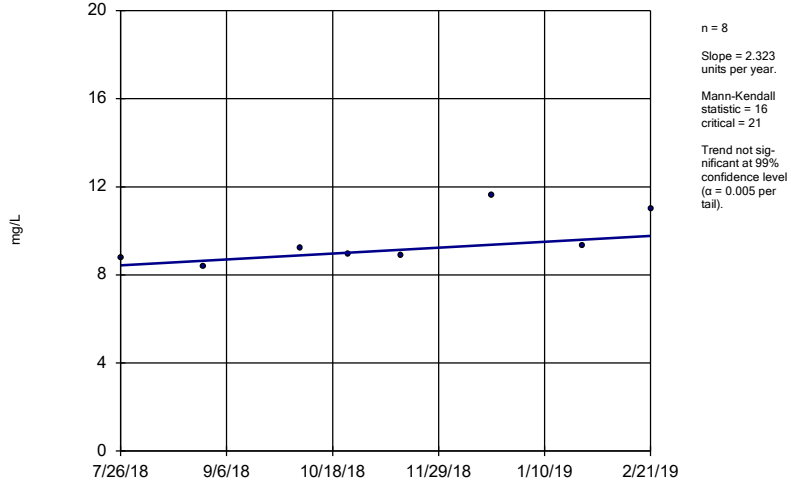
Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807B (bg)



n = 8

Slope = 2.323 units per year.

Mann-Kendall statistic = 16 critical = 21

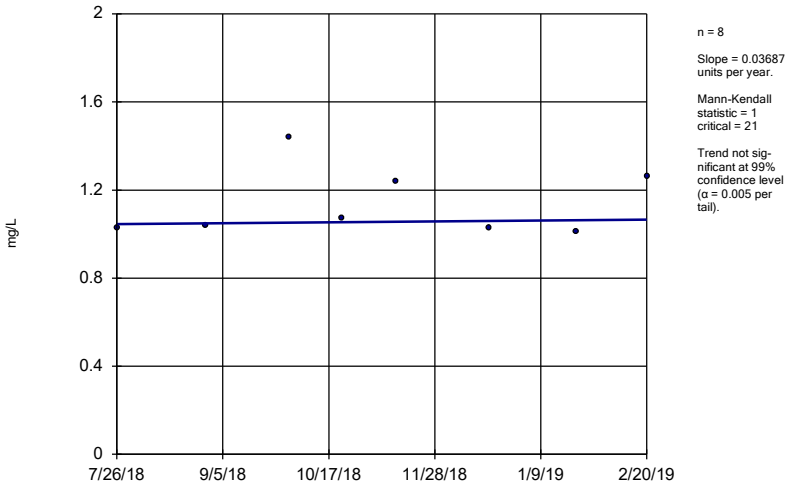
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-9



n = 8

Slope = 0.03687 units per year.

Mann-Kendall statistic = 1
critical = 21

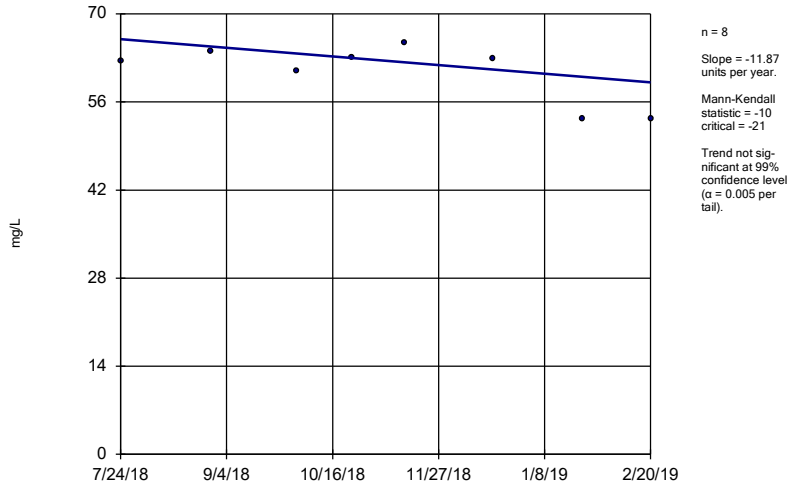
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1801A



n = 8

Slope = -11.87 units per year.

Mann-Kendall statistic = -10
critical = -21

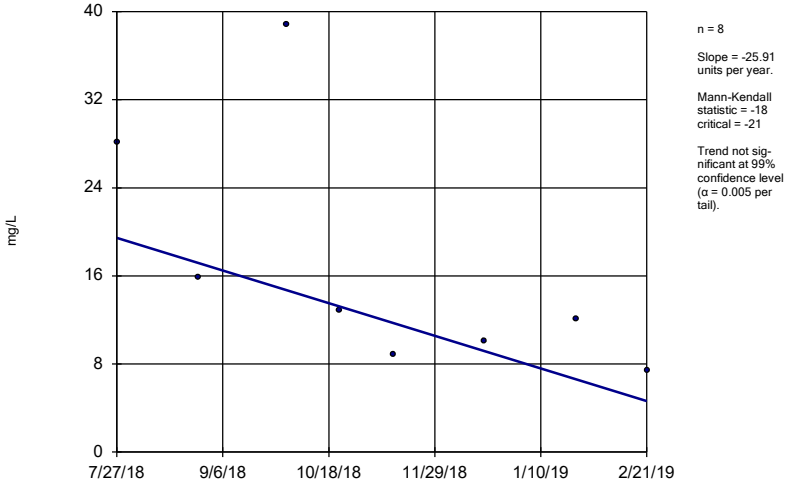
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1804A



n = 8

Slope = -25.91 units per year.

Mann-Kendall statistic = -18
critical = -21

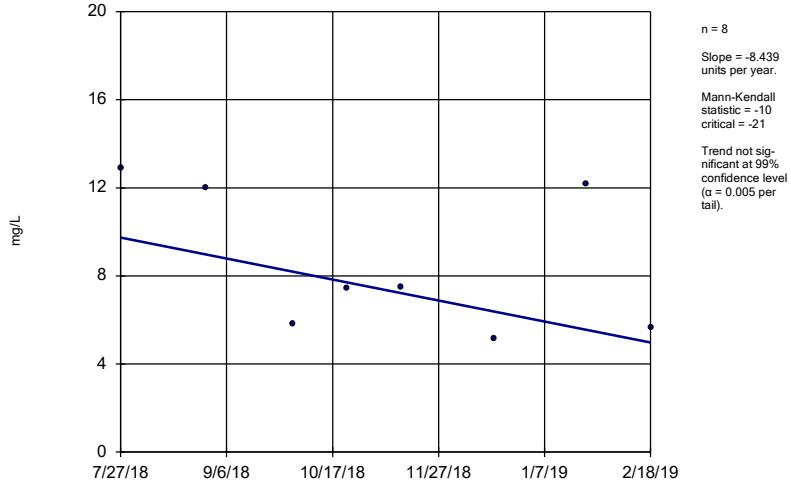
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1806A



n = 8

Slope = -8.439 units per year.

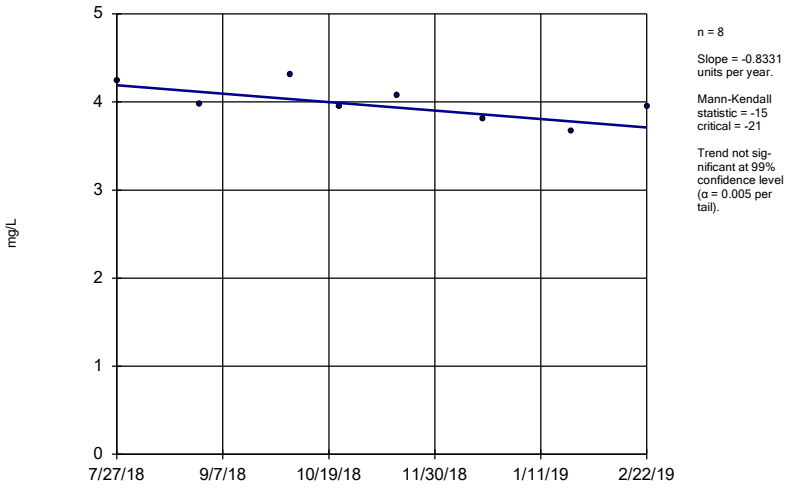
Mann-Kendall statistic = -10
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-2



n = 8

Slope = -0.8331 units per year.

Mann-Kendall statistic = -15
critical = -21

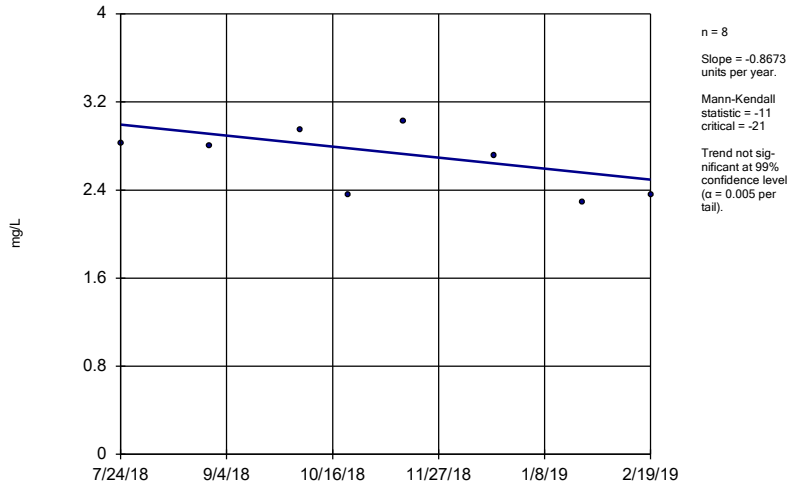
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1



n = 8

Slope = -0.8673 units per year.

Mann-Kendall statistic = -11
critical = -21

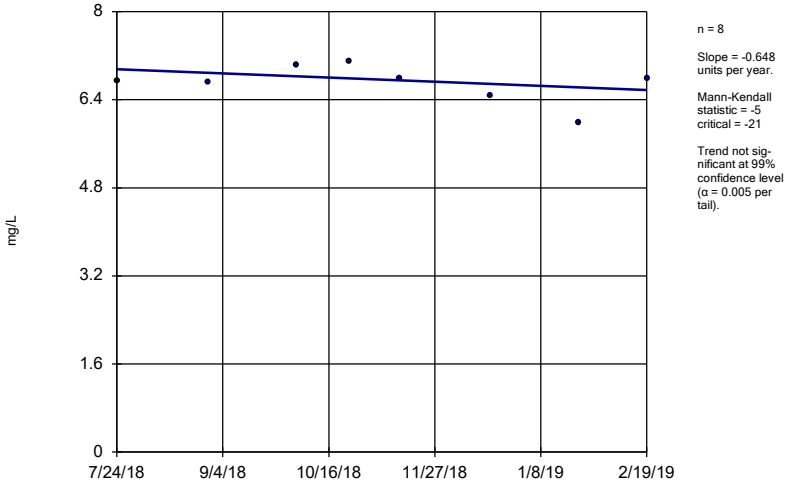
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-5



n = 8

Slope = -0.648 units per year.

Mann-Kendall statistic = -5
critical = -21

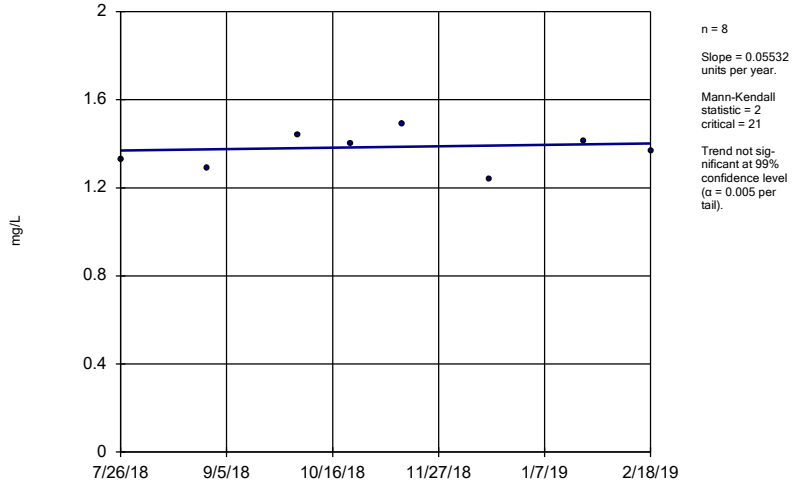
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-7



n = 8

Slope = 0.05532 units per year.

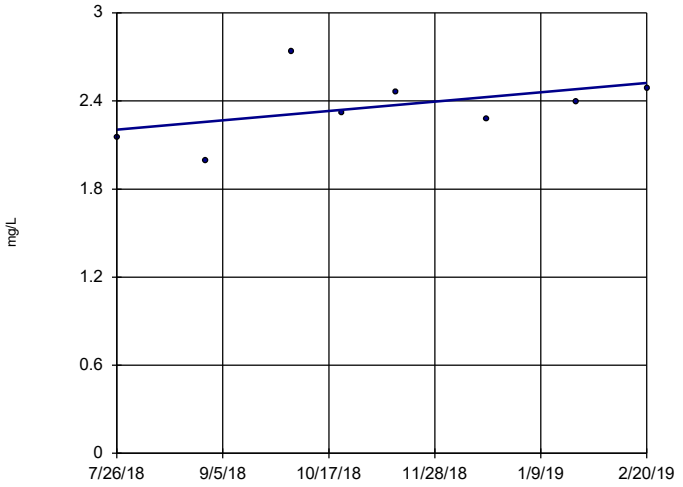
Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-8



n = 8

Slope = 0.5554 units per year.

Mann-Kendall statistic = 10 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

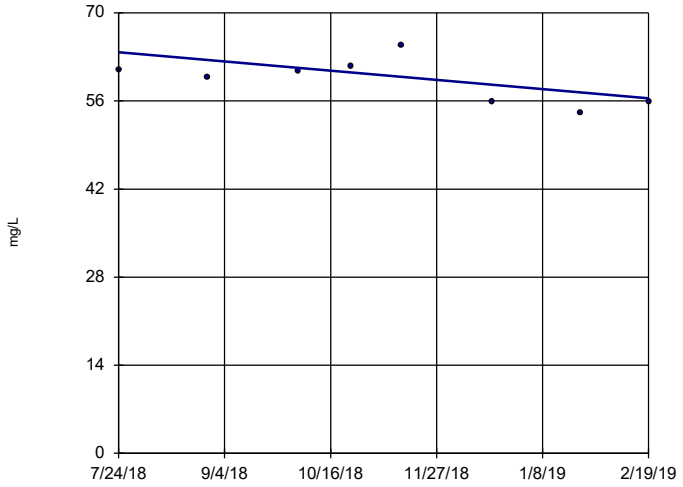
Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-6



n = 8

Slope = -12.71 units per year.

Mann-Kendall statistic = -9 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

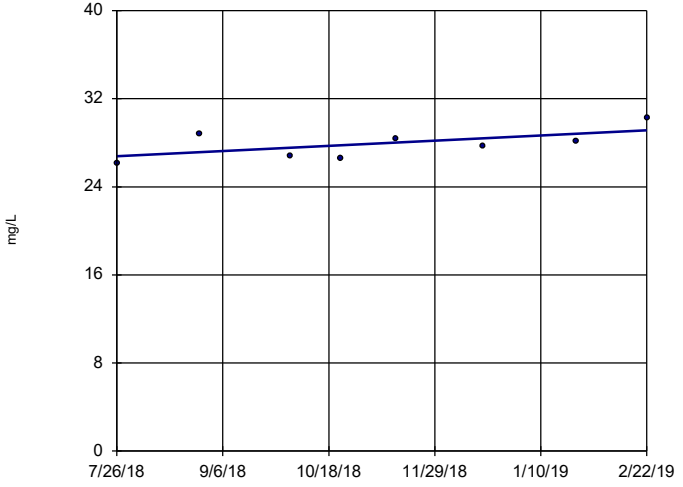
Constituent: Calcium Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1809A (bg)



n = 8

Slope = 4.081 units per year.

Mann-Kendall statistic = 12 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

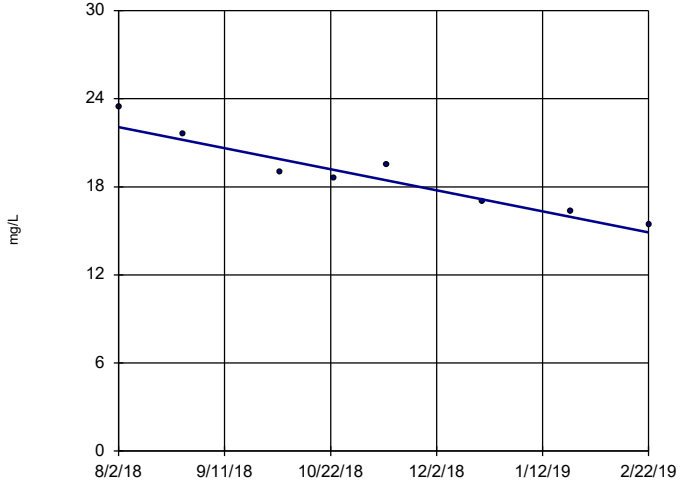
Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1810A (bg)



n = 8

Slope = -12.81 units per year.

Mann-Kendall statistic = -24 critical = -21

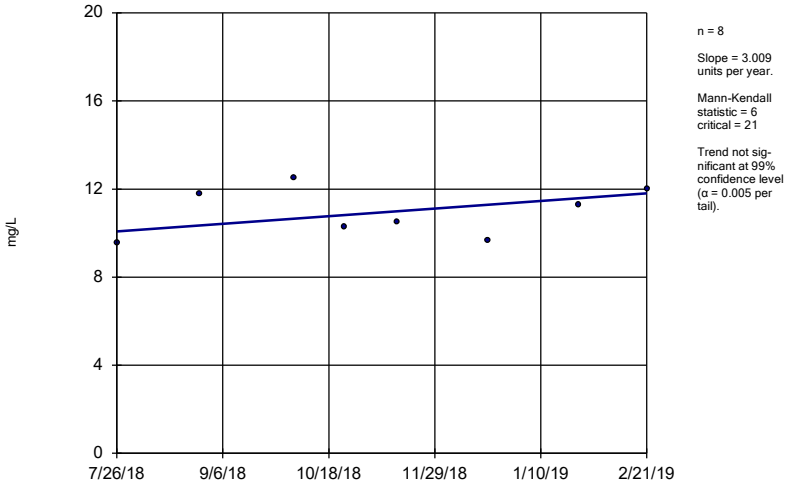
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1807A (bg)



n = 8

Slope = 3.009 units per year.

Mann-Kendall statistic = 6
critical = 21

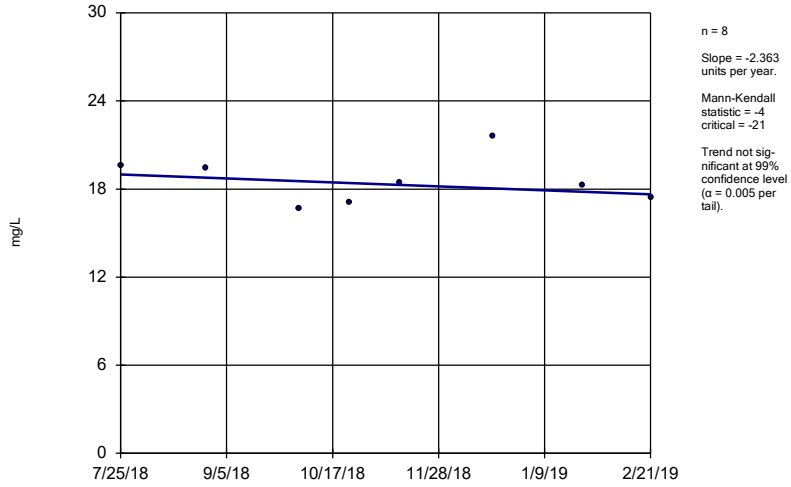
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1808A (bg)



n = 8

Slope = -2.363 units per year.

Mann-Kendall statistic = -4
critical = -21

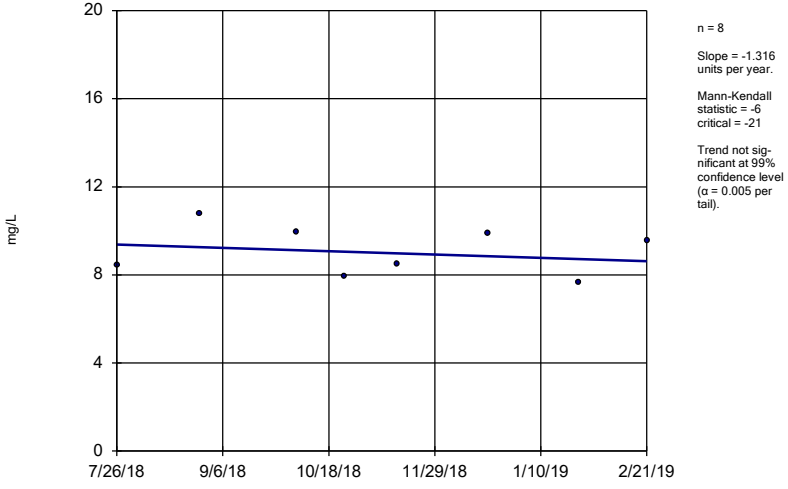
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807B (bg)



n = 8

Slope = -1.316 units per year.

Mann-Kendall statistic = -6
critical = -21

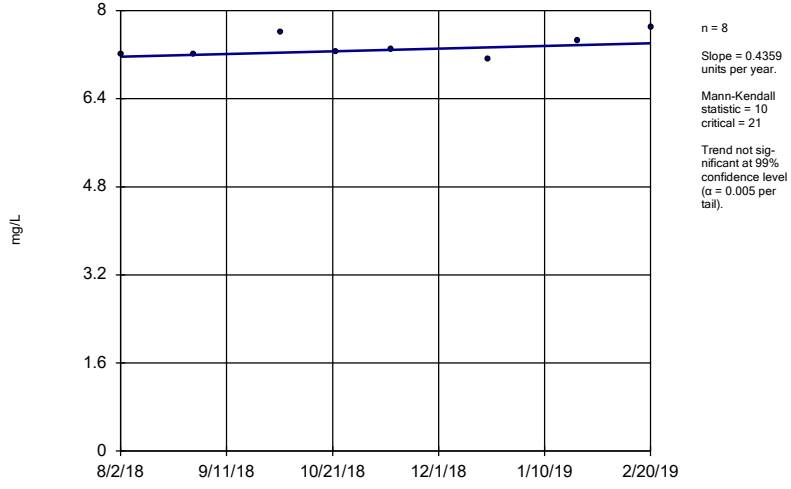
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-9



n = 8

Slope = 0.4359 units per year.

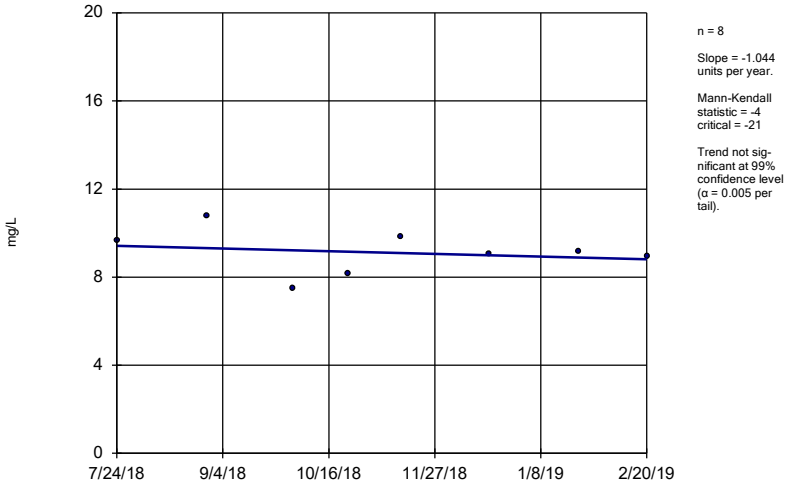
Mann-Kendall statistic = 10
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1801A



n = 8

Slope = -1.044 units per year.

Mann-Kendall statistic = -4
critical = -21

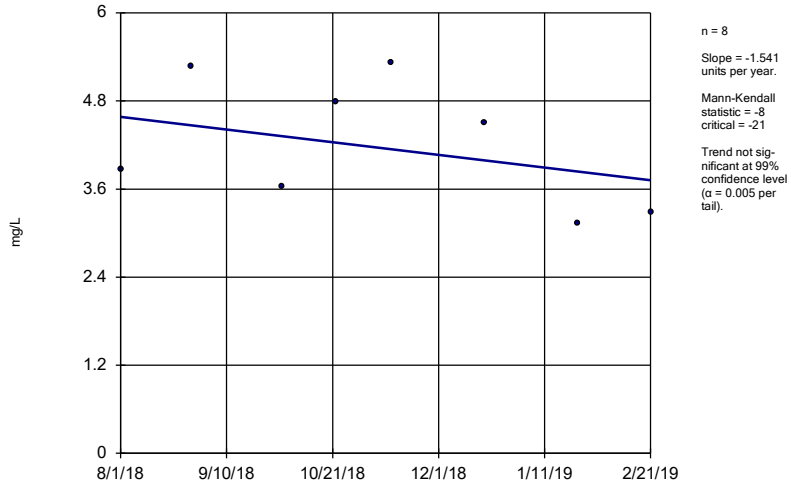
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1804A



n = 8

Slope = -1.541 units per year.

Mann-Kendall statistic = -8
critical = -21

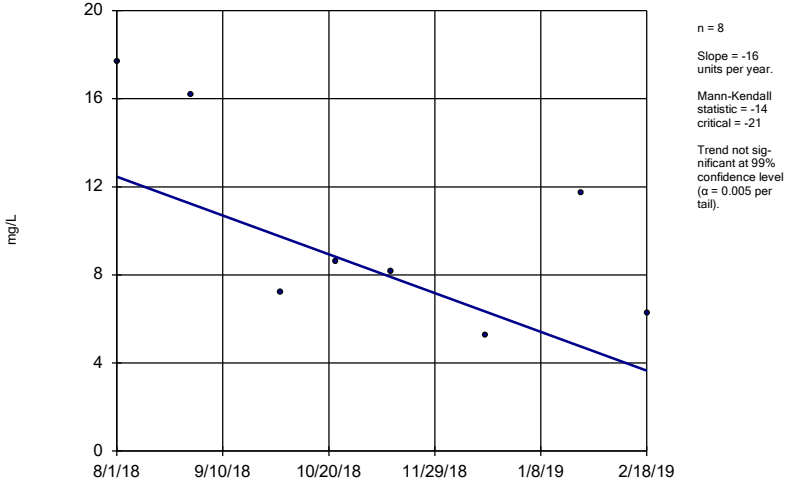
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1806A



n = 8

Slope = -16 units per year.

Mann-Kendall statistic = -14
critical = -21

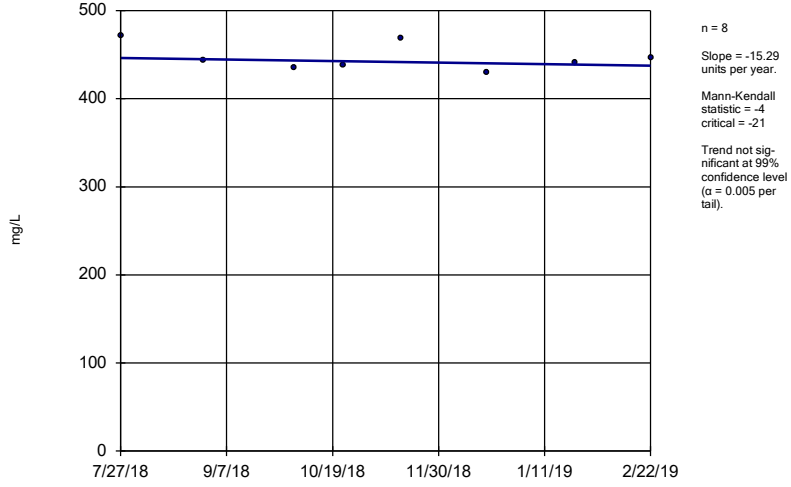
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-2



n = 8

Slope = -15.29 units per year.

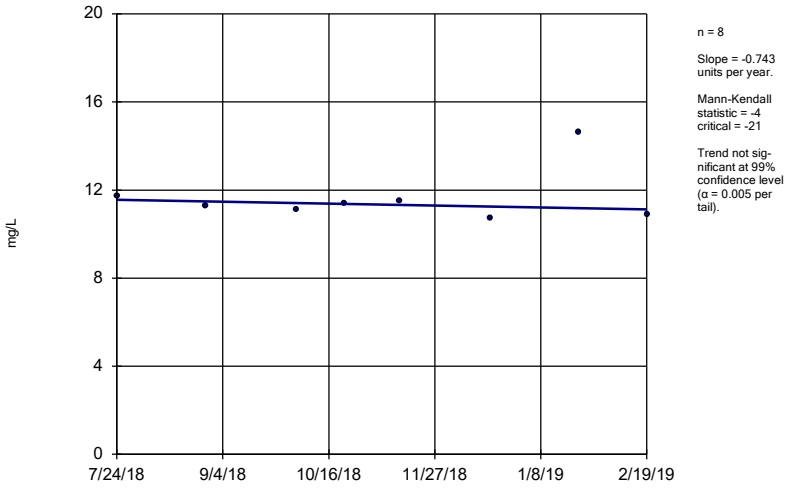
Mann-Kendall statistic = -4
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1



n = 8

Slope = -0.743 units per year.

Mann-Kendall statistic = -4 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

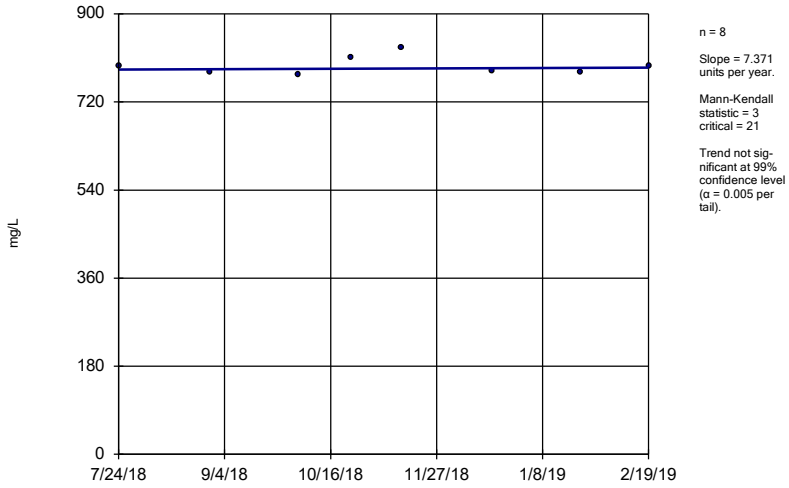
Constituent: Chloride Analysis Run 4/18/2019 8:46 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-5



n = 8

Slope = 7.371 units per year.

Mann-Kendall statistic = 3 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

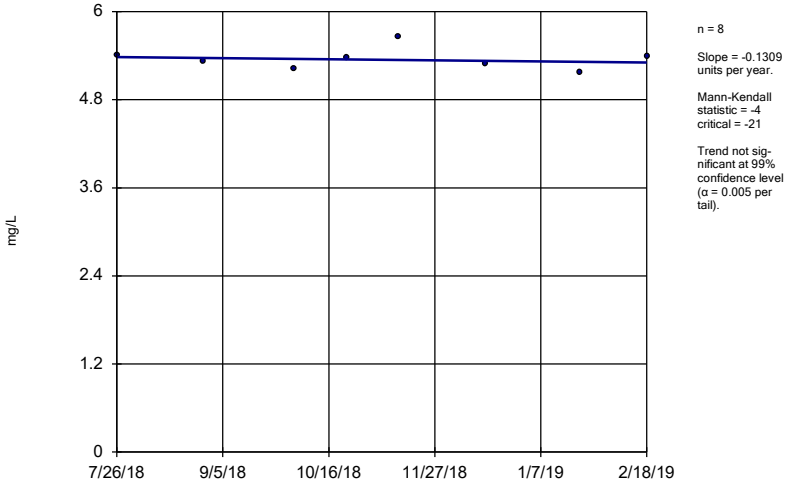
Constituent: Chloride Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-7



n = 8

Slope = -0.1309 units per year.

Mann-Kendall statistic = -4 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

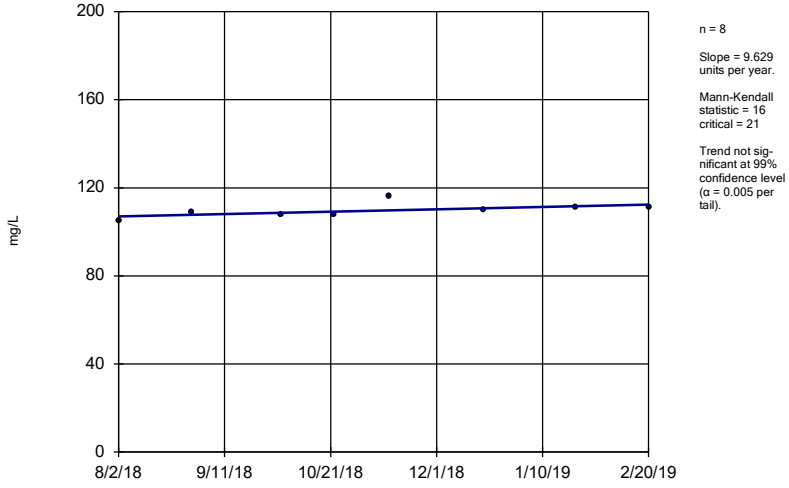
Constituent: Chloride Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-8



n = 8

Slope = 9.629 units per year.

Mann-Kendall statistic = 16 critical = 21

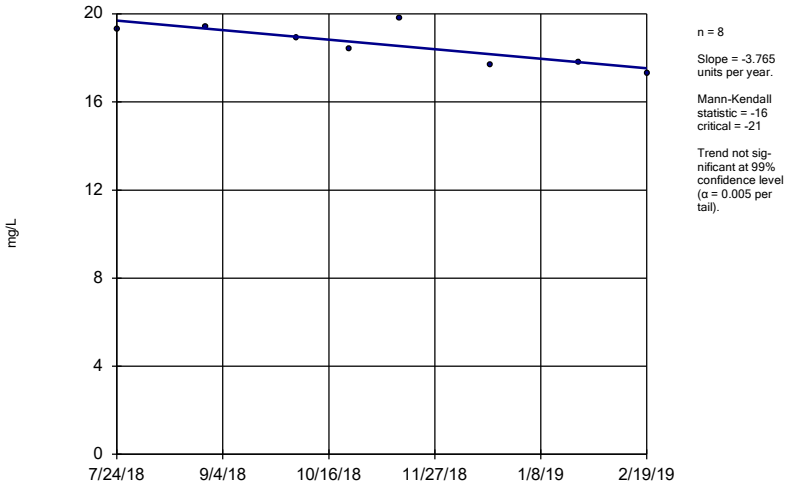
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-6



n = 8

Slope = -3.765 units per year.

Mann-Kendall statistic = -16
critical = -21

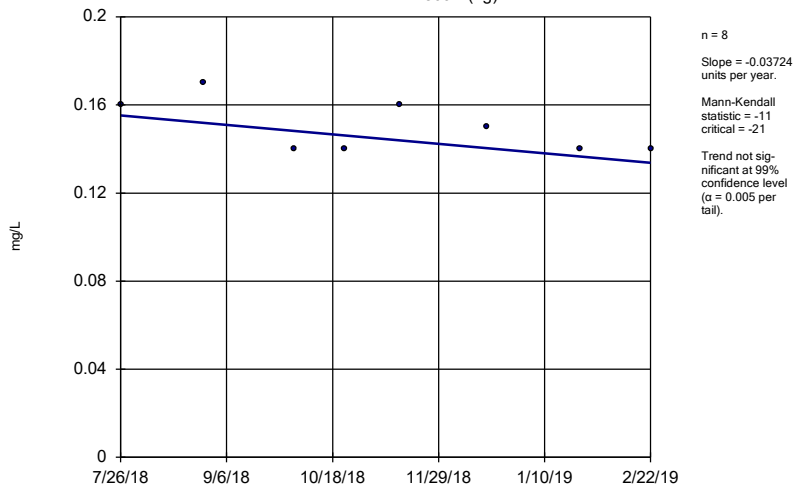
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1809A (bg)



n = 8

Slope = -0.03724 units per year.

Mann-Kendall statistic = -11
critical = -21

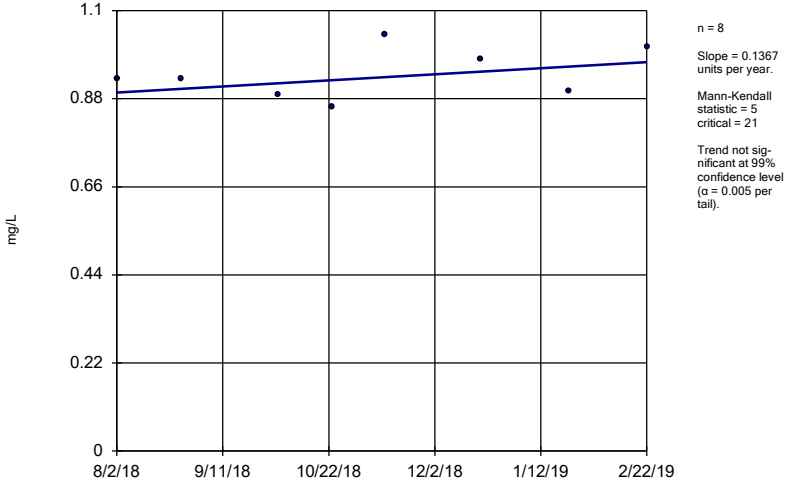
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1810A (bg)



n = 8

Slope = 0.1367 units per year.

Mann-Kendall statistic = 5
critical = 21

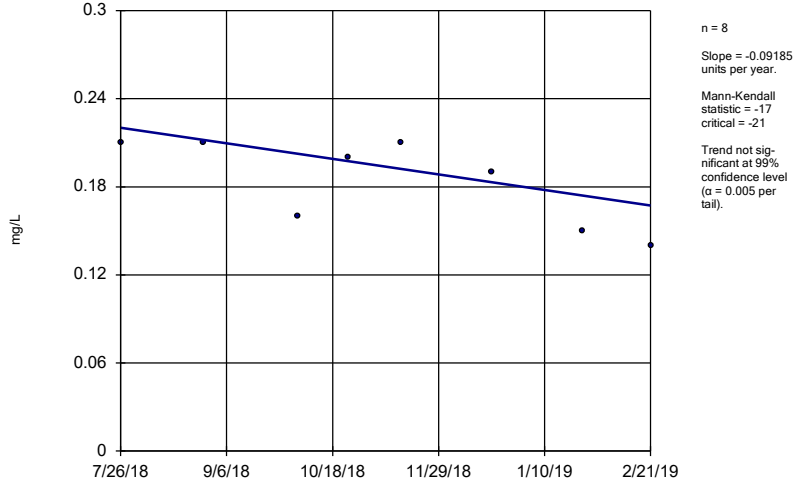
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807A (bg)



n = 8

Slope = -0.09185 units per year.

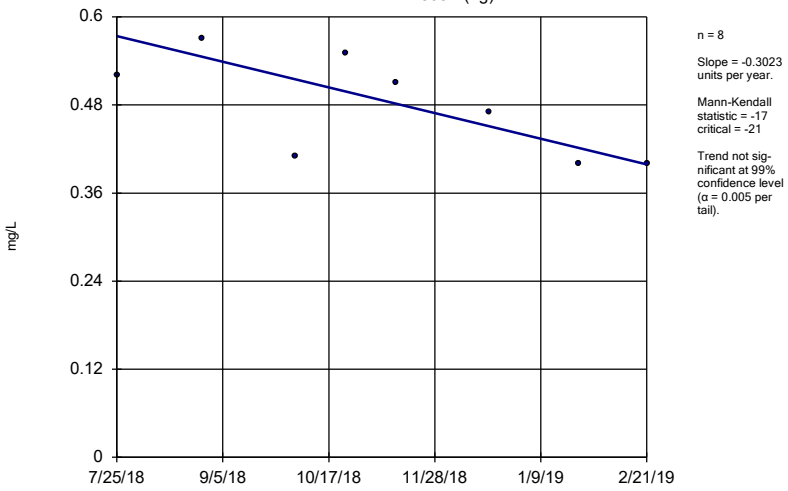
Mann-Kendall statistic = -17
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1808A (bg)



n = 8

Slope = -0.3023 units per year.

Mann-Kendall statistic = -17
critical = -21

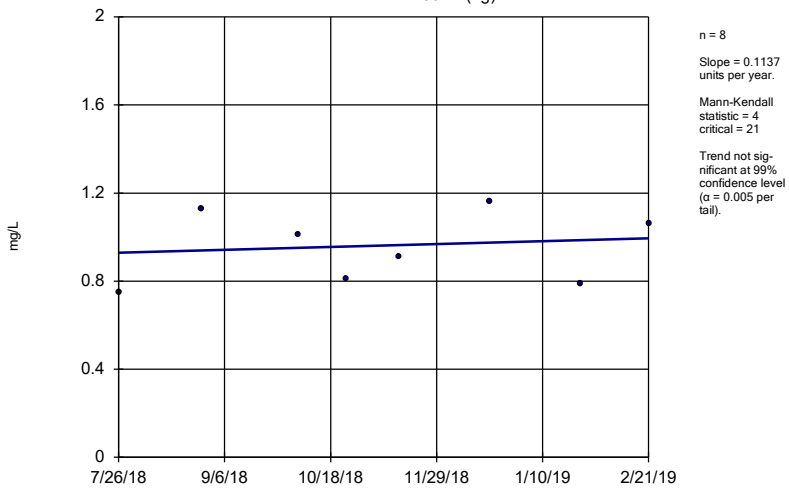
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807B (bg)



n = 8

Slope = 0.1137 units per year.

Mann-Kendall statistic = 4
critical = 21

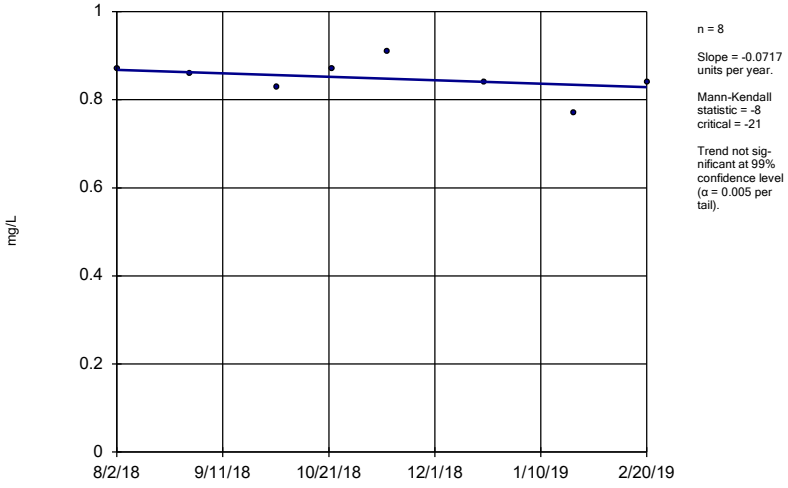
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-9



n = 8

Slope = -0.0717 units per year.

Mann-Kendall statistic = -8
critical = -21

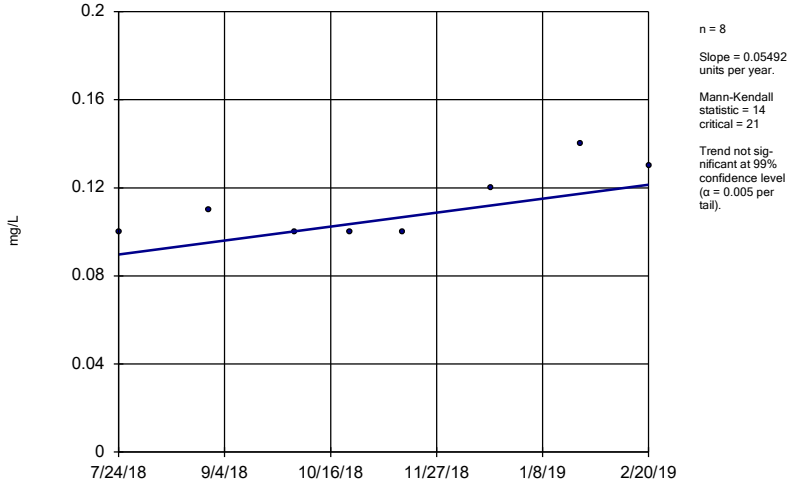
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1801A



n = 8

Slope = 0.05492 units per year.

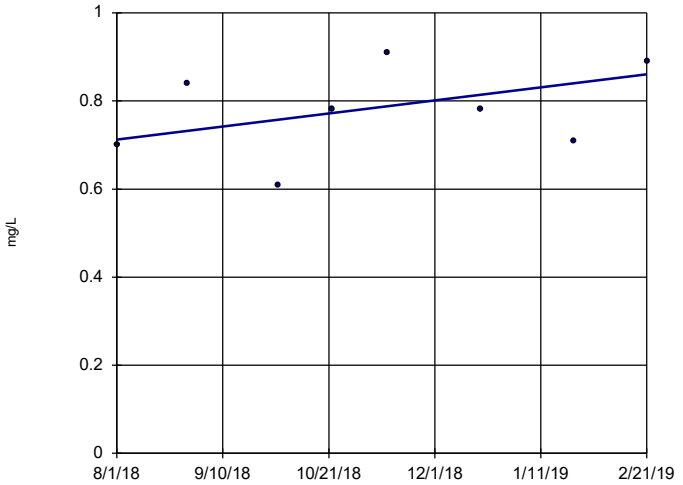
Mann-Kendall statistic = 14
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1804A



n = 8

Slope = 0.2644 units per year.

Mann-Kendall statistic = 7 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

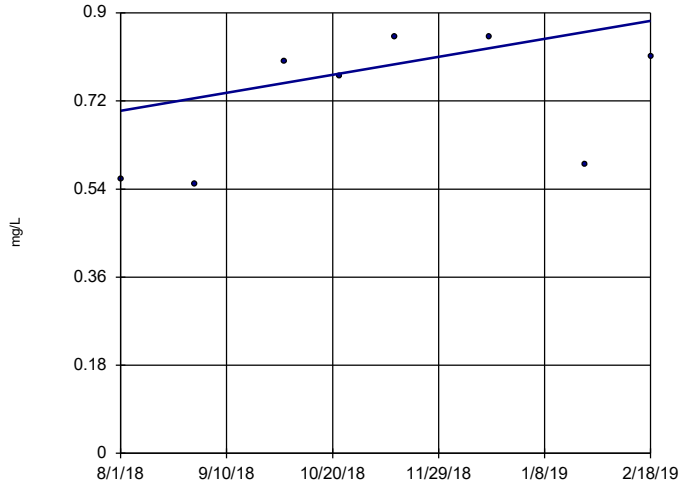
Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1806A



n = 8

Slope = 0.3342 units per year.

Mann-Kendall statistic = 11 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

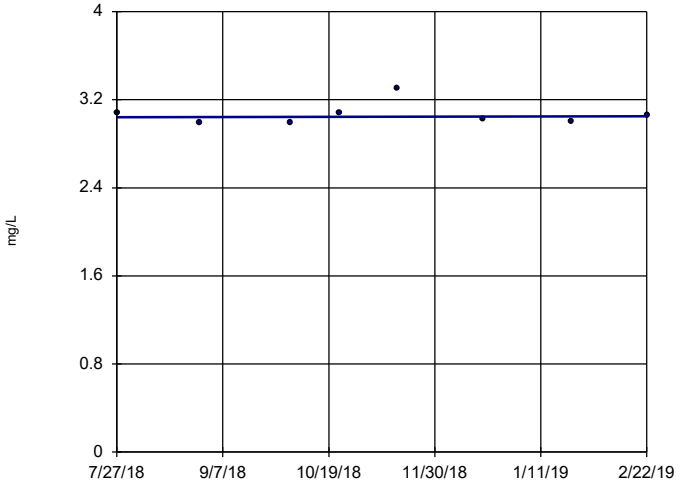
Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-2



n = 8

Slope = 0.01241 units per year.

Mann-Kendall statistic = 2 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

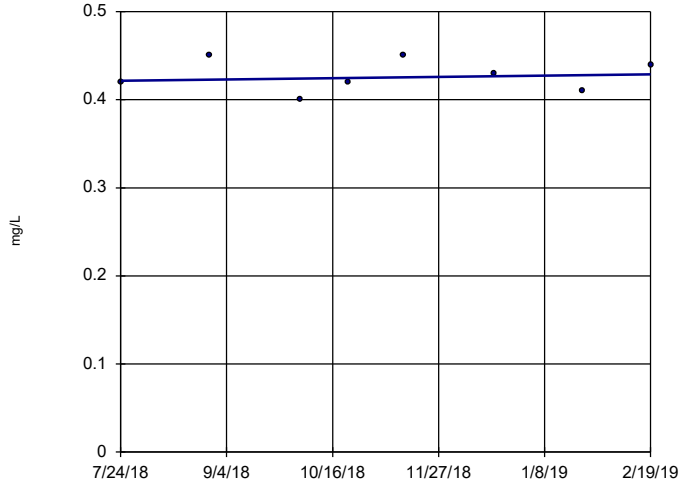
Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1



n = 8

Slope = 0.01233 units per year.

Mann-Kendall statistic = 2 critical = 21

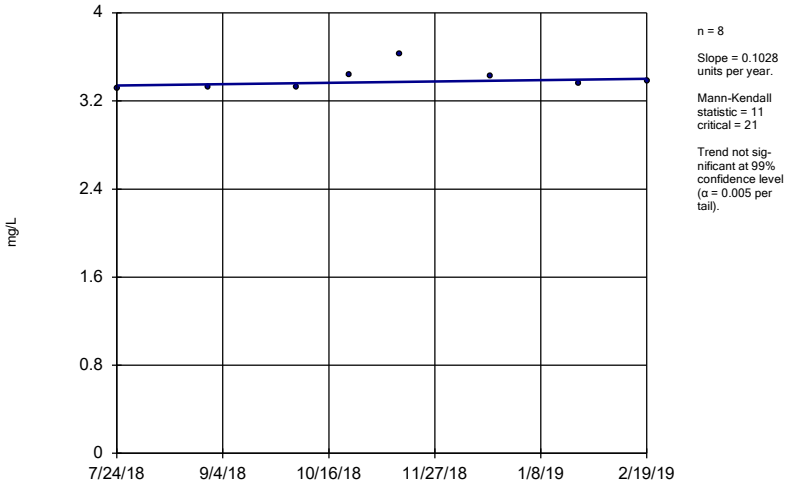
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-5



n = 8

Slope = 0.1028 units per year.

Mann-Kendall statistic = 11
critical = 21

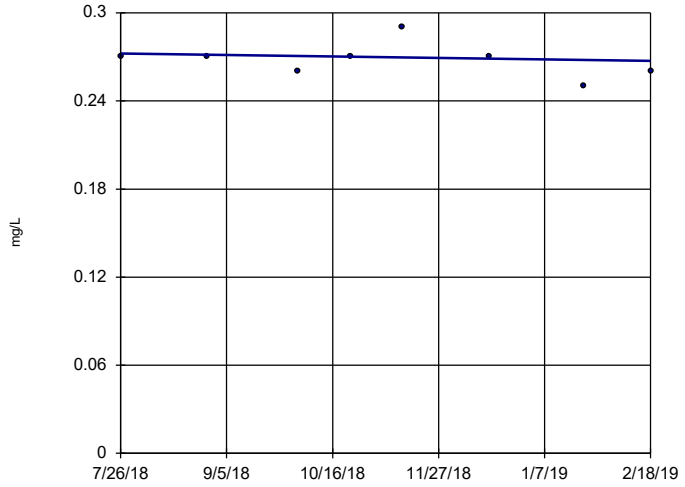
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-7



n = 8

Slope = -0.008816 units per year.

Mann-Kendall statistic = -7
critical = -21

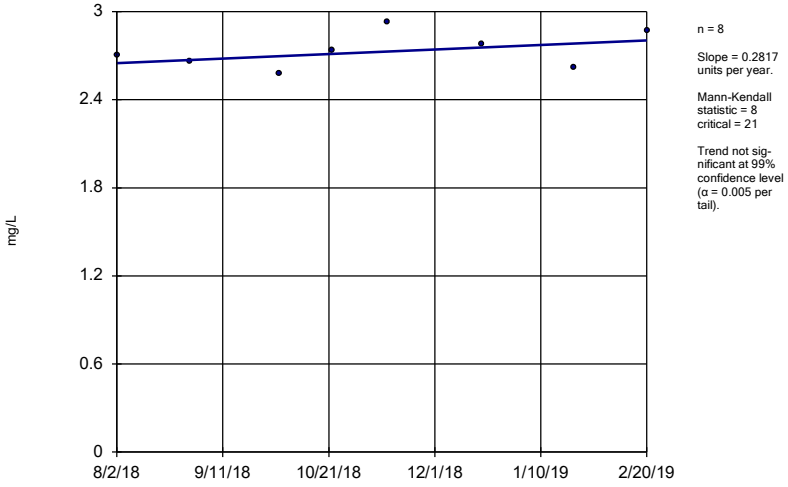
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-8



n = 8

Slope = 0.2817 units per year.

Mann-Kendall statistic = 8
critical = 21

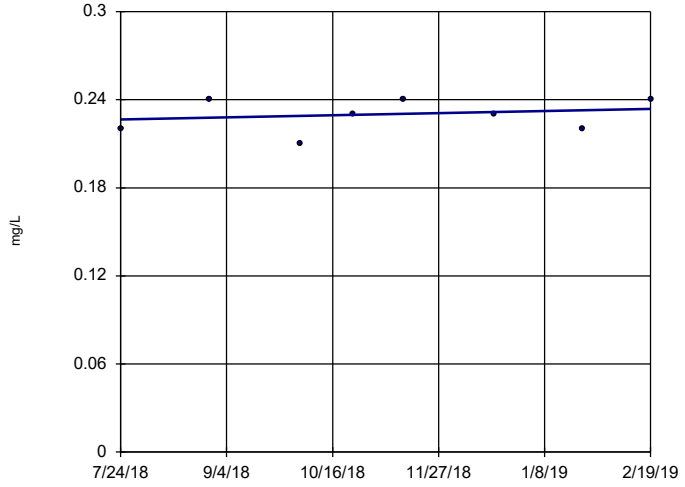
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-6



n = 8

Slope = 0.01233 units per year.

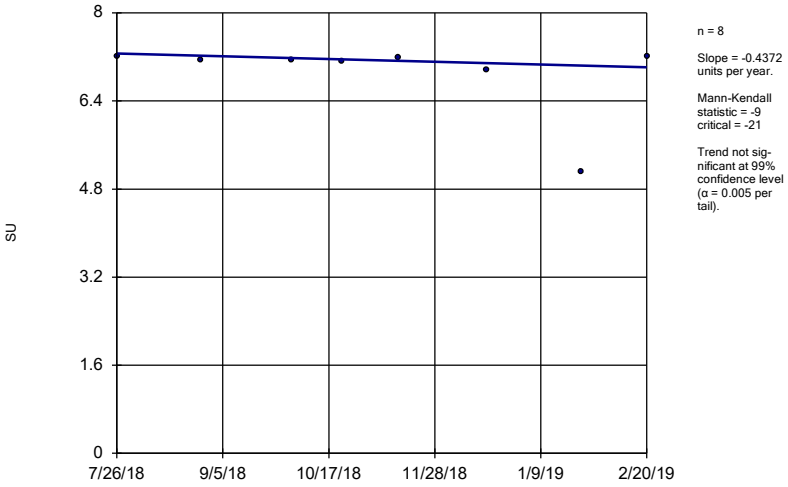
Mann-Kendall statistic = 5
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1809A (bg)



n = 8

Slope = -0.4372 units per year.

Mann-Kendall statistic = -9
critical = -21

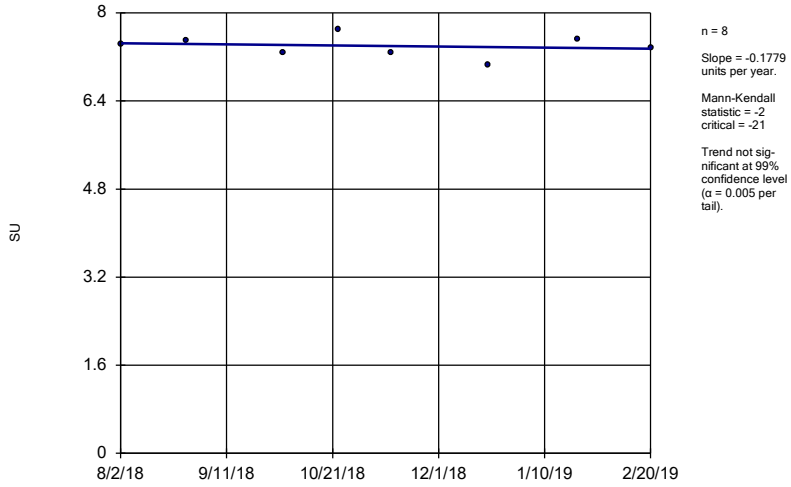
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1810A (bg)



n = 8

Slope = -0.1779 units per year.

Mann-Kendall statistic = -2
critical = -21

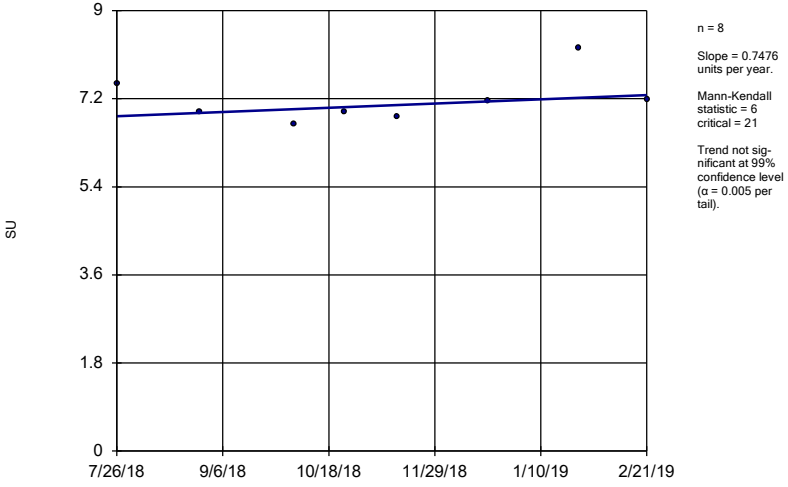
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807A (bg)



n = 8

Slope = 0.7476 units per year.

Mann-Kendall statistic = 6
critical = 21

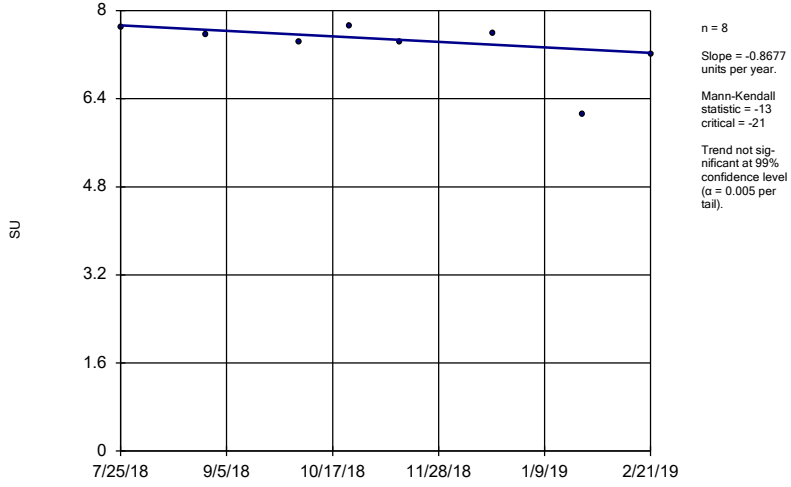
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1808A (bg)



n = 8

Slope = -0.8677 units per year.

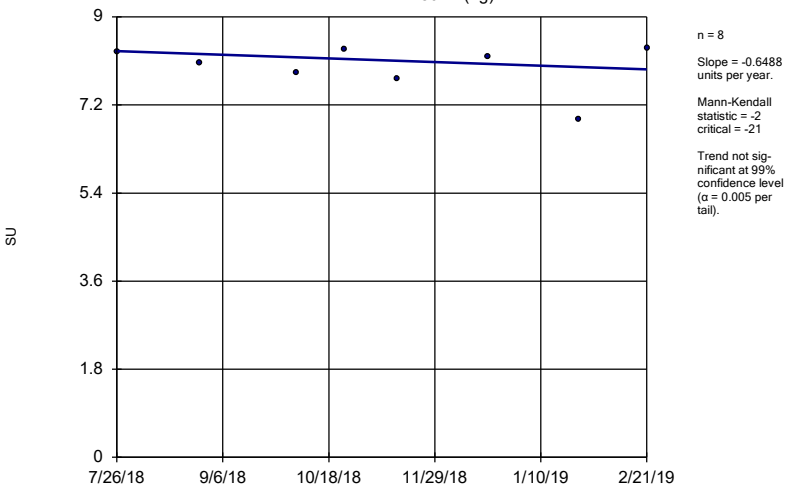
Mann-Kendall statistic = -13
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1807B (bg)



n = 8

Slope = -0.6488 units per year.

Mann-Kendall statistic = -2
critical = -21

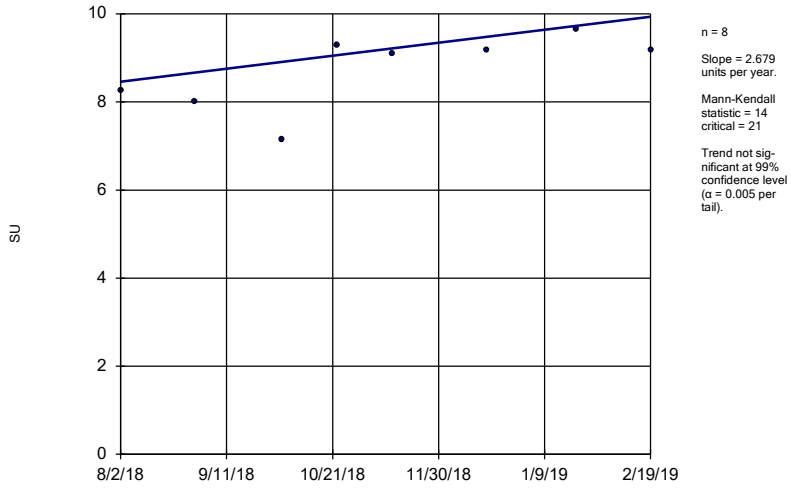
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-9



n = 8

Slope = 2.679 units per year.

Mann-Kendall statistic = 14
critical = 21

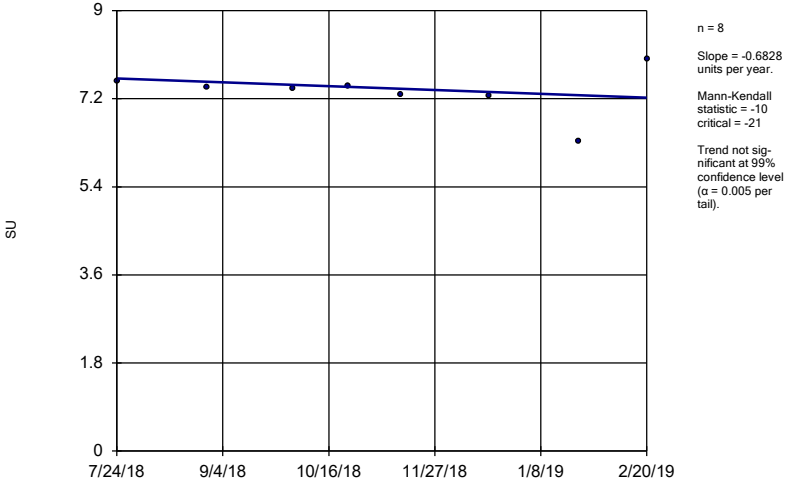
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1801A



n = 8

Slope = -0.6828 units per year.

Mann-Kendall statistic = -10
critical = -21

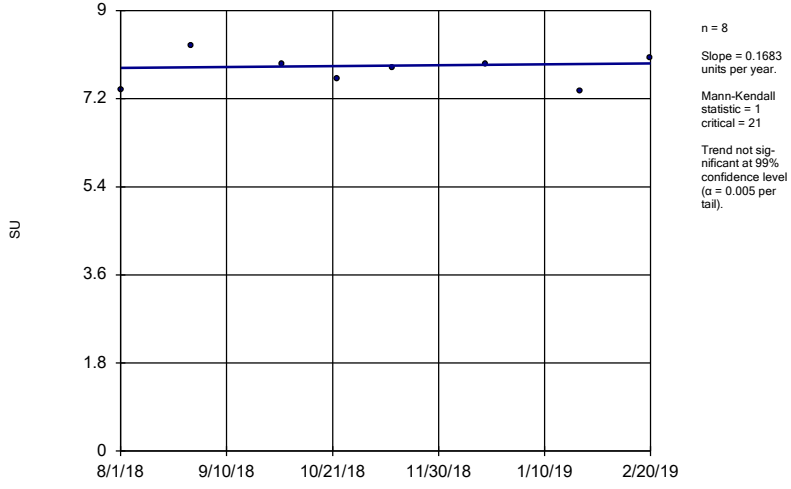
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1804A



n = 8

Slope = 0.1683 units per year.

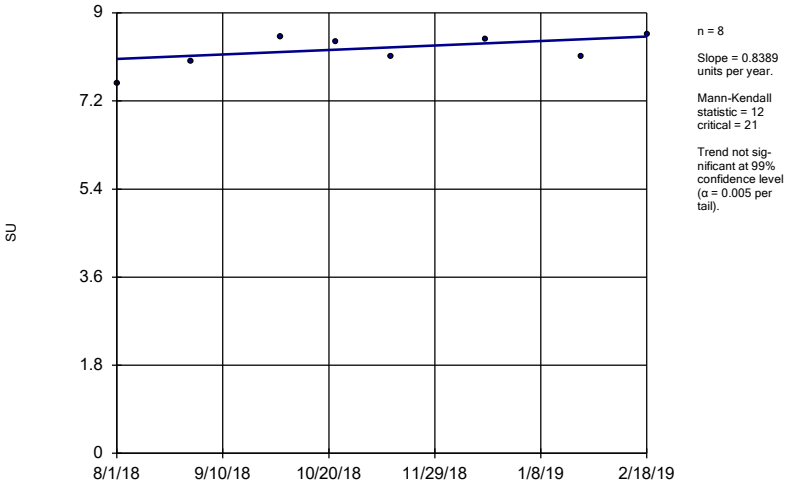
Mann-Kendall statistic = 1
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1806A



n = 8

Slope = 0.8389 units per year.

Mann-Kendall statistic = 12
critical = 21

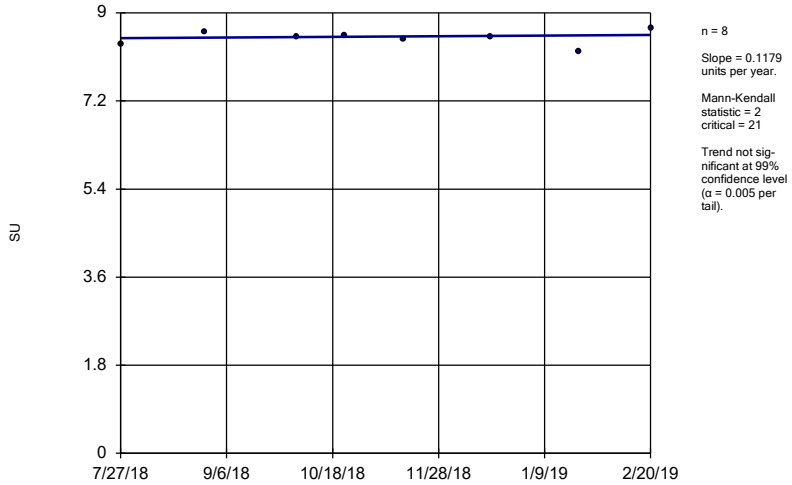
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-2



n = 8

Slope = 0.1179 units per year.

Mann-Kendall statistic = 2
critical = 21

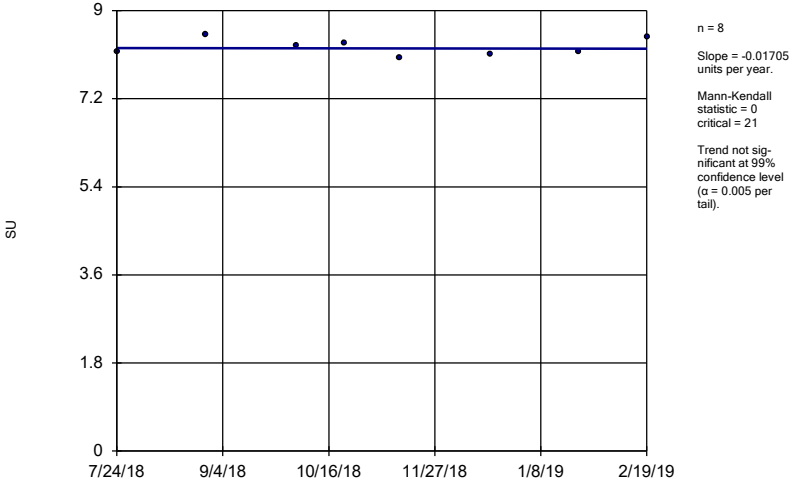
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1



n = 8

Slope = -0.01705 units per year.

Mann-Kendall statistic = 0
critical = 21

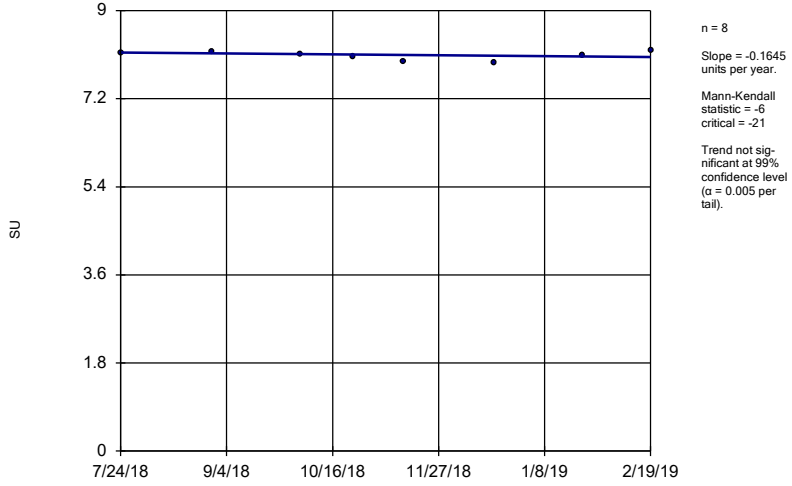
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-5



n = 8

Slope = -0.1645 units per year.

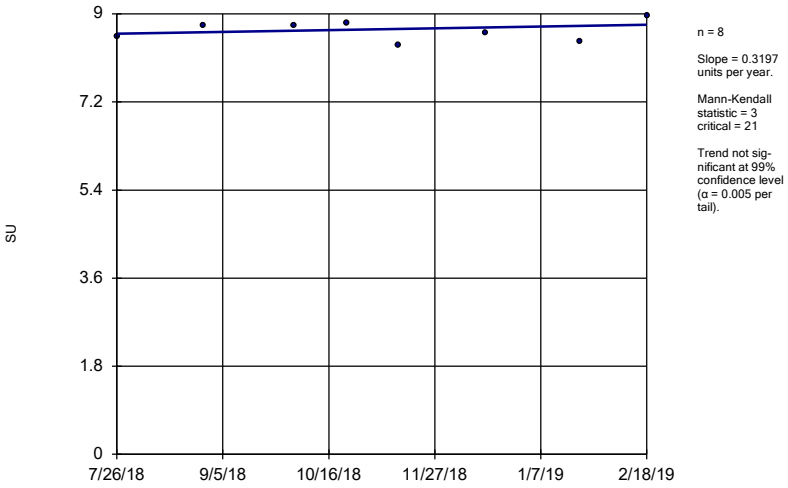
Mann-Kendall statistic = -6
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-7



n = 8

Slope = 0.3197 units per year.

Mann-Kendall statistic = 3
critical = 21

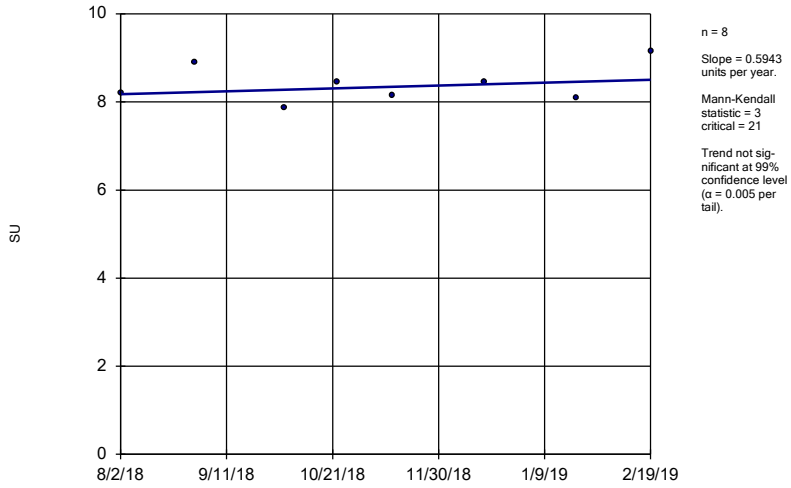
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-8



n = 8

Slope = 0.5943 units per year.

Mann-Kendall statistic = 3
critical = 21

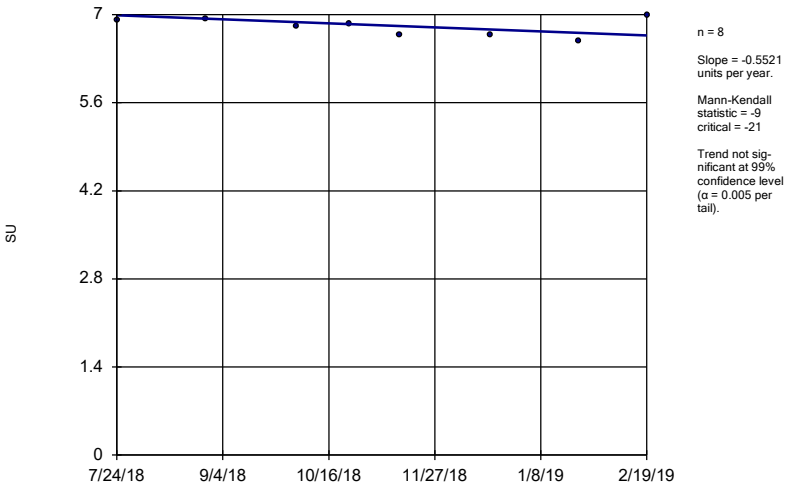
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-6



n = 8

Slope = -0.5521 units per year.

Mann-Kendall statistic = -9
critical = -21

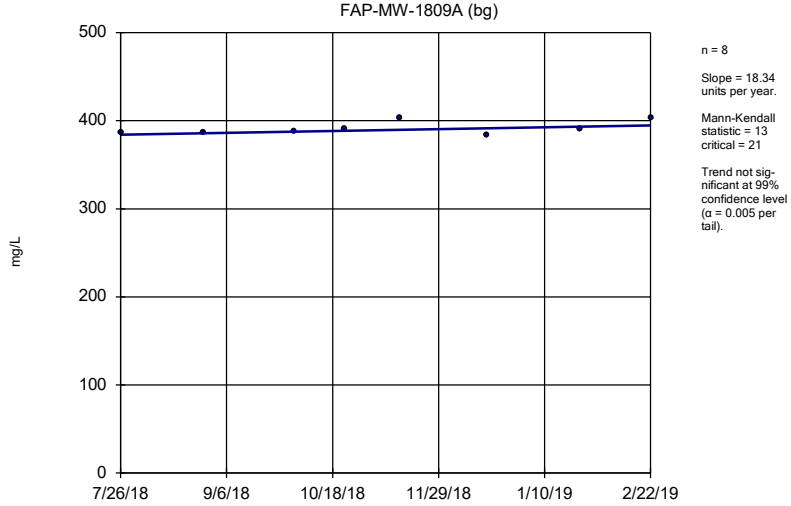
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1809A (bg)



n = 8

Slope = 18.34 units per year.

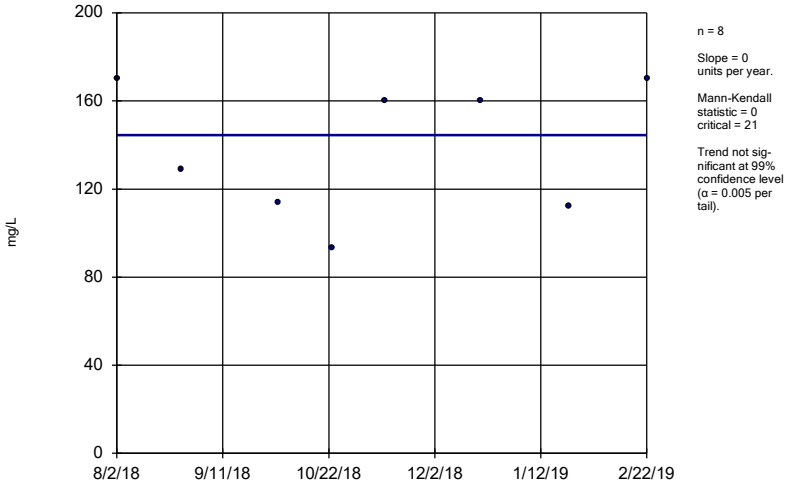
Mann-Kendall statistic = 13
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1810A (bg)



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

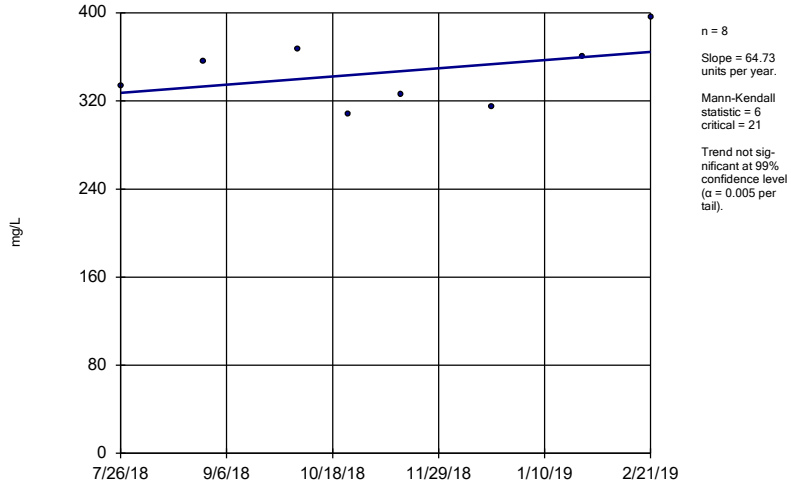
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807A (bg)



n = 8

Slope = 64.73 units per year.

Mann-Kendall statistic = 6 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

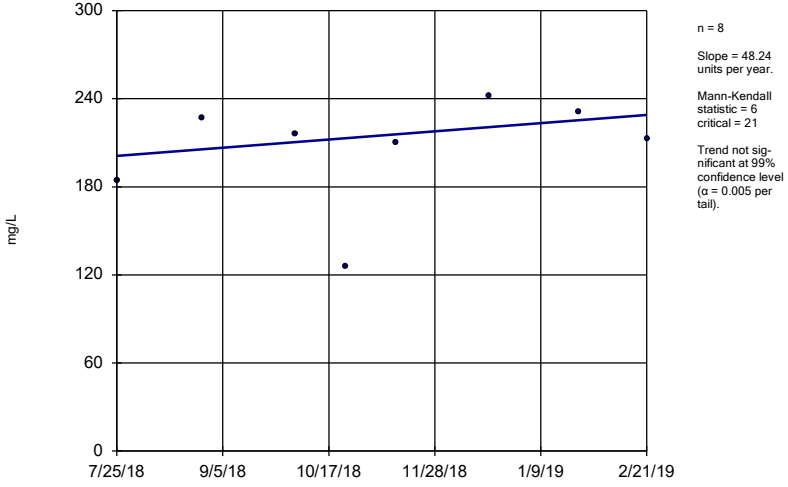
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1808A (bg)



n = 8

Slope = 48.24 units per year.

Mann-Kendall statistic = 6 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

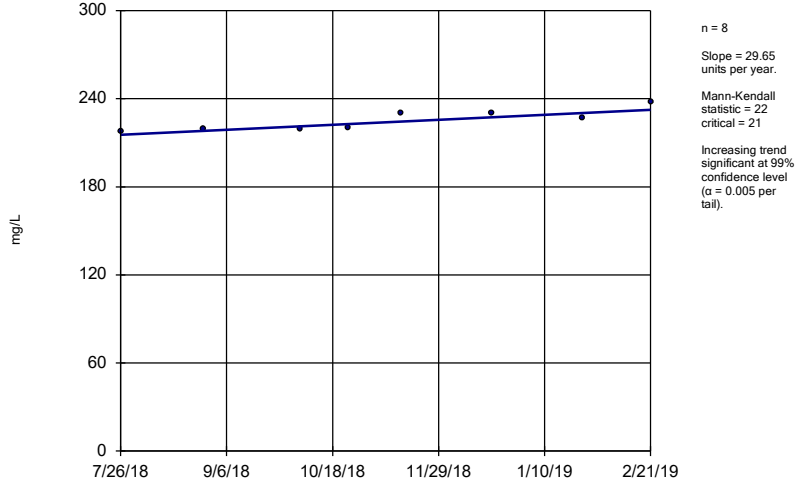
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807B (bg)



n = 8

Slope = 29.65 units per year.

Mann-Kendall statistic = 22 critical = 21

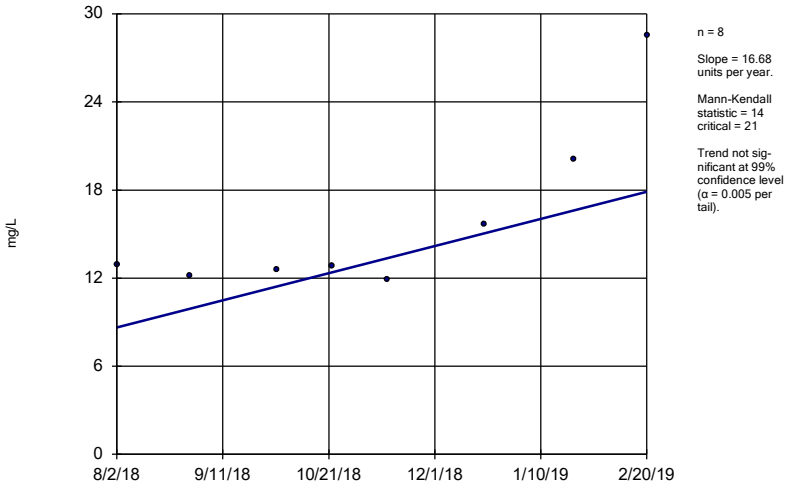
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-9



n = 8

Slope = 16.68 units per year.

Mann-Kendall statistic = 14 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

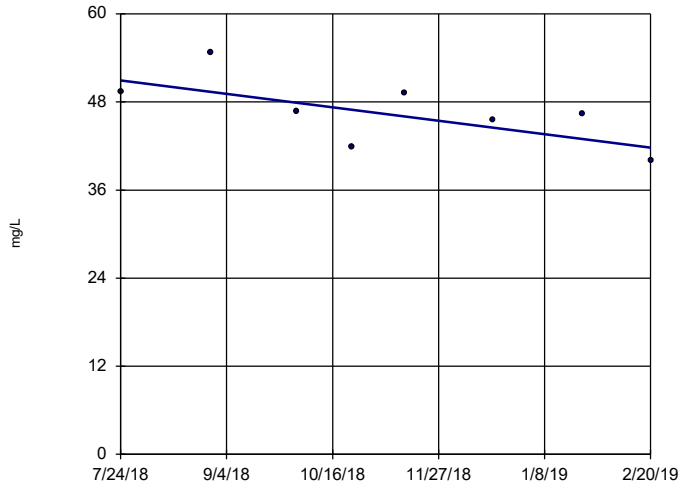
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1801A



n = 8

Slope = -15.84 units per year.

Mann-Kendall statistic = -16 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

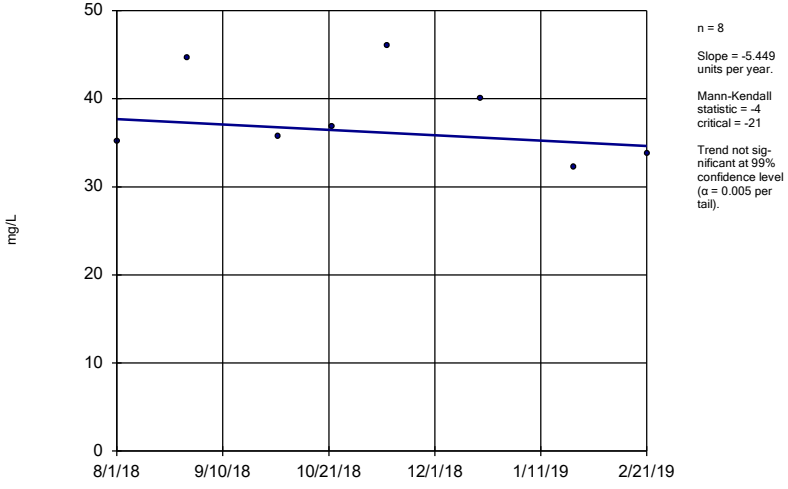
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1804A



n = 8

Slope = -5.449 units per year.

Mann-Kendall statistic = -4 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

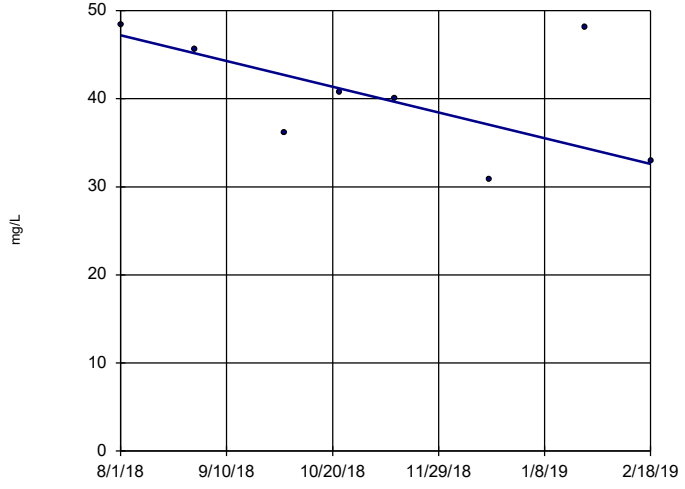
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1806A



n = 8

Slope = -26.5 units per year.

Mann-Kendall statistic = -12 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

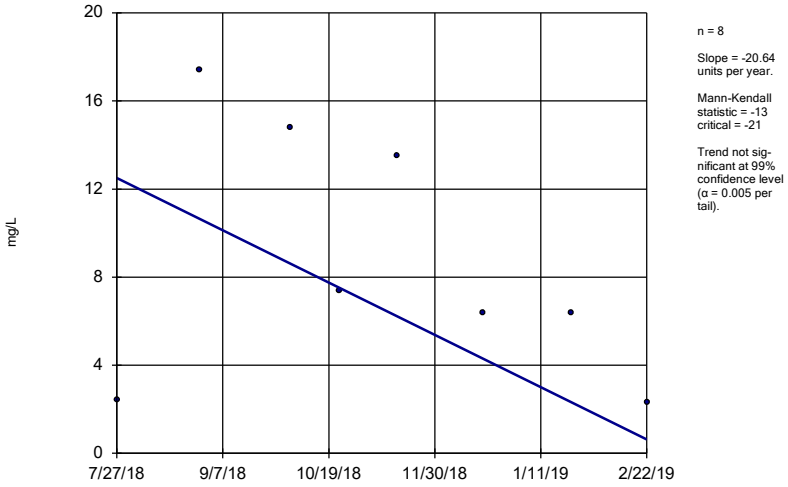
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-2



n = 8

Slope = -20.64 units per year.

Mann-Kendall statistic = -13 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

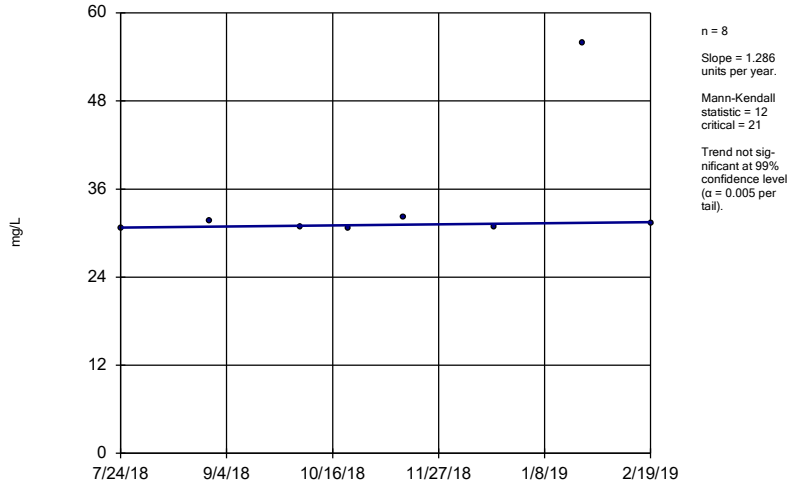
Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1



n = 8

Slope = 1.286 units per year.

Mann-Kendall statistic = 12 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/18/2019 8:47 AM View: Trend Testing

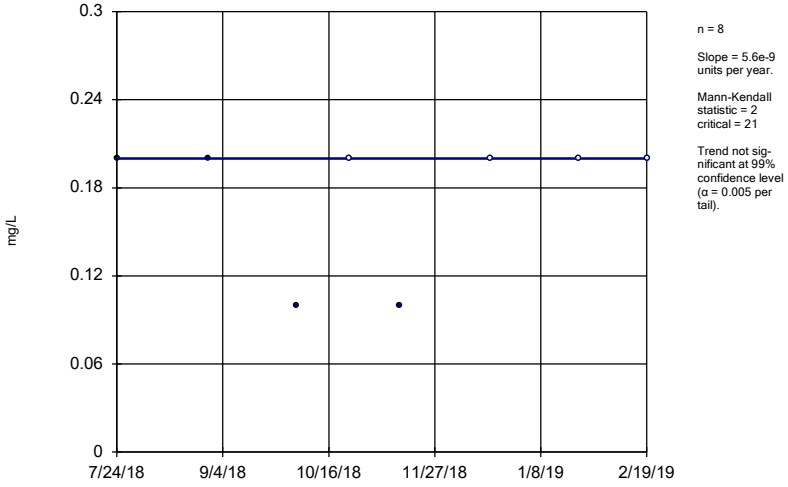
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Hollow symbols indicate censored values.

Sen's Slope Estimator

FAP-MW-5



n = 8

Slope = 5.6e-9 units per year.

Mann-Kendall statistic = 2 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

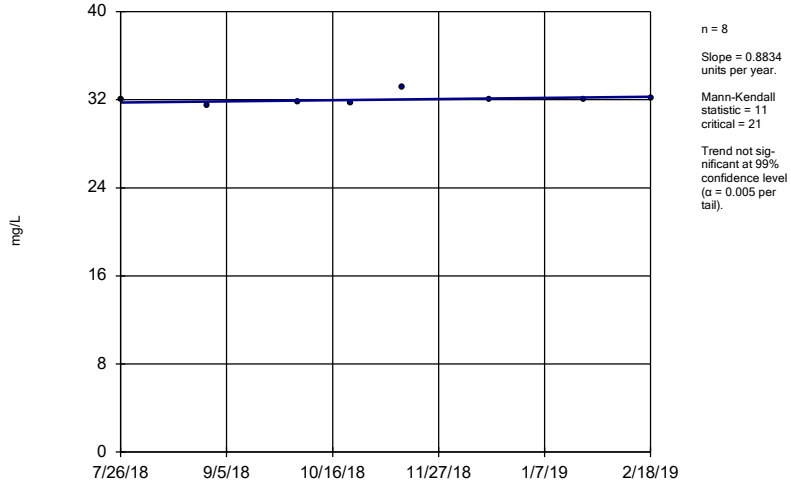
Constituent: Sulfate Analysis Run 4/18/2019 8:48 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-7



n = 8

Slope = 0.8834 units per year.

Mann-Kendall statistic = 11 critical = 21

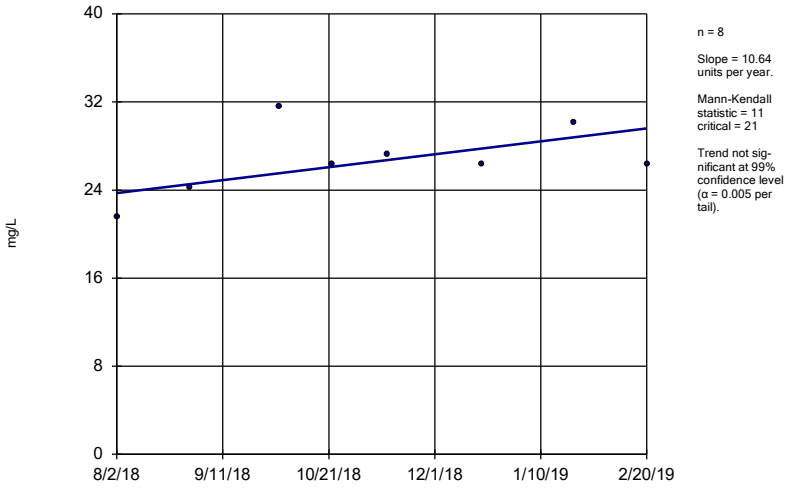
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/18/2019 8:48 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-8



n = 8

Slope = 10.64 units per year.

Mann-Kendall statistic = 11
critical = 21

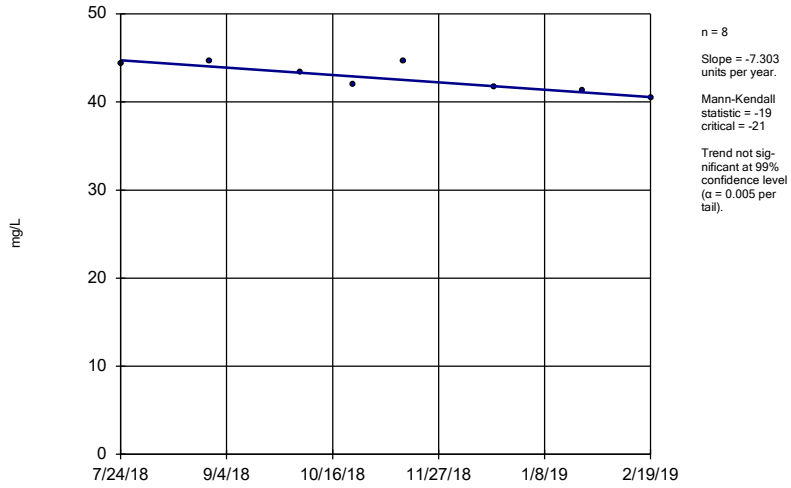
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-6



n = 8

Slope = -7.303 units per year.

Mann-Kendall statistic = -19
critical = -21

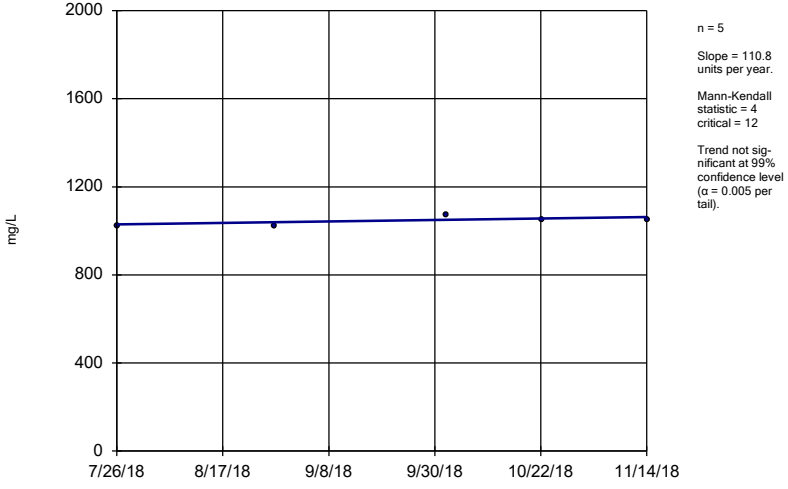
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1809A (bg)



n = 5

Slope = 110.8 units per year.

Mann-Kendall statistic = 4
critical = 12

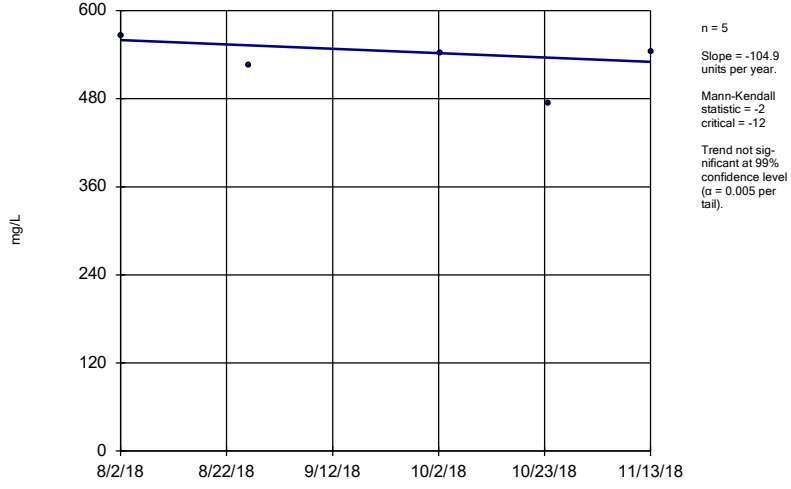
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1810A (bg)



n = 5

Slope = -104.9 units per year.

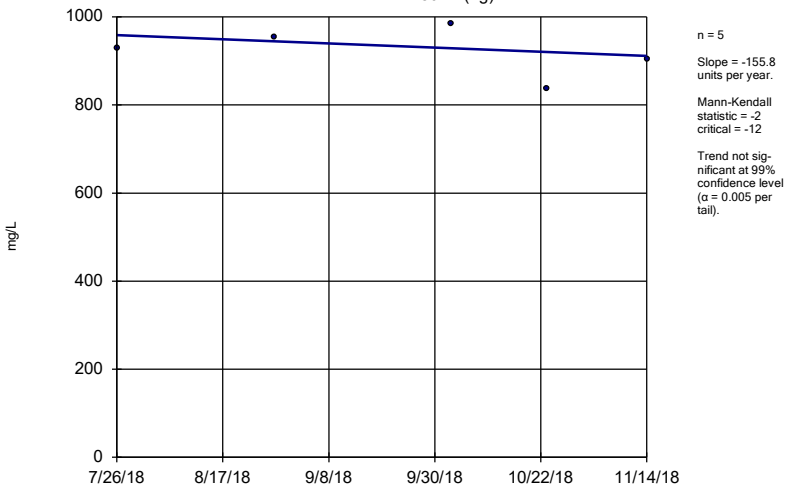
Mann-Kendall statistic = -2
critical = -12

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1807A (bg)

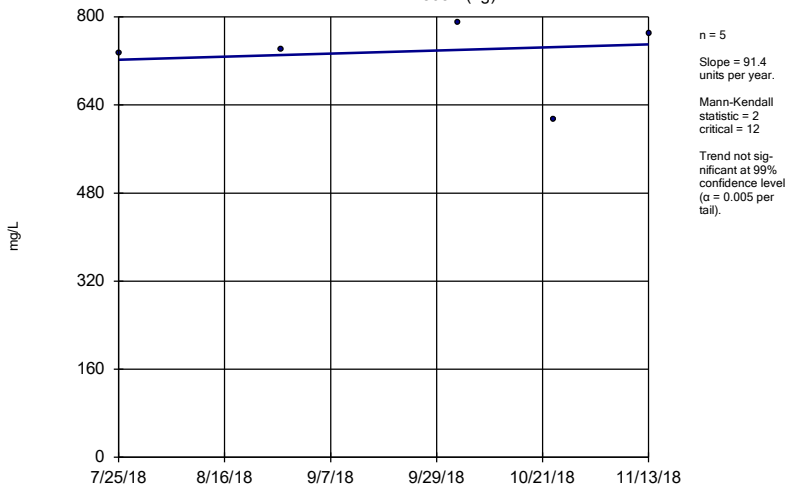


Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1808A (bg)

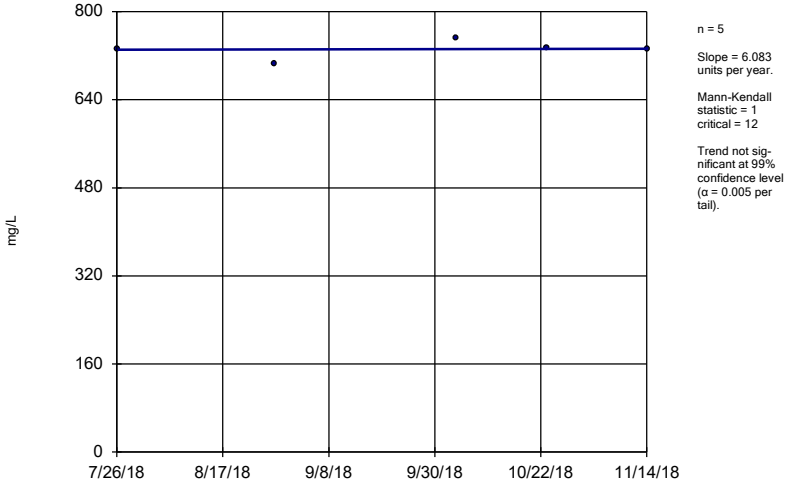


Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1807B (bg)

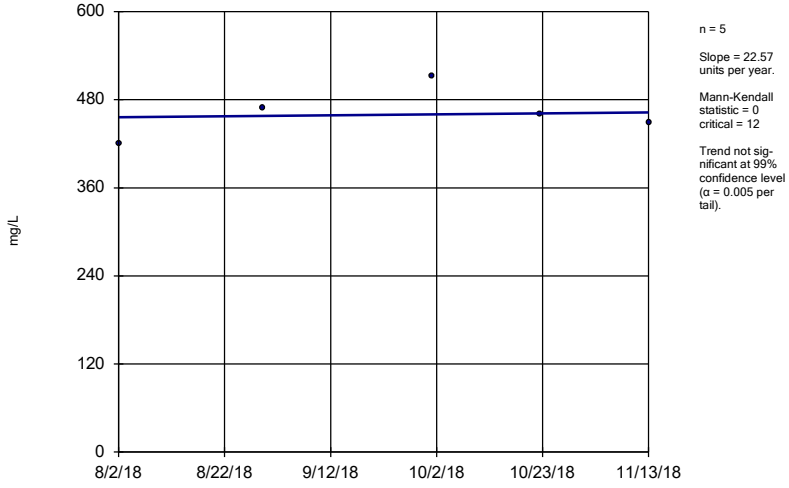


Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

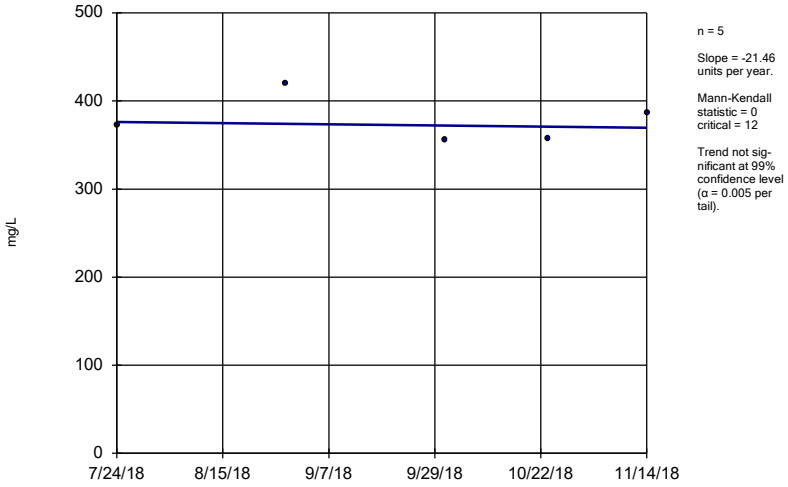
FAP-MW-9



Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1801A



n = 5

Slope = -21.46 units per year.

Mann-Kendall statistic = 0
critical = 12

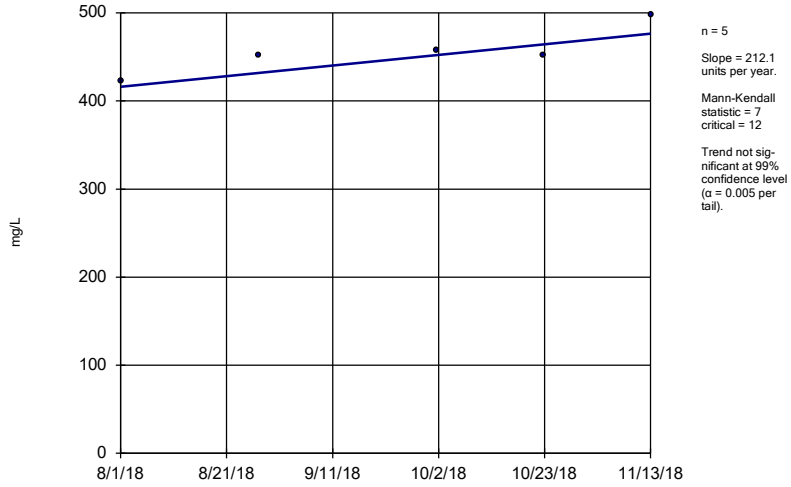
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1804A



n = 5

Slope = 212.1 units per year.

Mann-Kendall statistic = 7
critical = 12

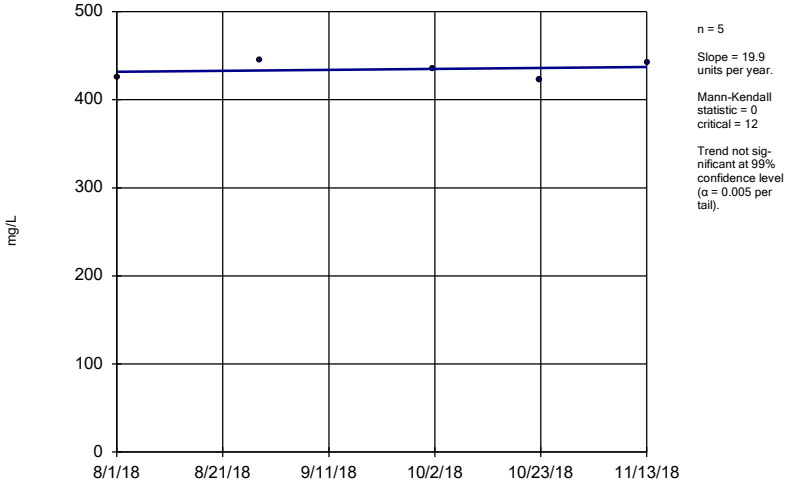
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-1806A



n = 5

Slope = 19.9 units per year.

Mann-Kendall statistic = 0
critical = 12

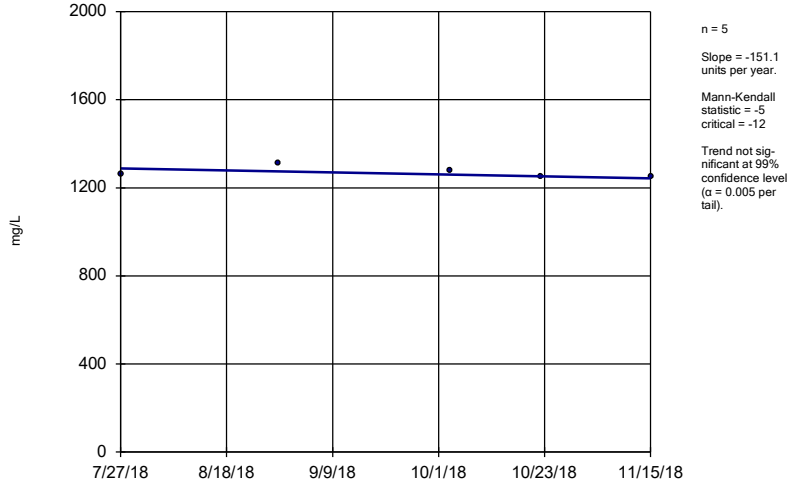
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-2



n = 5

Slope = -151.1 units per year.

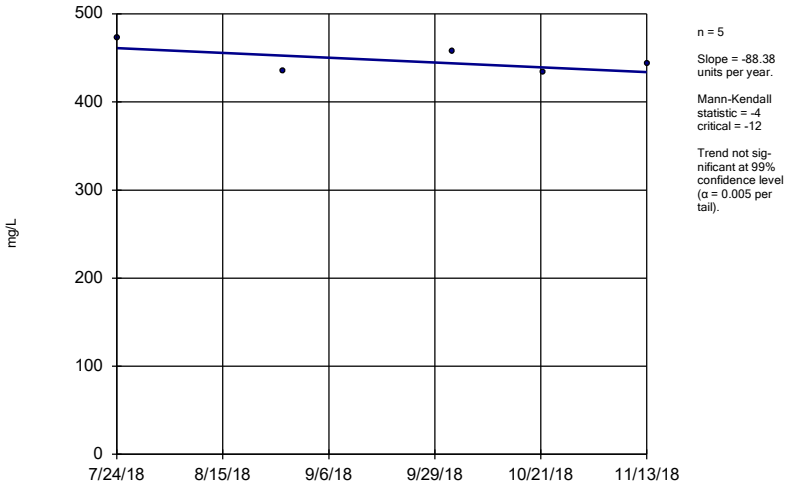
Mann-Kendall statistic = -5
critical = -12

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing
Amos FAP Client: Geosyntec Data: Amos FAP

Sen's Slope Estimator

FAP-MW-1



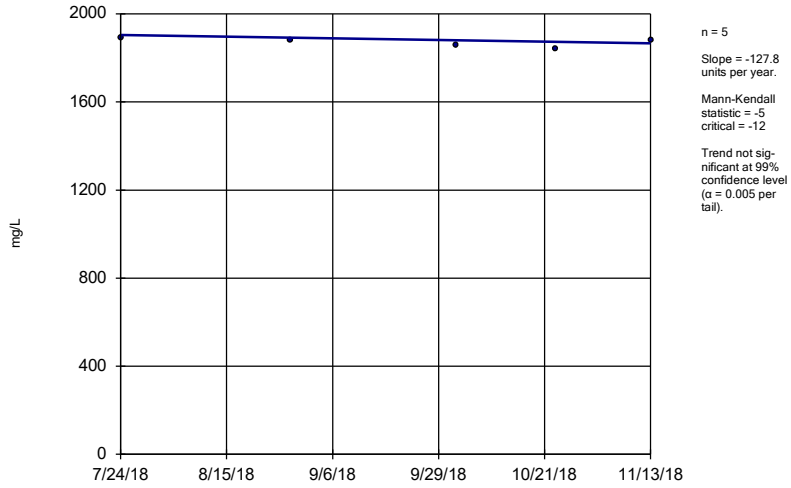
Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-5



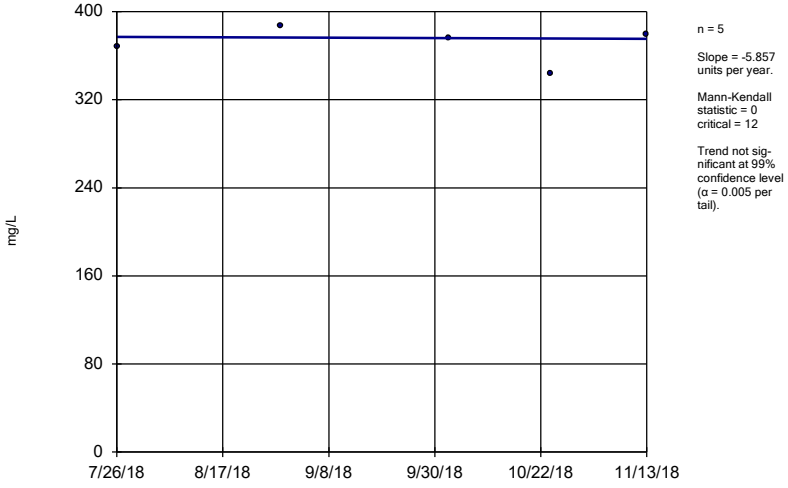
Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-7



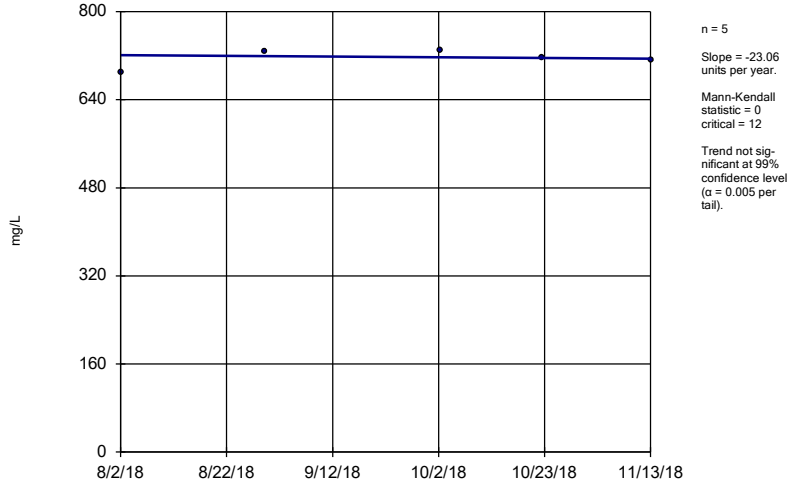
Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. EPA

Sen's Slope Estimator

FAP-MW-8



Constituent: Total Dissolved Solids Analysis Run 4/18/2019 8:48 AM View: Trend Testing

Amos FAP Client: Geosyntec Data: Amos FAP

FIGURE E: ANOVA

Analysis of Variance

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/22/2019, 7:51 PM

Constituent	Well	Calc.	Crit.	Sig.	Alpha	Transform	ANOVA Sig.	Alpha	Method
Boron (mg/L)	n/a	n/a	n/a	n/a	n/a	No	Yes	0.05	Param.
Calcium (mg/L)	n/a	n/a	n/a	n/a	n/a	sqrt(x)	Yes	0.05	Param.
Chloride (mg/L)	n/a	n/a	n/a	n/a	n/a	No	Yes	0.05	Param.
Fluoride (mg/L)	n/a	n/a	n/a	n/a	n/a	No	Yes	0.05	NP (eq. var.)
pH (SU)	n/a	n/a	n/a	n/a	n/a	x^5	Yes	0.05	Param.
Sulfate (mg/L)	n/a	n/a	n/a	n/a	n/a	No	Yes	0.05	NP (eq. var.)
Total Dissolved Solids (mg/L)	n/a	n/a	n/a	n/a	n/a	No	Yes	0.05	Param.

Parametric ANOVA

Constituent: Boron Analysis Run 6/4/2019 8:03 PM
Amos FAP Client: Geosyntec Data: Amos FAP

For observations made between 7/25/2018 and 2/22/2019 the parametric analysis of variance test indicates VARIATION at the 5% significance level. Because the calculated F statistic is greater than the tabulated F statistic, the hypothesis of a single homogeneous population is rejected.

Calculated F statistic = 25.55

Tabulated F statistic = 2.65 with 4 and 35 degrees of freedom at the 5% significance level.

ONE-WAY PARAMETRIC ANOVA TABLE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F
Between Groups	0.1109	4	0.02773	25.55
Error Within Groups	0.03799	35	0.001085	
Total	0.1489	39		

The Shapiro Wilk normality test on the residuals passed on the raw data. Alpha = 0.01, calculated = 0.9729, critical = 0.919. Levene's Equality of Variance test passed. Calculated = 1.436, tabulated = 2.65.

Parametric ANOVA

Constituent: Calcium Analysis Run 6/4/2019 8:04 PM
Amos FAP Client: Geosyntec Data: Amos FAP

For observations made between 7/25/2018 and 2/22/2019 the parametric analysis of variance test (after square root transformation) indicates VARIATION at the 5% significance level. Because the calculated F statistic is greater than the tabulated F statistic, the hypothesis of a single homogeneous population is rejected.

Calculated F statistic = 2274

Tabulated F statistic = 2.65 with 4 and 35 degrees of freedom at the 5% significance level.

ONE-WAY PARAMETRIC ANOVA TABLE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F
Between Groups	667	4	166.8	2274
Error Within Groups	2.567	35	0.07333	
Total	669.6	39		

The Shapiro Wilk normality test on the residuals passed after square root transformation. Alpha = 0.01, calculated = 0.9792, critical = 0.919. Levene's Equality of Variance test passed. Calculated = 1.522, tabulated = 2.65.

Parametric ANOVA

Constituent: Chloride Analysis Run 6/4/2019 8:04 PM
Amos FAP Client: Geosyntec Data: Amos FAP

For observations made between 7/25/2018 and 2/22/2019 the parametric analysis of variance test indicates VARIATION at the 5% significance level. Because the calculated F statistic is greater than the tabulated F statistic, the hypothesis of a single homogeneous population is rejected.

Calculated F statistic = 158.5

Tabulated F statistic = 2.65 with 4 and 35 degrees of freedom at the 5% significance level.

ONE-WAY PARAMETRIC ANOVA TABLE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F
Between Groups	1779	4	444.7	158.5
Error Within Groups	98.21	35	2.806	
Total	1877	39		

The Shapiro Wilk normality test on the residuals passed on the raw data. Alpha = 0.01, calculated = 0.9779, critical = 0.919. Levene's Equality of Variance test passed. Calculated = 1.912, tabulated = 2.65.

Non-Parametric ANOVA

Constituent: Fluoride Analysis Run 6/4/2019 8:05 PM
Amos FAP Client: Geosyntec Data: Amos FAP

For observations made between 7/25/2018 and 2/22/2019, the non-parametric analysis of variance test indicates a DIFFERENCE between the medians of the groups tested at the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one group has a significantly different median concentration of this constituent when compared to another group.

Calculated Kruskal-Wallis statistic = 34.59

Tabulated Chi-Squared value = 9.488 with 4 degrees of freedom at the 5% significance level.

There were 7 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 34.49
Adjusted Kruskal-Wallis statistic (H') = 34.59

Parametric ANOVA

Constituent: pH Analysis Run 6/4/2019 8:05 PM
Amos FAP Client: Geosyntec Data: Amos FAP

For observations made between 7/25/2018 and 2/21/2019 the parametric analysis of variance test (after x^5 transformation) indicates VARIATION at the 5% significance level. Because the calculated F statistic is greater than the tabulated F statistic, the hypothesis of a single homogeneous population is rejected.

Calculated F statistic = 7.243

Tabulated F statistic = 2.65 with 4 and 35 degrees of freedom at the 5% significance level.

ONE-WAY PARAMETRIC ANOVA TABLE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F
Between Groups	1.2e9	4	3.0e8	7.243
Error Within Groups	1.5e9	35	4.2e7	
Total	2.7e9	39		

The Shapiro Wilk normality test on the residuals passed after x^5 transformation. Alpha = 0.01, calculated = 0.935, critical = 0.919. Levene's Equality of Variance test passed. Calculated = 1.252, tabulated = 2.65.

Non-Parametric ANOVA

Constituent: Sulfate Analysis Run 6/4/2019 8:05 PM
Amos FAP Client: Geosyntec Data: Amos FAP

For observations made between 7/25/2018 and 2/22/2019, the non-parametric analysis of variance test indicates a DIFFERENCE between the medians of the groups tested at the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one group has a significantly different median concentration of this constituent when compared to another group.

Calculated Kruskal-Wallis statistic = 34.55

Tabulated Chi-Squared value = 9.488 with 4 degrees of freedom at the 5% significance level.

There were 8 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 34.52
Adjusted Kruskal-Wallis statistic (H') = 34.55

Parametric ANOVA

Constituent: Total Dissolved Solids Analysis Run 6/4/2019 8:06 PM
Amos FAP Client: Geosyntec Data: Amos FAP

For observations made between 7/25/2018 and 11/14/2018 the parametric analysis of variance test indicates VARIATION at the 5% significance level. Because the calculated F statistic is greater than the tabulated F statistic, the hypothesis of a single homogeneous population is rejected.

Calculated F statistic = 99.95

Tabulated F statistic = 2.87 with 4 and 20 degrees of freedom at the 5% significance level.

ONE-WAY PARAMETRIC ANOVA TABLE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F
Between Groups	778286	4	194571	99.95
Error Within Groups	38932	20	1947	
Total	817218	24		

The Shapiro Wilk normality test on the residuals passed on the raw data. Alpha = 0.01, calculated = 0.9046, critical = 0.888. Levene's Equality of Variance test passed. Calculated = 1.562, tabulated = 2.87.

FIGURE F: UPPER TOLERANCE LIMITS – APPENDIX III

UTL's - Appendix III

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 9:02 AM

Constituent	Well	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	n/a	0.3132	n/a	40	0.167	0.06179	0	None	No	0.01	Inter
Calcium (mg/L)	n/a	191	n/a	40	n/a	n/a	0	n/a	n/a	0.1285	NP Inter(normality)
Chloride (mg/L)	n/a	36.45	n/a	40	4.046	0.8422	0	None	sqrt(x)	0.01	Inter
Fluoride (mg/L)	n/a	1.16	n/a	40	n/a	n/a	0	n/a	n/a	0.1285	NP Inter(normality)
pH (SU)	n/a	8.787	5.625	40	54.42	8.509	0	None	x^2	0.01	Inter
Sulfate (mg/L)	n/a	403	n/a	40	n/a	n/a	0	n/a	n/a	0.1285	NP Inter(normality)
Total Dissolved Solids (mg/L)	n/a	1277	n/a	25	790.9	184.5	0	None	No	0.01	Inter

FIGURE G: CONFIDENCE INTERVALS – APPENDIX III

Confidence Interval Summary Table - Significant Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 9:10 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	%NDs	Transform	Alpha	Method
Boron (mg/L)	**FAP-MW-1804A**	**0.7944**	**0.6199**	**0.31**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Chloride (mg/L)	**FAP-MW-2**	**462.9**	**430.6**	**36.45**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Chloride (mg/L)	**FAP-MW-5**	**813.7**	**773.9**	**36.45**	**n/a**	**Yes**	**8**	**0**	**ln(x)**	**0.01**	**Param.**
Chloride (mg/L)	**FAP-MW-8**	**113.1**	**106.4**	**36.45**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	**FAP-MW-2**	**3.3**	**2.99**	**1.16**	**n/a**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Fluoride (mg/L)	**FAP-MW-5**	**3.63**	**3.32**	**1.16**	**n/a**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Fluoride (mg/L)	**FAP-MW-8**	**2.863**	**2.607**	**1.16**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Total Dissolved Solids (mg/L)	**FAP-MW-5**	**1904**	**1836**	**1277**	**n/a**	**Yes**	**5**	**0**	**No**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 9:10 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	%NDs	Transform	Alpha	Method
Boron (mg/L)	FAP-MW-9	0.157	0.1213	0.31	n/a	No	8	0	No	0.01	Param.
Boron (mg/L)	FAP-MW-1801A	0.2866	0.1101	0.31	n/a	No	8	0	No	0.01	Param.
Boron (mg/L)	**FAP-MW-1804A**	**0.7944**	**0.6199**	**0.31**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Boron (mg/L)	FAP-MW-1806A	0.1873	0.1406	0.31	n/a	No	8	0	sqrt(x)	0.01	Param.
Boron (mg/L)	FAP-MW-2	0.3058	0.2277	0.31	n/a	No	8	0	No	0.01	Param.
Boron (mg/L)	FAP-MW-1	0.1875	0.113	0.31	n/a	No	8	0	No	0.01	Param.
Boron (mg/L)	FAP-MW-5	0.2909	0.2251	0.31	n/a	No	8	0	No	0.01	Param.
Boron (mg/L)	FAP-MW-7	0.1601	0.07085	0.31	n/a	No	8	0	No	0.01	Param.
Boron (mg/L)	FAP-MW-8	0.2637	0.2065	0.31	n/a	No	8	0	No	0.01	Param.
Boron (mg/L)	FAP-MW-6	0.1192	0.07875	0.31	n/a	No	8	0	No	0.01	Param.
Calcium (mg/L)	FAP-MW-9	1.44	1.01	191	n/a	No	8	0	No	0.004	NP (normality)
Calcium (mg/L)	FAP-MW-1801A	64.96	56.36	191	n/a	No	8	0	x^6	0.01	Param.
Calcium (mg/L)	FAP-MW-1804A	27.31	6.983	191	n/a	No	8	0	sqrt(x)	0.01	Param.
Calcium (mg/L)	FAP-MW-1806A	12.02	5.34	191	n/a	No	8	0	x^(1/3)	0.01	Param.
Calcium (mg/L)	FAP-MW-2	4.22	3.775	191	n/a	No	8	0	No	0.01	Param.
Calcium (mg/L)	FAP-MW-1	2.974	2.359	191	n/a	No	8	0	No	0.01	Param.
Calcium (mg/L)	FAP-MW-5	7.071	6.334	191	n/a	No	8	0	No	0.01	Param.
Calcium (mg/L)	FAP-MW-7	1.458	1.285	191	n/a	No	8	0	No	0.01	Param.
Calcium (mg/L)	FAP-MW-8	2.593	2.112	191	n/a	No	8	0	No	0.01	Param.
Calcium (mg/L)	FAP-MW-6	63.04	55.33	191	n/a	No	8	0	No	0.01	Param.
Chloride (mg/L)	FAP-MW-9	7.575	7.135	36.45	n/a	No	8	0	No	0.01	Param.
Chloride (mg/L)	FAP-MW-1801A	10.23	8.059	36.45	n/a	No	8	0	No	0.01	Param.
Chloride (mg/L)	FAP-MW-1804A	5.143	3.312	36.45	n/a	No	8	0	No	0.01	Param.
Chloride (mg/L)	FAP-MW-1806A	15.04	5.234	36.45	n/a	No	8	0	No	0.01	Param.
Chloride (mg/L)	**FAP-MW-2**	**462.9**	**430.6**	**36.45**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Chloride (mg/L)	FAP-MW-1	14.6	10.7	36.45	n/a	No	8	0	No	0.004	NP (normality)
Chloride (mg/L)	**FAP-MW-5**	**813.7**	**773.9**	**36.45**	**n/a**	**Yes**	**8**	**0**	**ln(x)**	**0.01**	**Param.**
Chloride (mg/L)	FAP-MW-7	5.507	5.203	36.45	n/a	No	8	0	No	0.01	Param.
Chloride (mg/L)	**FAP-MW-8**	**113.1**	**106.4**	**36.45**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Chloride (mg/L)	FAP-MW-6	19.54	17.61	36.45	n/a	No	8	0	No	0.01	Param.
Fluoride (mg/L)	FAP-MW-9	0.8917	0.8058	1.16	n/a	No	8	0	No	0.01	Param.
Fluoride (mg/L)	FAP-MW-1801A	0.14	0.1	1.16	n/a	No	8	0	No	0.004	NP (normality)
Fluoride (mg/L)	FAP-MW-1804A	0.8856	0.6694	1.16	n/a	No	8	0	No	0.01	Param.
Fluoride (mg/L)	FAP-MW-1806A	0.8433	0.5905	1.16	n/a	No	8	0	x^6	0.01	Param.
Fluoride (mg/L)	**FAP-MW-2**	**3.3**	**2.99**	**1.16**	**n/a**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Fluoride (mg/L)	FAP-MW-1	0.4469	0.4081	1.16	n/a	No	8	0	No	0.01	Param.
Fluoride (mg/L)	**FAP-MW-5**	**3.63**	**3.32**	**1.16**	**n/a**	**Yes**	**8**	**0**	**No**	**0.004**	**NP (normality)**
Fluoride (mg/L)	FAP-MW-7	0.2798	0.2552	1.16	n/a	No	8	0	No	0.01	Param.
Fluoride (mg/L)	**FAP-MW-8**	**2.863**	**2.607**	**1.16**	**n/a**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Fluoride (mg/L)	FAP-MW-6	0.2407	0.2168	1.16	n/a	No	8	0	No	0.01	Param.
pH (SU)	FAP-MW-9	9.765	7.683	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-1801A	7.901	6.772	8.79	5.63	No	8	0	x^2	0.005	Param.
pH (SU)	FAP-MW-1804A	8.179	7.401	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-1806A	8.639	7.799	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-2	8.668	8.302	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-1	8.46	8.05	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-5	8.191	7.972	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-7	8.905	8.403	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-8	8.941	7.869	8.79	5.63	No	8	0	No	0.005	Param.
pH (SU)	FAP-MW-6	6.986	6.624	8.79	5.63	No	8	0	No	0.005	Param.
Sulfate (mg/L)	FAP-MW-9	28.5	11.9	403	n/a	No	8	0	No	0.004	NP (normality)
Sulfate (mg/L)	FAP-MW-1801A	51.63	41.82	403	n/a	No	8	0	No	0.01	Param.
Sulfate (mg/L)	FAP-MW-1804A	43.43	32.75	403	n/a	No	8	0	No	0.01	Param.
Sulfate (mg/L)	FAP-MW-1806A	47.48	33.3	403	n/a	No	8	0	No	0.01	Param.
Sulfate (mg/L)	FAP-MW-2	14.88	2.766	403	n/a	No	8	0	No	0.01	Param.

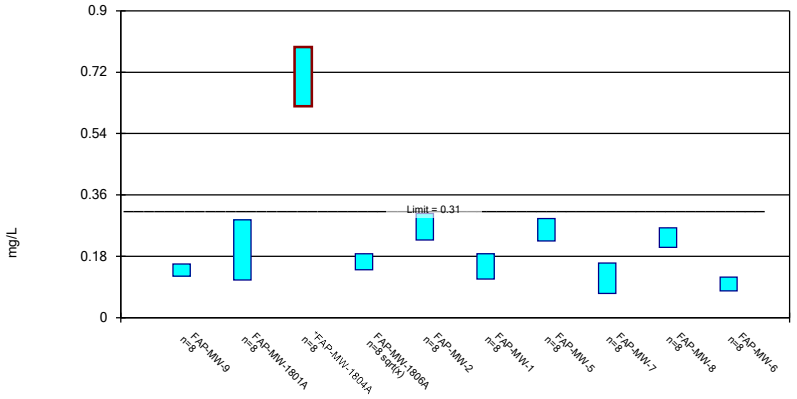
Confidence Interval Summary Table - All Results

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 9:10 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	FAP-MW-1	55.9	30.6	403	n/a	No	8	0	No	0.004	NP (normality)
Sulfate (mg/L)	FAP-MW-5	0.2	0.1	403	n/a	No	8	50	No	0.004	NP (normality)
Sulfate (mg/L)	FAP-MW-7	33.2	31.5	403	n/a	No	8	0	No	0.004	NP (normality)
Sulfate (mg/L)	FAP-MW-8	30.04	23.41	403	n/a	No	8	0	No	0.01	Param.
Sulfate (mg/L)	FAP-MW-6	44.56	41.04	403	n/a	No	8	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-9	518.3	406.1	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-1801A	422.4	334	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-1804A	501.6	411.6	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-1806A	450.3	418.1	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-2	1313	1227	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-1	476.2	421	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	**FAP-MW-5**	**1904**	**1836**	**1277**	**n/a**	**Yes**	**5**	**0**	**No**	**0.01**	**Param.**
Total Dissolved Solids (mg/L)	FAP-MW-7	398.4	343.2	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-8	741.1	688.5	1277	n/a	No	5	0	No	0.01	Param.
Total Dissolved Solids (mg/L)	FAP-MW-6	405.1	387.7	1277	n/a	No	5	0	No	0.01	Param.

Parametric Confidence Interval

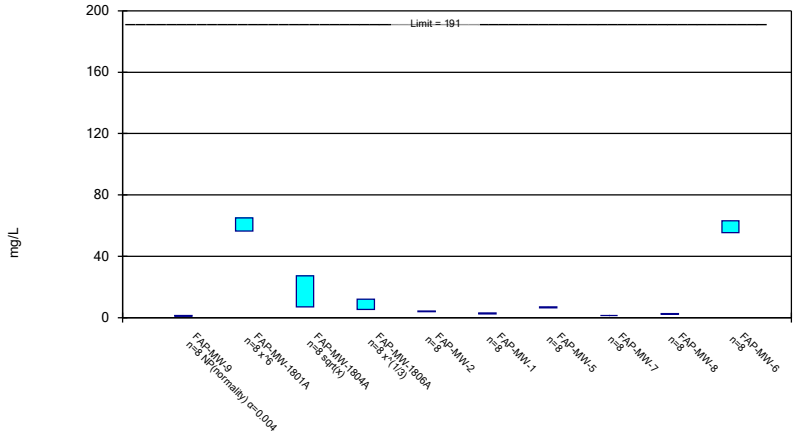
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Boron Analysis Run 4/18/2019 9:07 AM View: Confidence Intervals - Appendix III
Amos FAP Client: Geosyntec Data: Amos FAP

Parametric and Non-Parametric (NP) Confidence Interval

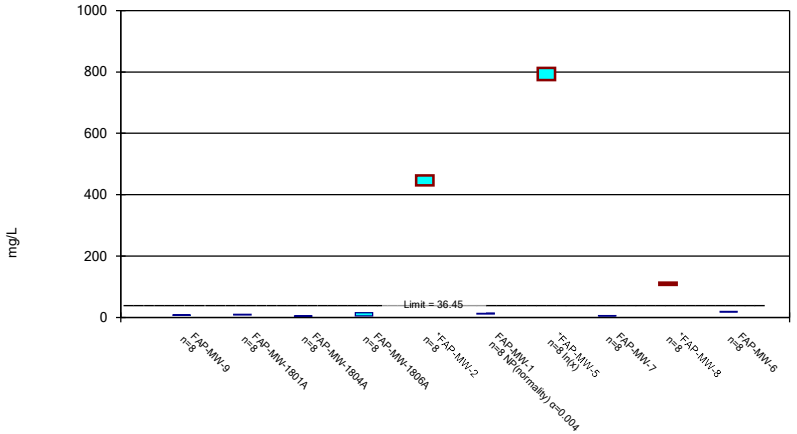
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Calcium Analysis Run 4/18/2019 9:07 AM View: Confidence Intervals - Appendix III
Amos FAP Client: Geosyntec Data: Amos FAP

Parametric and Non-Parametric (NP) Confidence Interval

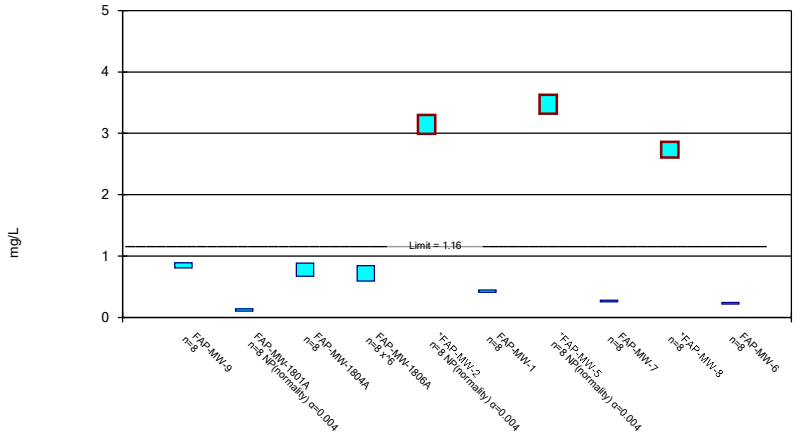
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chloride Analysis Run 4/18/2019 9:07 AM View: Confidence Intervals - Appendix III
Amos FAP Client: Geosyntec Data: Amos FAP

Parametric and Non-Parametric (NP) Confidence Interval

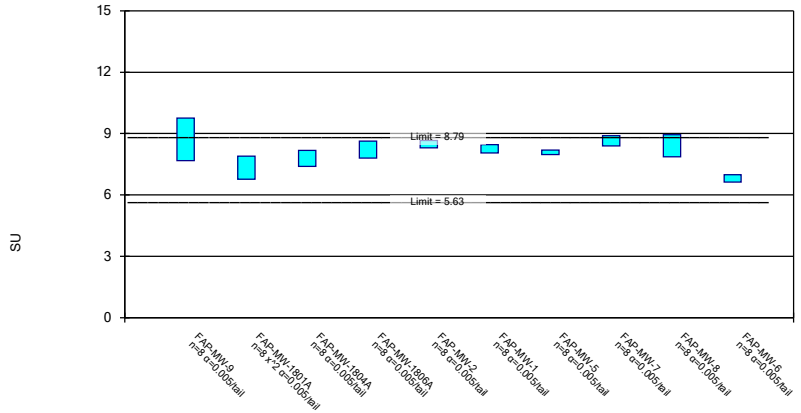
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/18/2019 9:07 AM View: Confidence Intervals - Appendix III
Amos FAP Client: Geosyntec Data: Amos FAP

Parametric Confidence Interval

Compliance Limit is not exceeded. Normality Test: Shapiro Wilk, alpha based on n.

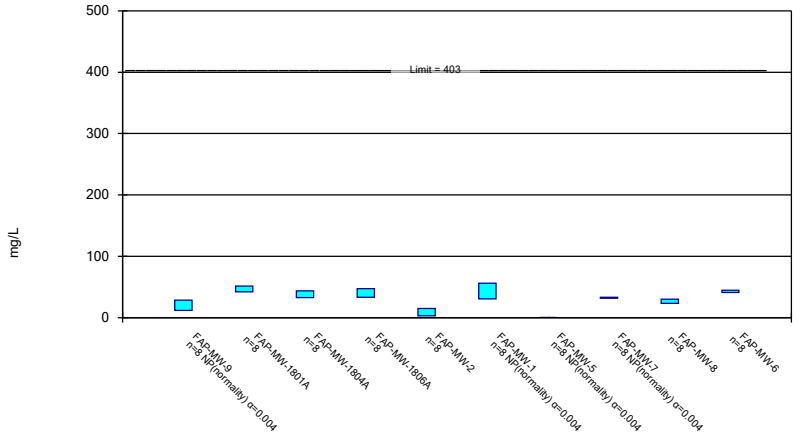


Constituent: pH Analysis Run 4/18/2019 9:07 AM View: Confidence Intervals - Appendix III
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

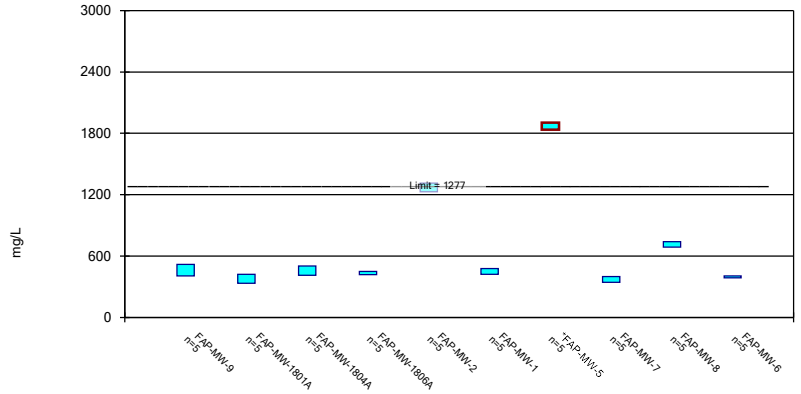


Constituent: Sulfate Analysis Run 4/18/2019 9:07 AM View: Confidence Intervals - Appendix III
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:07 AM View: Confidence Intervals - Appendi
Amos FAP Client: Geosyntec Data: Amos FAP

FIGURE H: INTRAWELL PREDICTION LIMITS

Intrawell Prediction Limit Summary

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 9:22 AM

Constituent	Well	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	FAP-MW-1809A	0.1335	n/a	8	0.08625	0.01507	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1810A	0.3585	n/a	8	0.2449	0.03627	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1807A	0.2929	n/a	8	0.1601	0.04237	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1808A	0.2337	n/a	8	0.1476	0.02746	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1807B	0.3107	n/a	8	0.1963	0.03653	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-9	0.1919	n/a	8	0.1391	0.01684	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1801A	0.4593	n/a	8	0.1984	0.08327	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1804A	0.965	n/a	8	0.7071	0.08232	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1806A	0.235	n/a	8	0.1638	0.02273	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-2	0.3823	n/a	8	0.2668	0.03688	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-1	0.2605	n/a	8	0.1503	0.03518	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-5	0.3553	n/a	8	0.258	0.03107	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-7	0.2475	n/a	8	0.1155	0.04212	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-8	0.3196	n/a	8	0.2351	0.02698	0	None	No	0.0007523	Param Intra 1 of 2
Boron (mg/L)	FAP-MW-6	0.1588	n/a	8	0.099	0.0191	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1809A	201.4	n/a	8	183.3	5.8	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1810A	37.93	n/a	8	27.25	3.41	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1807A	178.6	n/a	8	150.5	8.976	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1808A	49.91	n/a	8	6.383	0.2174	0	None	sqrt(x)	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1807B	13.12	n/a	8	9.51	1.152	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-9	1.629	n/a	8	1.14	0.156	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1801A	75.41	n/a	8	60.69	4.698	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1804A	51.2	n/a	8	16.78	10.99	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1806A	18.76	n/a	8	8.583	3.249	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-2	4.656	n/a	8	3.998	0.2101	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-1	3.575	n/a	8	2.666	0.29	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-5	7.792	n/a	8	6.703	0.3478	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-7	1.627	n/a	8	1.371	0.08167	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-8	3.064	n/a	8	2.353	0.227	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	FAP-MW-6	70.59	n/a	8	59.19	3.638	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1809A	32.03	n/a	8	27.84	1.338	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1810A	27.27	n/a	8	18.85	2.689	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1807A	14.41	n/a	8	10.96	1.101	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1808A	23.59	n/a	8	18.56	1.606	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1807B	12.55	n/a	8	9.093	1.103	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-9	8.004	n/a	8	7.355	0.2072	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1801A	12.35	n/a	8	9.143	1.022	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1804A	6.934	n/a	8	4.228	0.8638	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1806A	24.64	n/a	8	10.14	4.628	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-2	494.5	n/a	8	446.8	15.24	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-1	14.6	n/a	8	n/a	n/a	0	n/a	n/a	0.02144	NP Intra (normality) 1 of 2
Chloride (mg/L)	FAP-MW-5	853.2	n/a	8	793.8	18.97	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-7	5.803	n/a	8	5.355	0.143	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-8	119.8	n/a	8	109.8	3.196	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	FAP-MW-6	21.44	n/a	8	18.58	0.913	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1809A	0.1874	n/a	8	0.15	0.01195	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1810A	1.138	n/a	8	0.9425	0.06228	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1807A	0.2754	n/a	8	0.1838	0.02925	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1808A	0.6948	n/a	8	0.4788	0.06896	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1807B	1.453	n/a	8	0.9525	0.1599	0	None	No	0.0007523	Param Intra 1 of 2

Intrawell Prediction Limit Summary

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 9:22 AM

Constituent	Well	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	FAP-MW-9	0.9757	n/a	8	0.8488	0.04051	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1801A	0.162	n/a	8	0.1125	0.01581	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1804A	1.097	n/a	8	0.7775	0.1019	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1806A	1.136	n/a	8	0.7225	0.1321	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-2	3.392	n/a	8	1.12	0.03235	0	None	ln(x)	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-1	0.4849	n/a	8	0.4275	0.01832	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-5	3.724	n/a	8	3.403	0.1025	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-7	0.304	n/a	8	0.2675	0.01165	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-8	3.114	n/a	8	2.735	0.1209	0	None	No	0.0007523	Param Intra 1 of 2
Fluoride (mg/L)	FAP-MW-6	0.264	n/a	8	0.2288	0.01126	0	None	No	0.0007523	Param Intra 1 of 2
pH (SU)	FAP-MW-1809A	7.22	5.12	8	n/a	n/a	0	n/a	n/a	0.04288	NP Intra (normality) 1 of 2
pH (SU)	FAP-MW-1810A	7.994	6.786	8	7.39	0.1929	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-1807A	8.742	5.62	8	7.181	0.4982	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-1808A	8.476	5.309	8	2978	697.1	0	None	x^4	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-1807B	9.479	6.456	8	7.968	0.4824	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-9	11.36	6.088	8	8.724	0.8413	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-1801A	8.82	5.87	8	7.345	0.4707	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-1804A	8.776	6.804	8	7.79	0.3147	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-1806A	9.283	7.155	8	8.219	0.3396	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-2	8.948	8.022	8	8.485	0.1476	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-1	8.774	7.736	8	8.255	0.1656	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-5	8.358	7.804	8	8.081	0.08839	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-7	9.29	8.018	8	8.654	0.203	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-8	9.762	7.048	8	8.405	0.4332	0	None	No	0.0003761	Param Intra 1 of 2
pH (SU)	FAP-MW-6	7.263	6.347	8	6.805	0.1462	0	None	No	0.0003761	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1809A	414.9	n/a	8	391.3	7.536	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1810A	233	n/a	8	138.5	30.15	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1807A	438.7	n/a	8	345.4	29.79	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1808A	321	n/a	8	206.1	36.67	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1807B	247.9	n/a	8	225.1	7.259	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-9	36.17	n/a	8	3.931	0.6651	0	None	sqrt(x)	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1801A	61.24	n/a	8	46.73	4.631	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1804A	53.87	n/a	8	38.09	5.039	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1806A	61.35	n/a	8	40.39	6.689	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-2	26.73	n/a	8	8.825	5.716	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-1	55.9	n/a	8	n/a	n/a	0	n/a	n/a	0.02144	NP Intra (normality) 1 of 2
Sulfate (mg/L)	FAP-MW-5	0.2	n/a	8	n/a	n/a	50	n/a	n/a	0.02144	NP Intra (normality) 1 of 2
Sulfate (mg/L)	FAP-MW-7	33.63	n/a	8	32.04	0.5097	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-8	36.52	n/a	8	26.73	3.126	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	FAP-MW-6	48	n/a	8	42.8	1.659	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1809A	1157	n/a	5	1042	21.68	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1810A	714.5	n/a	5	529.8	34.78	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1807A	1217	n/a	5	921.8	55.59	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1808A	1093	n/a	5	729.6	68.5	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1807B	818.8	n/a	5	731.4	16.46	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-9	640.2	n/a	5	462.2	33.51	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1801A	518.4	n/a	5	378.2	26.4	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1804A	599.3	n/a	5	456.6	26.87	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-1806A	485.3	n/a	5	434.2	9.628	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-2	1405	n/a	5	1270	25.5	0	None	No	0.0007523	Param Intra 1 of 2

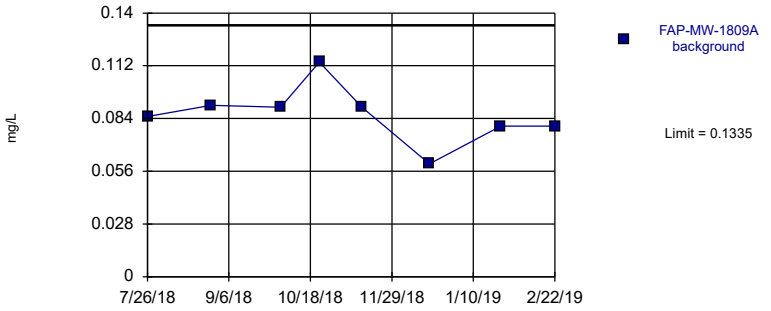
Intrawell Prediction Limit Summary

Amos FAP Client: Geosyntec Data: Amos FAP Printed 4/18/2019, 9:22 AM

Constituent	Well	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	FAP-MW-1	536.1	n/a	5	448.6	16.47	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-5	1976	n/a	5	1870	20	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-7	458.2	n/a	5	370.8	16.45	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-8	798.1	n/a	5	714.8	15.69	0	None	No	0.0007523	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	FAP-MW-6	423.9	n/a	5	396.4	5.177	0	None	No	0.0007523	Param Intra 1 of 2

Prediction Limit

Intrawell Parametric, FAP-MW-1809A (bg)



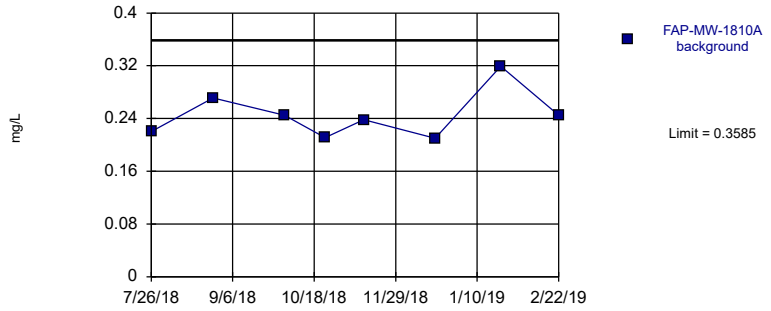
Background Data Summary: Mean=0.08625, Std. Dev.=0.01507, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9173, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:15 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1810A (bg)



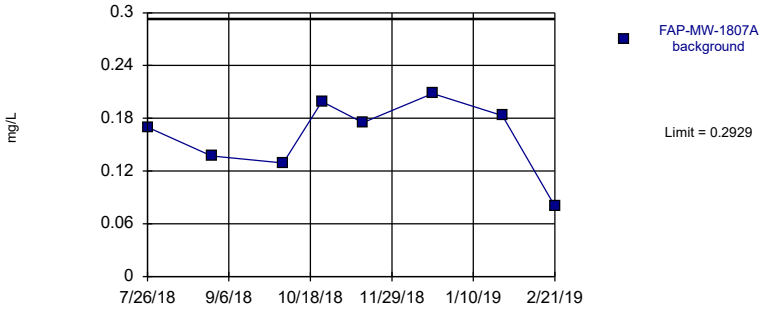
Background Data Summary: Mean=0.2449, Std. Dev.=0.03627, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8739, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:15 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807A (bg)



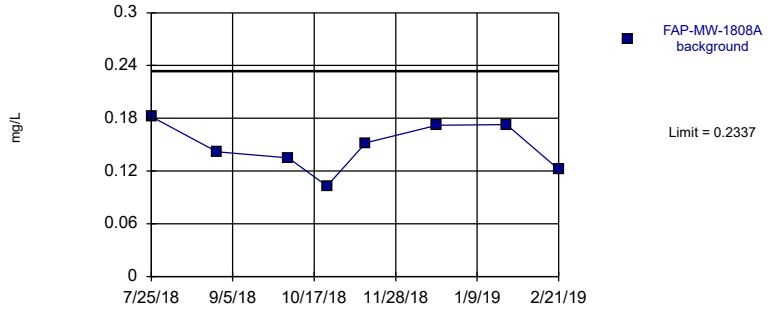
Background Data Summary: Mean=0.1601, Std. Dev.=0.04237, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9265, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:15 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1808A (bg)

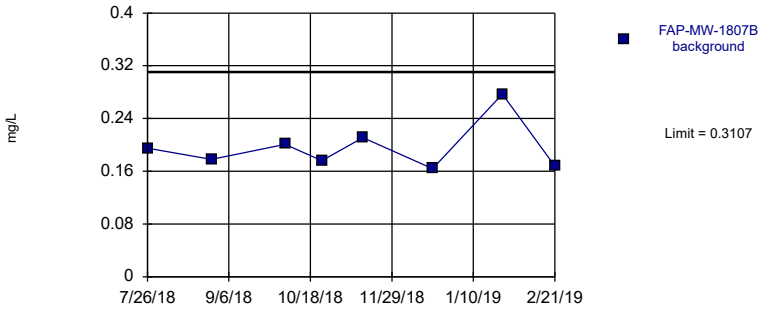


Background Data Summary: Mean=0.1476, Std. Dev.=0.02746, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.954, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:15 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1807B (bg)



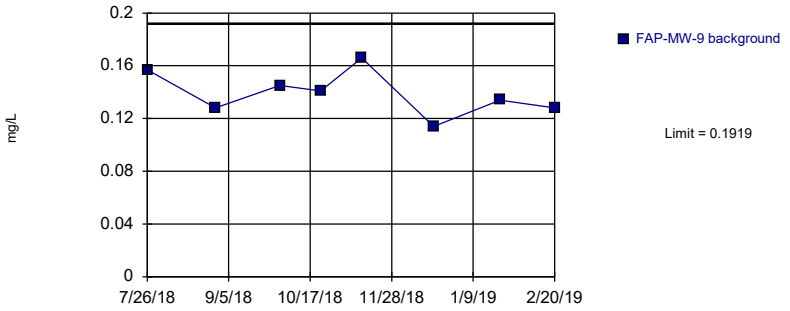
Background Data Summary: Mean=0.1963, Std. Dev.=0.03653, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8158, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-9



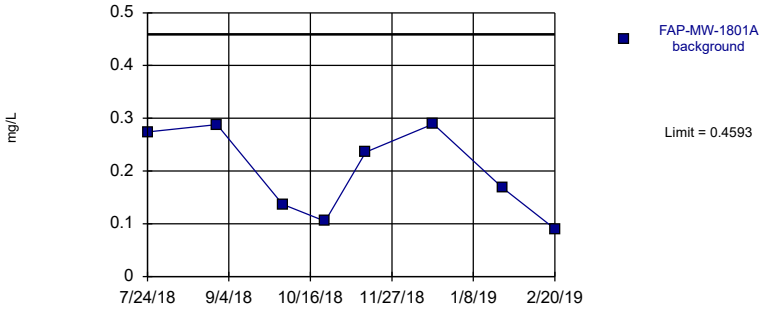
Background Data Summary: Mean=0.1391, Std. Dev.=0.01684, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9755, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1801A



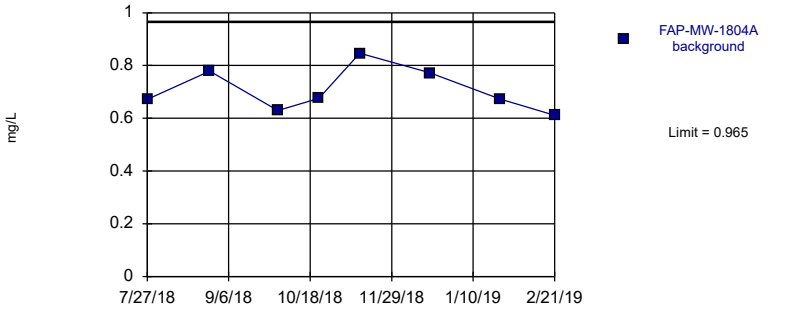
Background Data Summary: Mean=0.1984, Std. Dev.=0.08327, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8746, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1804A

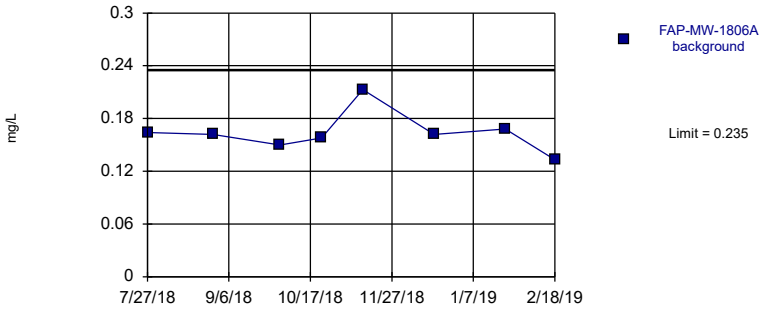


Background Data Summary: Mean=0.7071, Std. Dev.=0.08232, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9053, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1806A



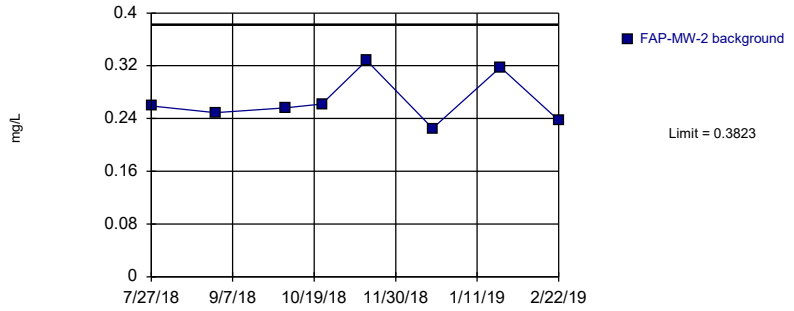
Background Data Summary: Mean=0.1638, Std. Dev.=0.02273, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.841, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-2



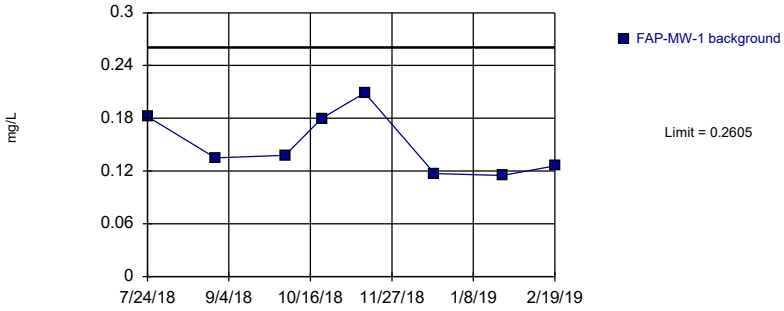
Background Data Summary: Mean=0.2668, Std. Dev.=0.03688, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8584, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1



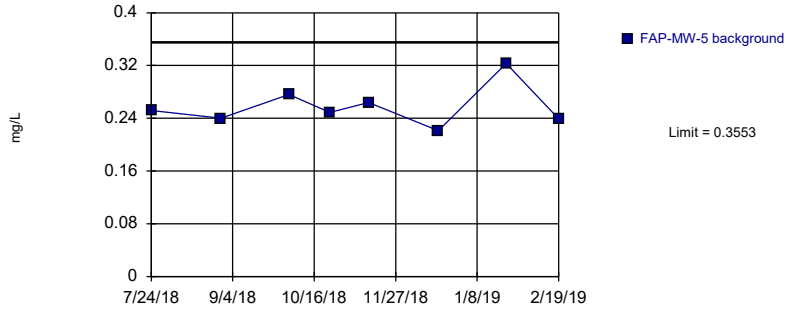
Background Data Summary: Mean=0.1503, Std. Dev.=0.03518, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8744, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-5

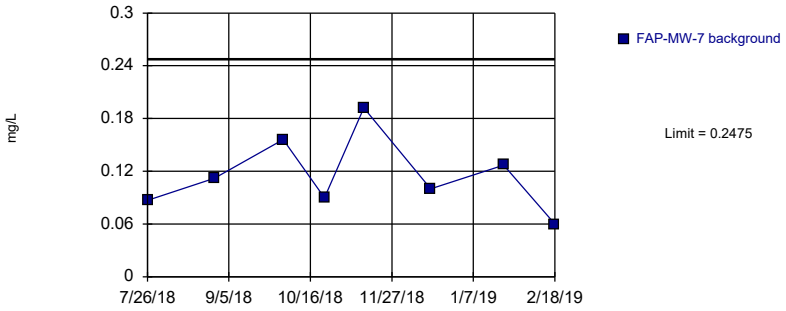


Background Data Summary: Mean=0.258, Std. Dev.=0.03107, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8957, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-7



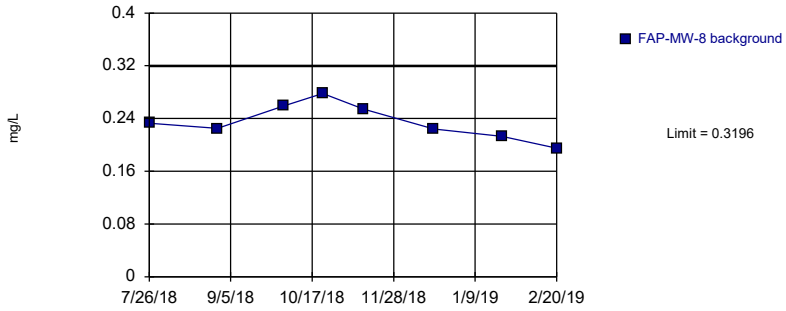
Background Data Summary: Mean=0.1155, Std. Dev.=0.04212, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9538, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-8



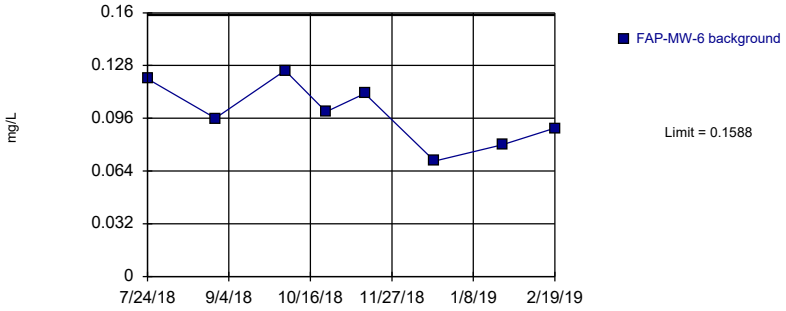
Background Data Summary: Mean=0.2351, Std. Dev.=0.02698, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9745, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-6



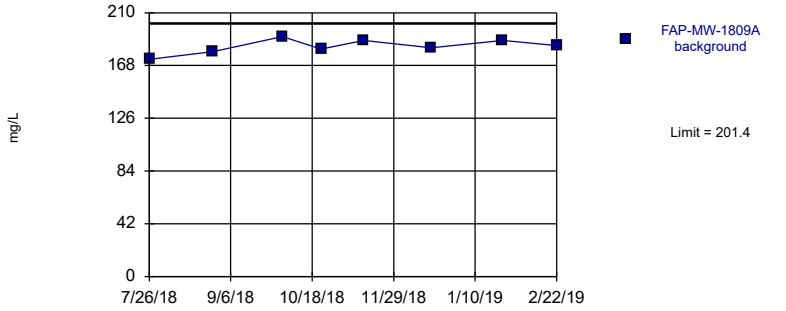
Background Data Summary: Mean=0.099, Std. Dev.=0.0191, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9721, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Boron Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1809A (bg)

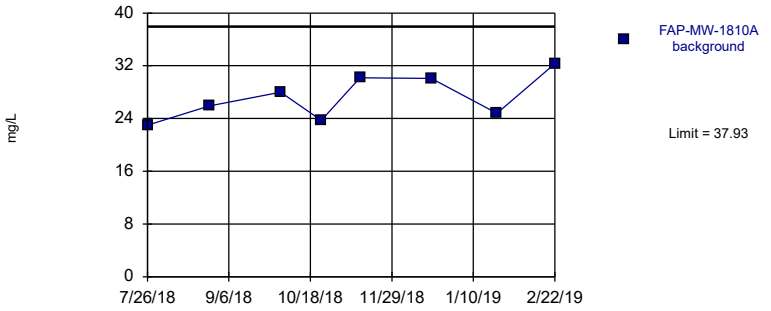


Background Data Summary: Mean=183.3, Std. Dev.=5.8, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9648, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1810A (bg)



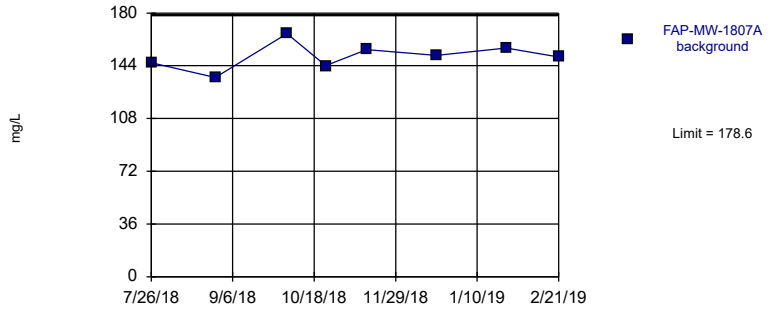
Background Data Summary: Mean=27.25, Std. Dev.=3.41, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9358, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807A (bg)



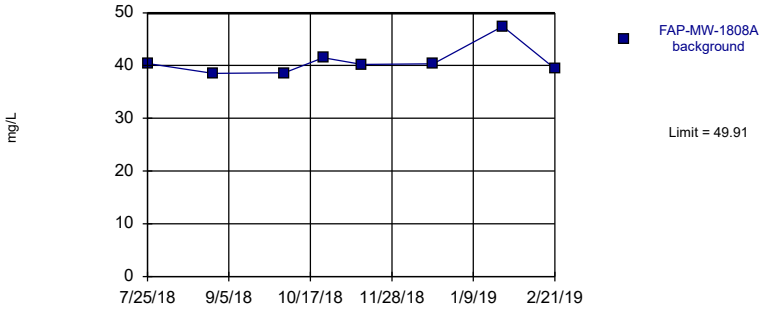
Background Data Summary: Mean=150.5, Std. Dev.=8.976, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9856, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1808A (bg)



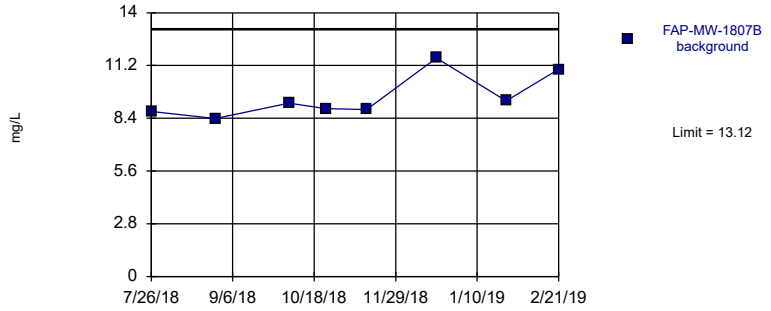
Background Data Summary (based on square root transformation): Mean=6.383, Std. Dev.=0.2174, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7501, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807B (bg)

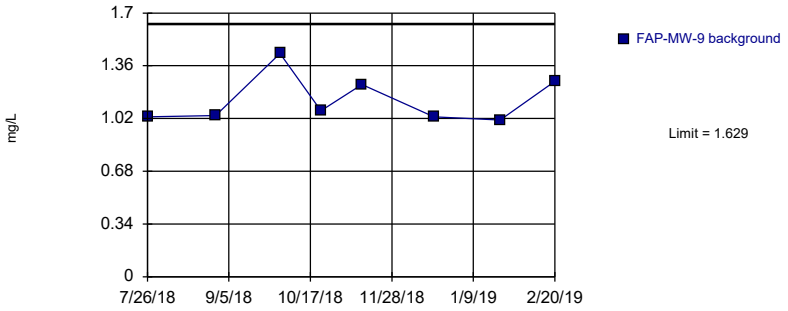


Background Data Summary: Mean=9.51, Std. Dev.=1.152, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8132, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-9



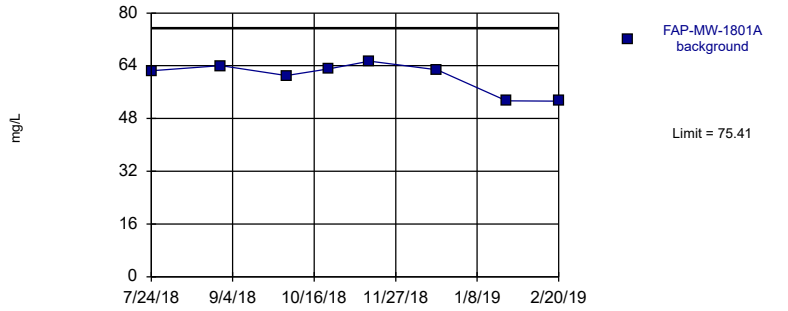
Background Data Summary: Mean=1.14, Std. Dev.=0.156, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.809, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1801A



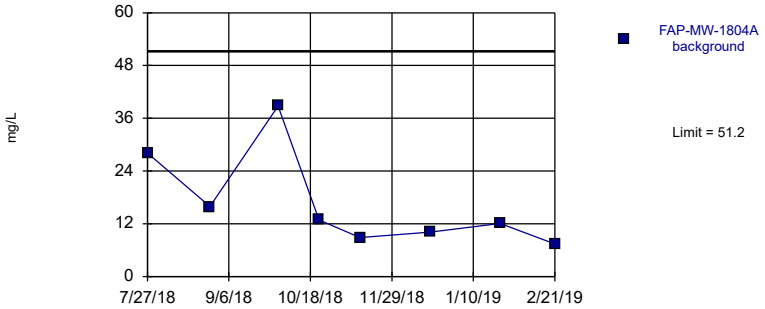
Background Data Summary: Mean=60.69, Std. Dev.=4.698, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7915, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1804A



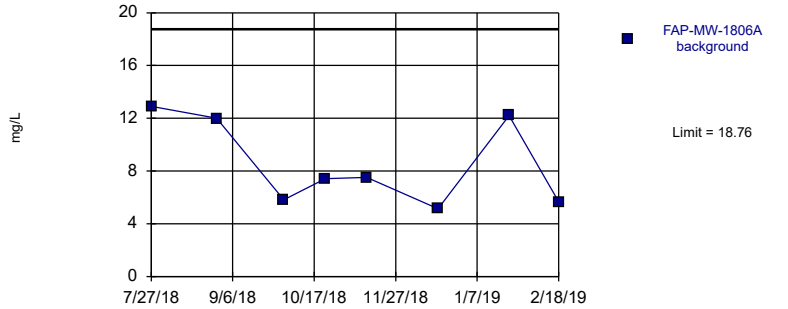
Background Data Summary: Mean=16.78, Std. Dev.=10.99, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8072, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1806A

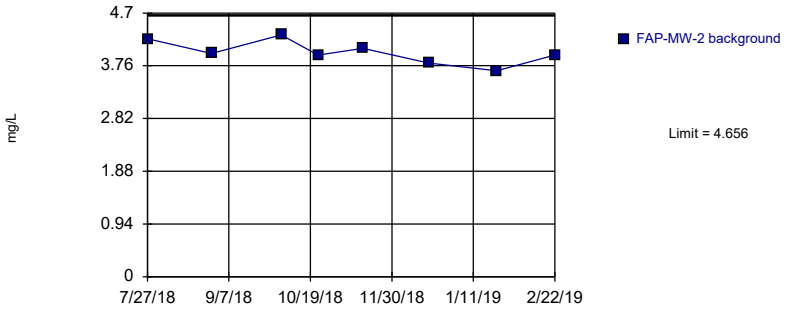


Background Data Summary: Mean=8.583, Std. Dev.=3.249, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8329, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-2



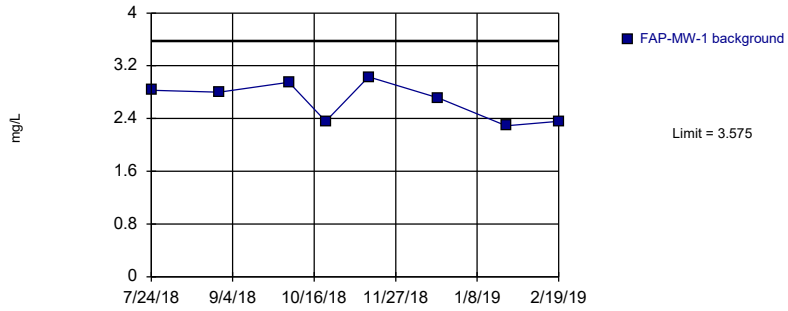
Background Data Summary: Mean=3.998, Std. Dev.=0.2101, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1



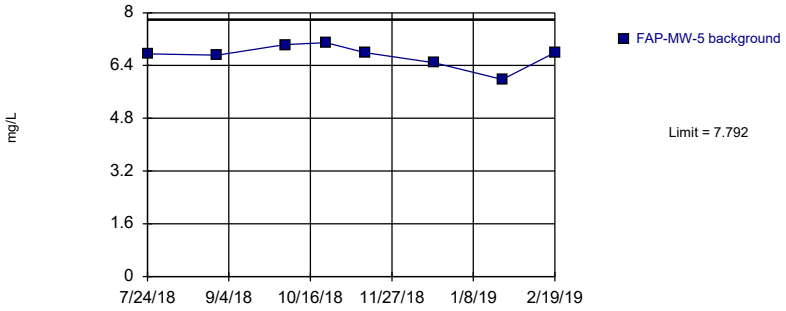
Background Data Summary: Mean=2.666, Std. Dev.=0.29, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8844, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-5



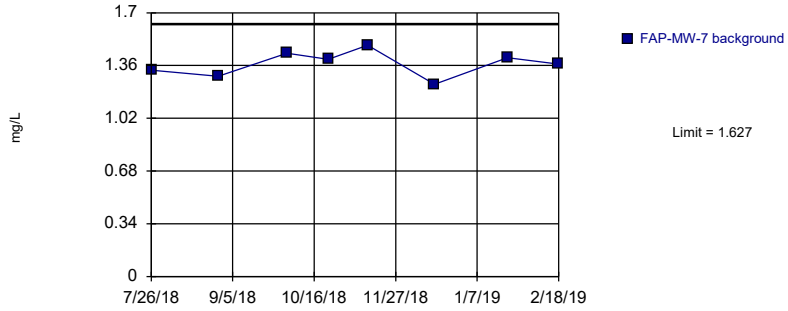
Background Data Summary: Mean=6.703, Std. Dev.=0.3478, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8777, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-7

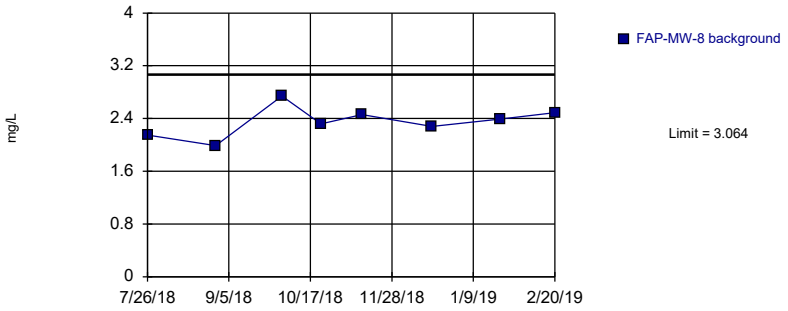


Background Data Summary: Mean=1.371, Std. Dev.=0.08167, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9845, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-8



Background Data Summary: Mean=2.353, Std. Dev.=0.227, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9872, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

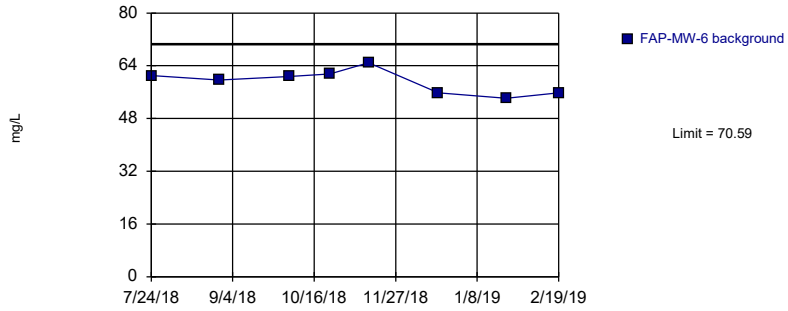
Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-6



Background Data Summary: Mean=59.19, Std. Dev.=3.638, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9339, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

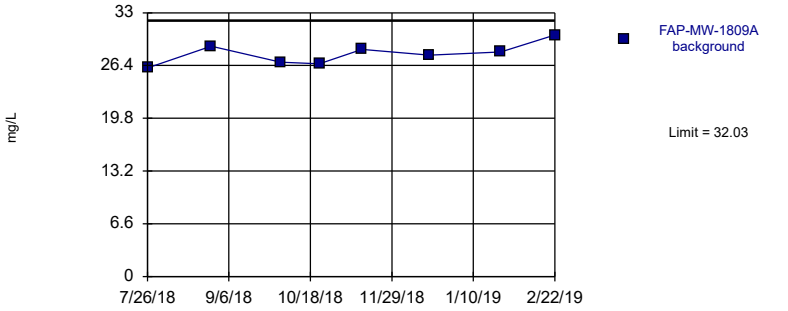
Constituent: Calcium Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1809A (bg)



Background Data Summary: Mean=27.84, Std. Dev.=1.338, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9651, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

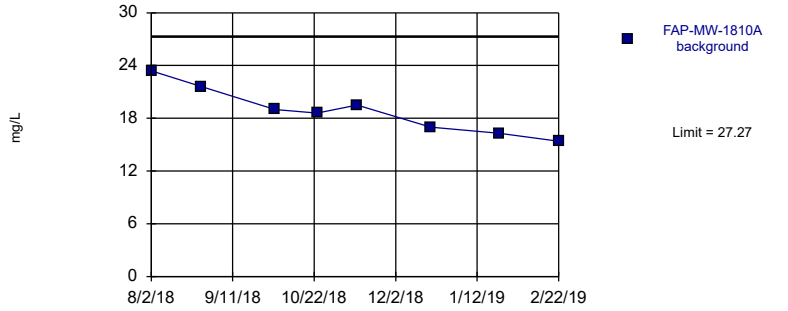
Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell

Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1810A (bg)



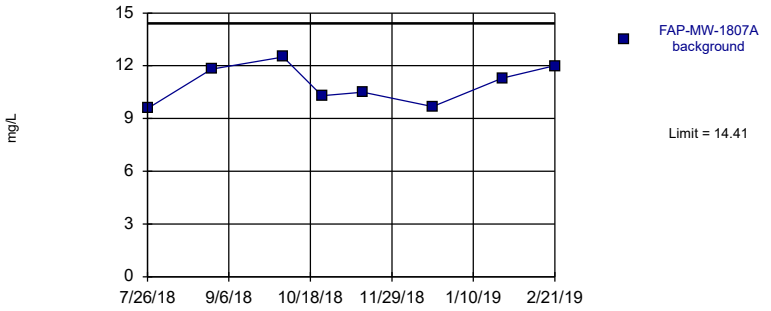
Background Data Summary: Mean=18.85, Std. Dev.=2.689, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9619, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell

Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1807A (bg)



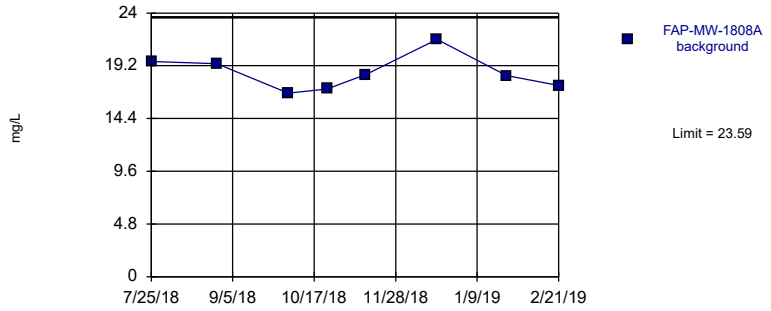
Background Data Summary: Mean=10.96, Std. Dev.=1.101, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9322, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1808A (bg)



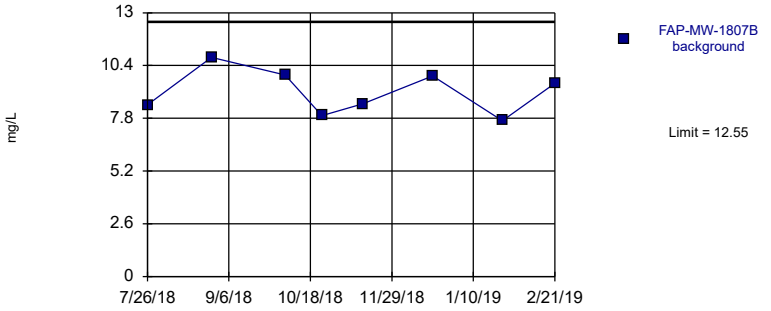
Background Data Summary: Mean=18.56, Std. Dev.=1.606, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9357, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807B (bg)



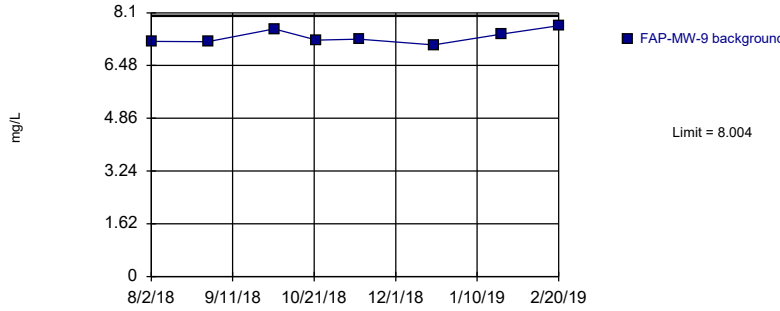
Background Data Summary: Mean=9.093, Std. Dev.=1.103, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9389, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-9

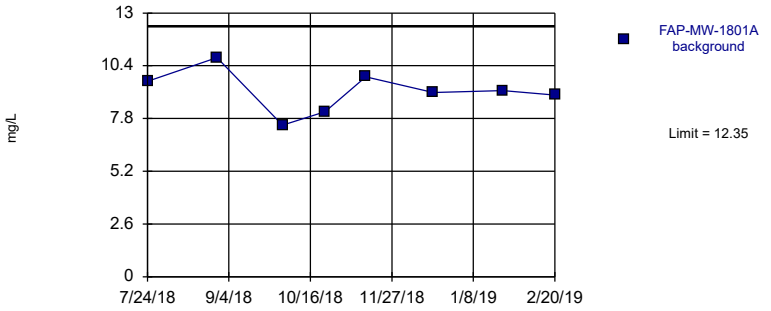


Background Data Summary: Mean=7.355, Std. Dev.=0.2072, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9073, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1801A



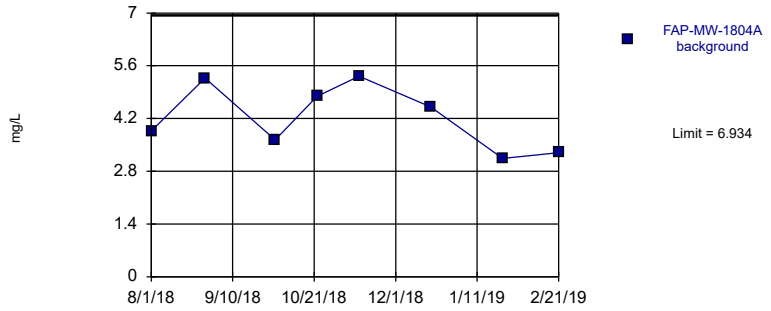
Background Data Summary: Mean=9.143, Std. Dev.=1.022, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9798, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1804A



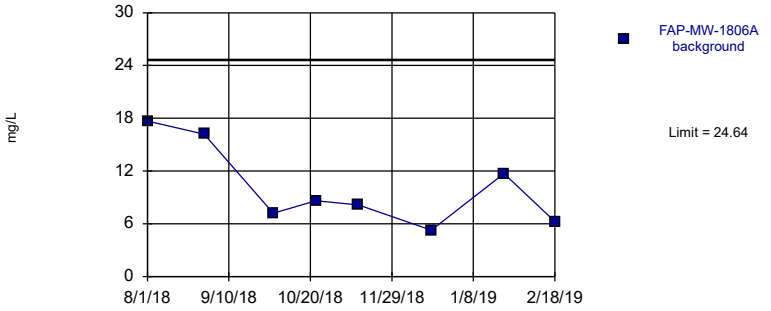
Background Data Summary: Mean=4.228, Std. Dev.=0.8638, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9132, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1806A



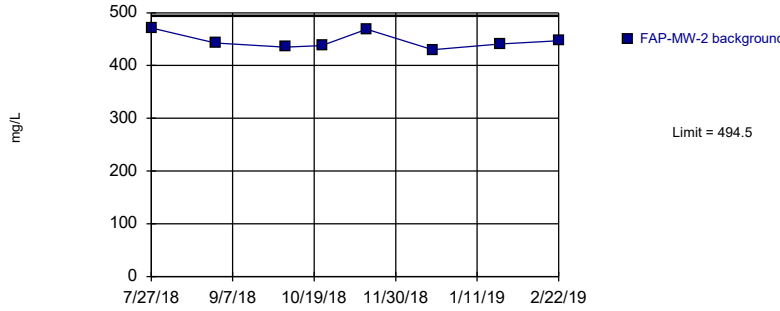
Background Data Summary: Mean=10.14, Std. Dev.=4.628, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8778, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-2

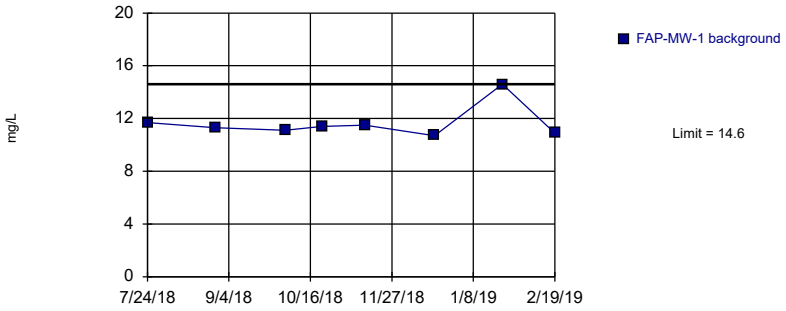


Background Data Summary: Mean=446.8, Std. Dev.=15.24, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8537, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Non-parametric, FAP-MW-1



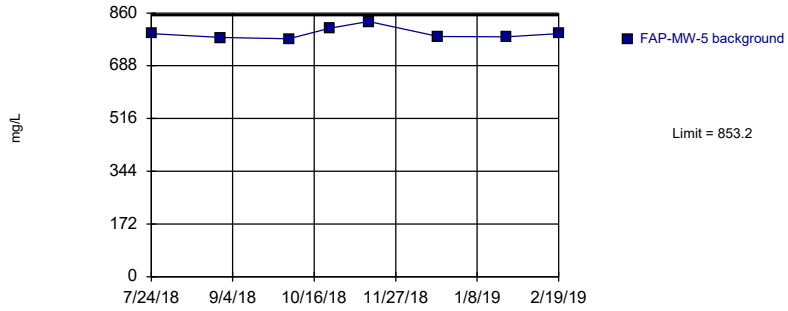
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-5



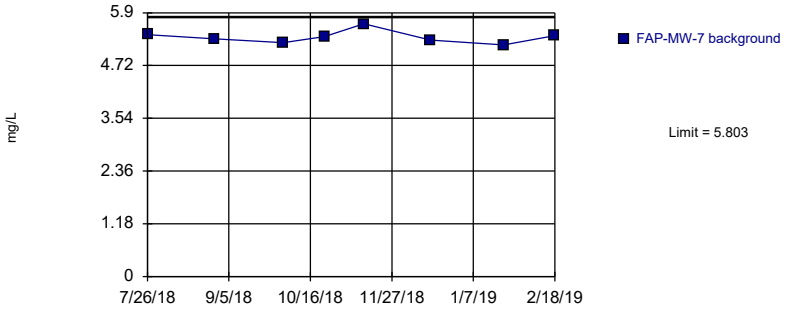
Background Data Summary: Mean=793.8, Std. Dev.=18.97, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8464, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-7



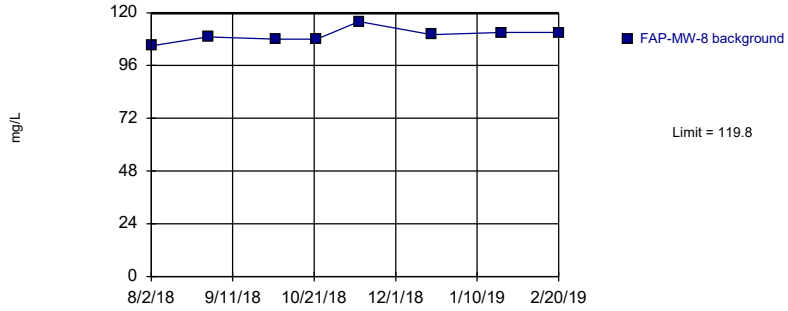
Background Data Summary: Mean=5.355, Std. Dev.=0.143, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9132, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-8

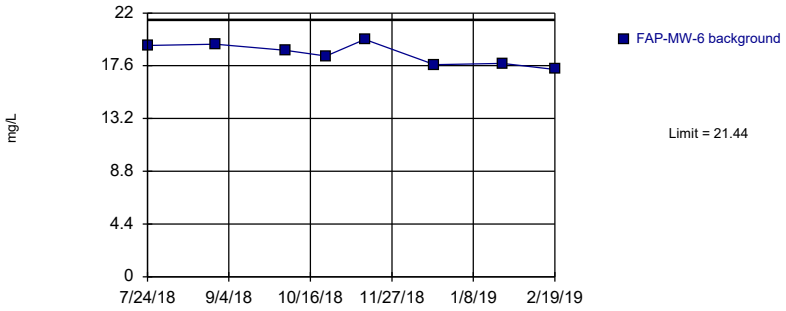


Background Data Summary: Mean=109.8, Std. Dev.=3.196, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9371, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-6



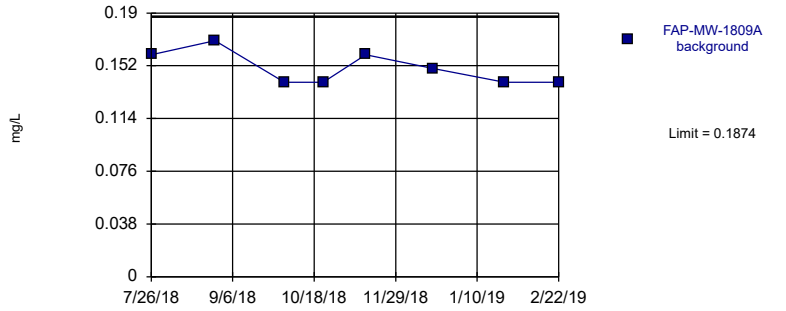
Background Data Summary: Mean=18.58, Std. Dev.=0.913, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9387, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1809A (bg)



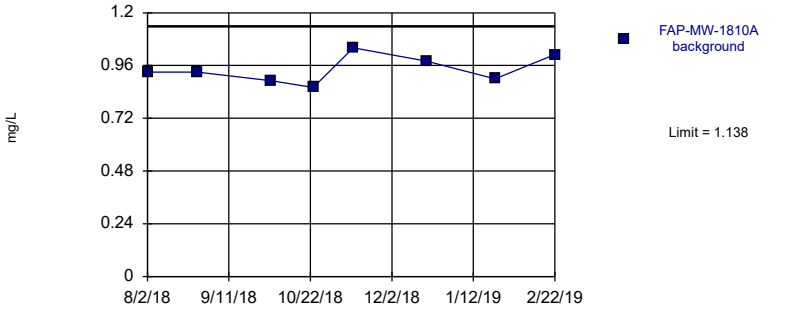
Background Data Summary: Mean=0.15, Std. Dev.=0.01195, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.814, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1810A (bg)



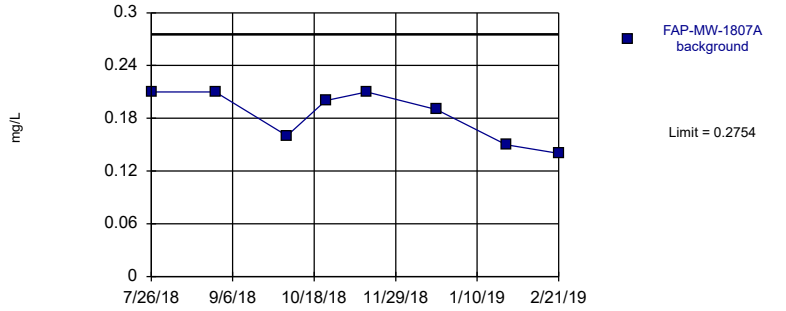
Background Data Summary: Mean=0.9425, Std. Dev.=0.06228, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9529, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807A (bg)

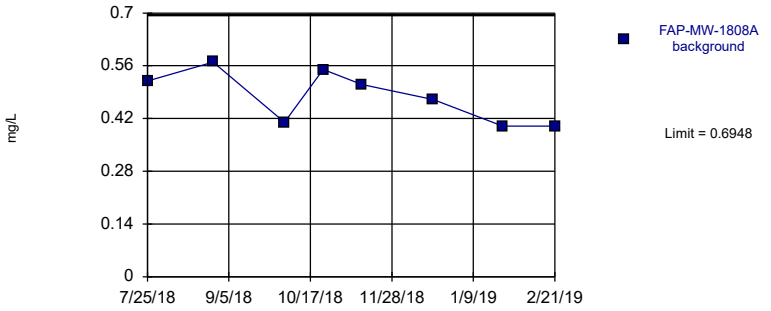


Background Data Summary: Mean=0.1838, Std. Dev.=0.02925, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.833, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:16 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1808A (bg)



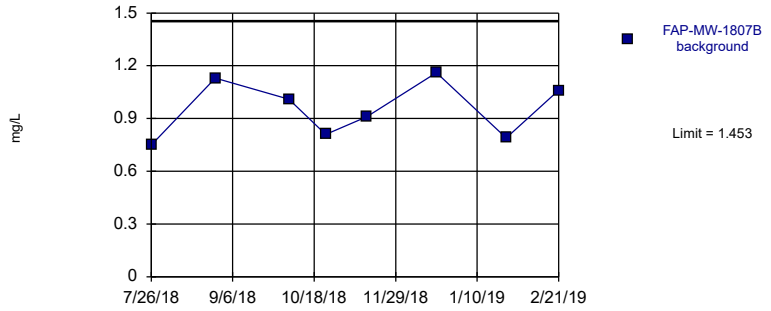
Background Data Summary: Mean=0.4788, Std. Dev.=0.06896, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807B (bg)



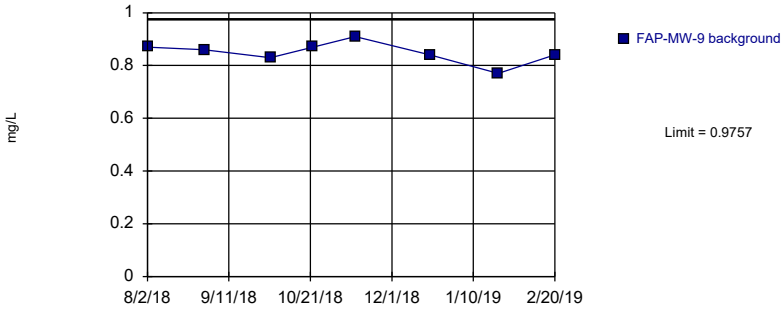
Background Data Summary: Mean=0.9525, Std. Dev.=0.1599, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9161, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-9



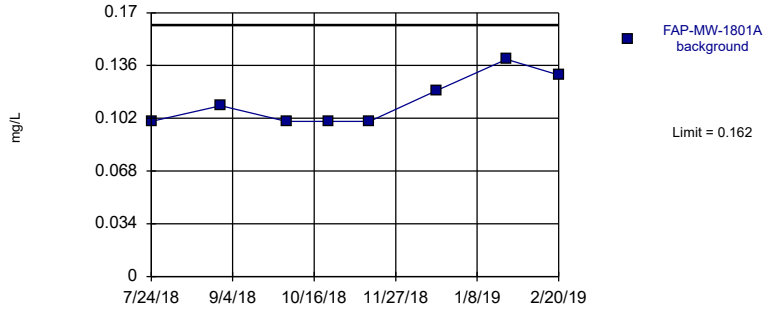
Background Data Summary: Mean=0.8488, Std. Dev.=0.04051, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9368, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1801A

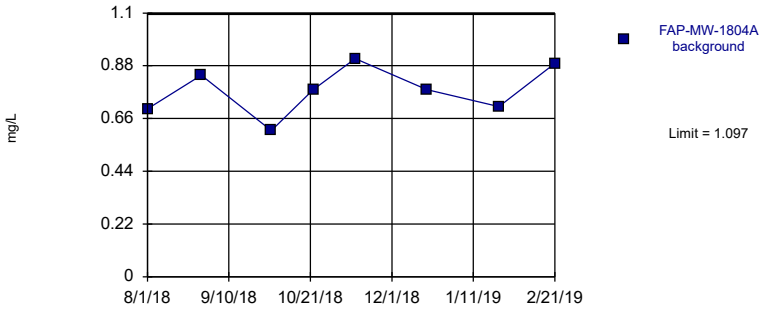


Background Data Summary: Mean=0.1125, Std. Dev.=0.01581, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8142, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1804A



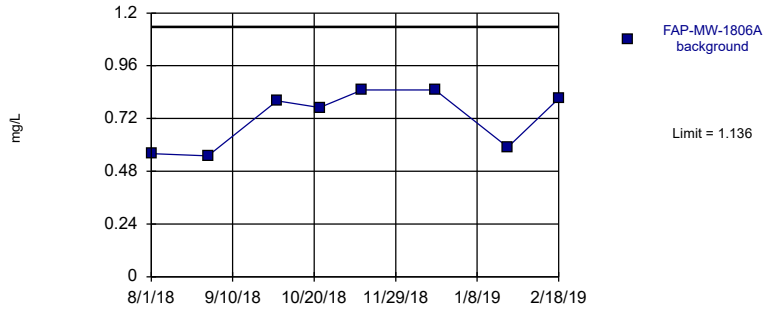
Background Data Summary: Mean=0.7775, Std. Dev.=0.1019, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9605, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1806A



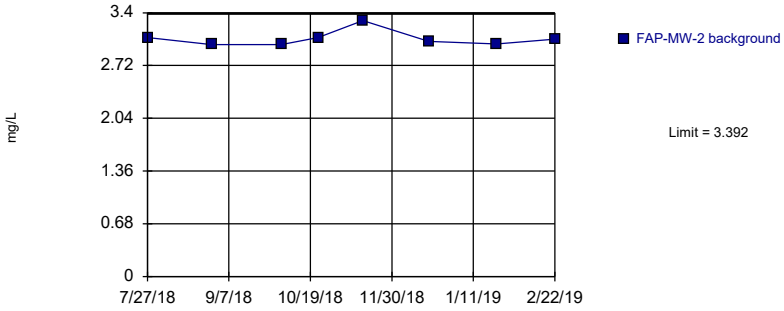
Background Data Summary: Mean=0.7225, Std. Dev.=0.1321, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8038, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-2



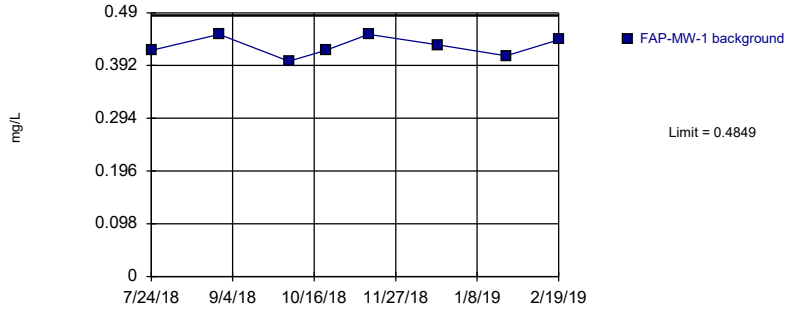
Background Data Summary (based on natural log transformation): Mean=1.12, Std. Dev.=0.03235, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.752, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1

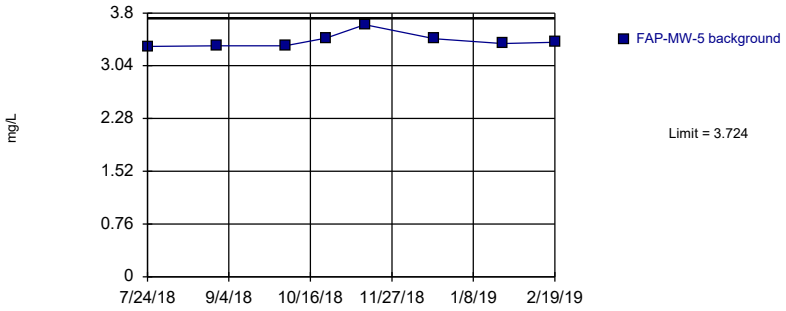


Background Data Summary: Mean=0.4275, Std. Dev.=0.01832, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9385, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-5



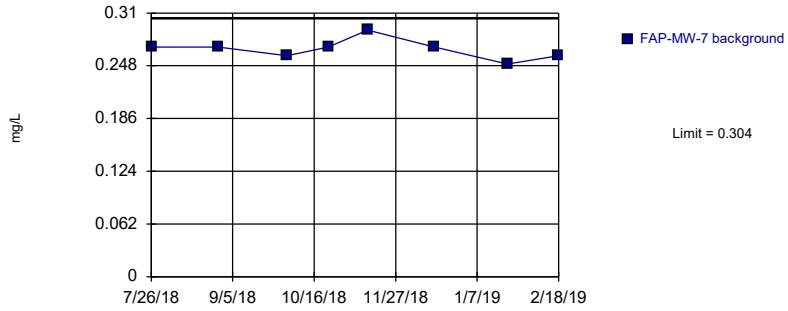
Background Data Summary: Mean=3.403, Std. Dev.=0.1025, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7895, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-7



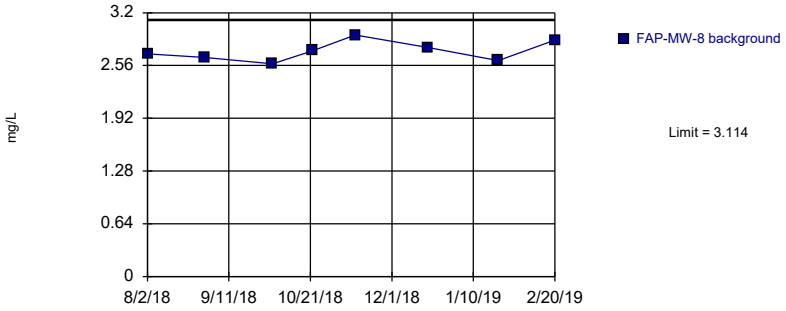
Background Data Summary: Mean=0.2675, Std. Dev.=0.01165, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8923, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-8



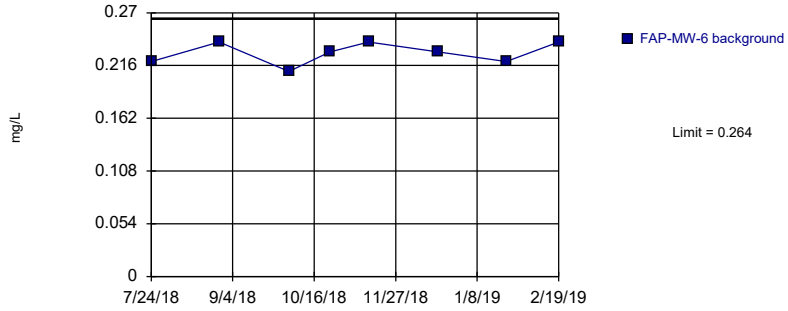
Background Data Summary: Mean=2.735, Std. Dev.=0.1209, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9633, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-6

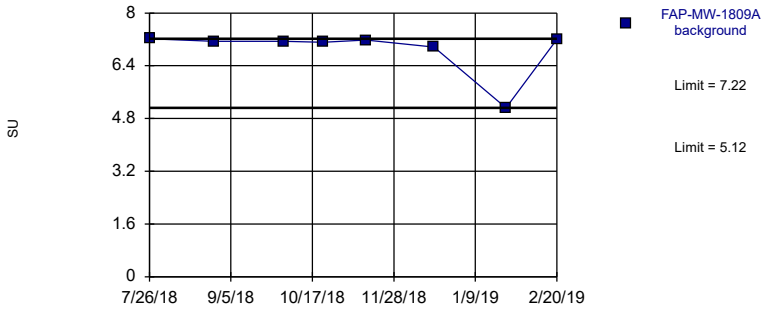


Background Data Summary: Mean=0.2288, Std. Dev.=0.01126, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8815, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Non-parametric, FAP-MW-1809A (bg)



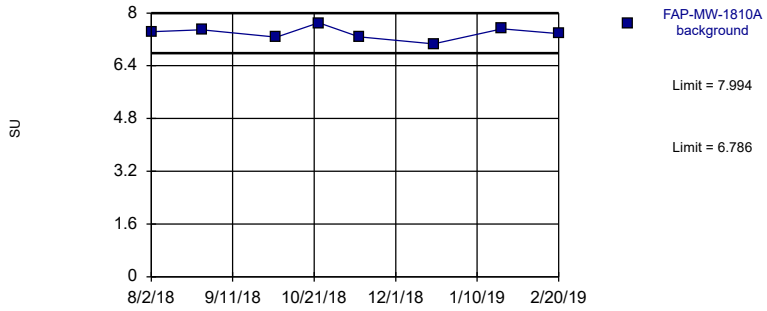
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.08484. Individual comparison alpha = 0.04288 (1 of 2). Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1810A (bg)



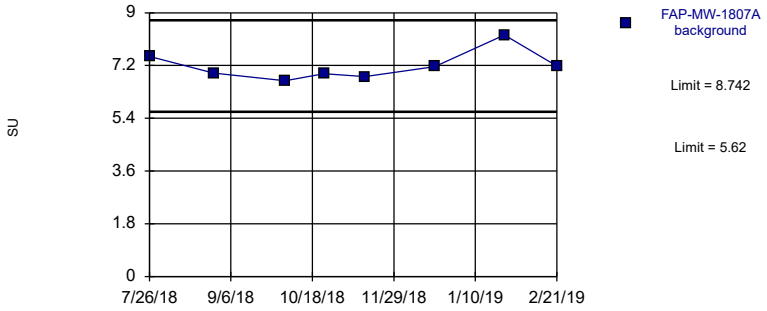
Background Data Summary: Mean=7.39, Std. Dev.=0.1929, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9848, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807A (bg)



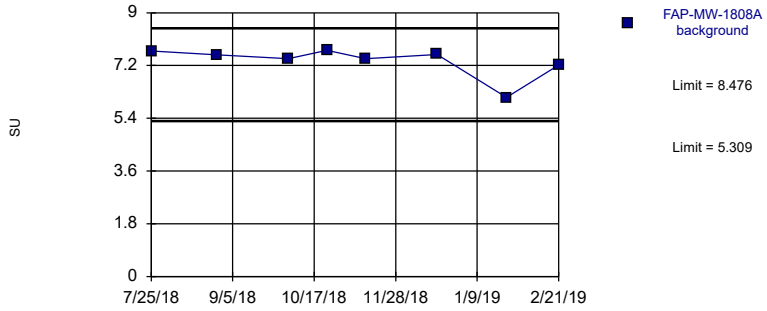
Background Data Summary: Mean=7.181, Std. Dev.=0.4982, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8567, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1808A (bg)

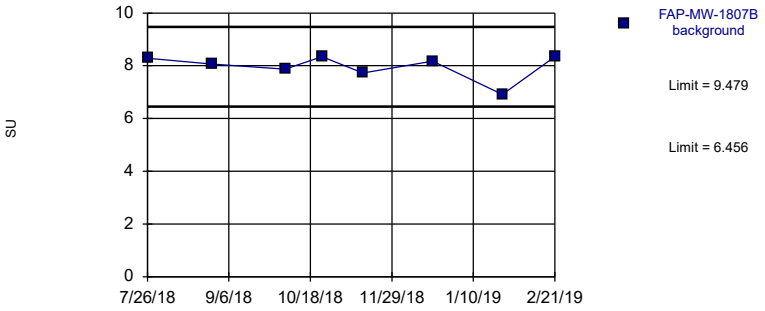


Background Data Summary (based on x^4 transformation): Mean=2978, Std. Dev.=697.1, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7714, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1807B (bg)



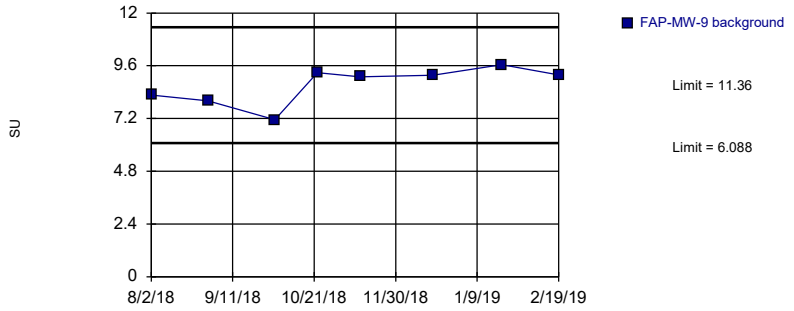
Background Data Summary: Mean=7.968, Std. Dev.=0.4824, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8032, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-9



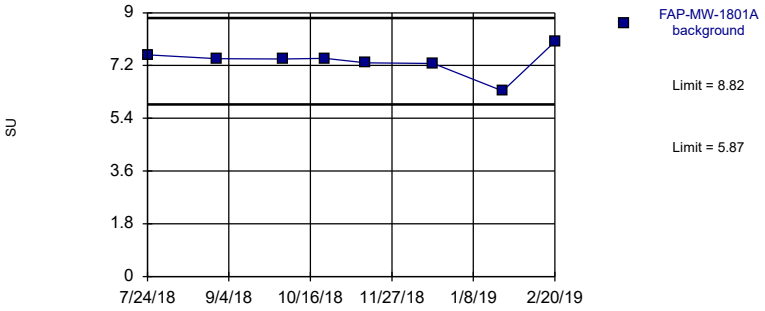
Background Data Summary: Mean=8.724, Std. Dev.=0.8413, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8788, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1801A



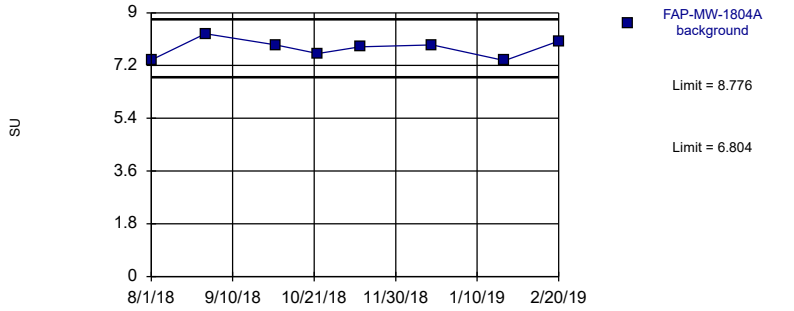
Background Data Summary: Mean=7.345, Std. Dev.=0.4707, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8333, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1804A

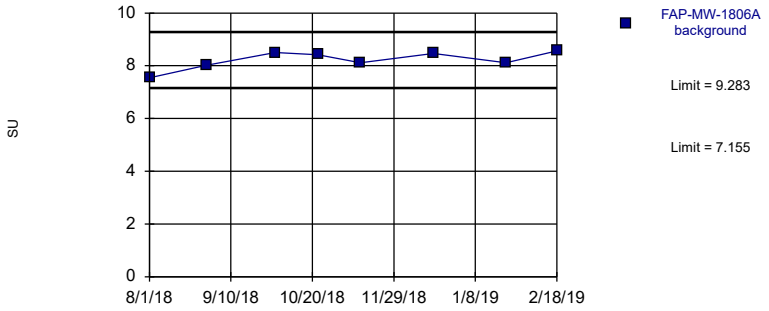


Background Data Summary: Mean=7.79, Std. Dev.=0.3147, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9398, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1806A



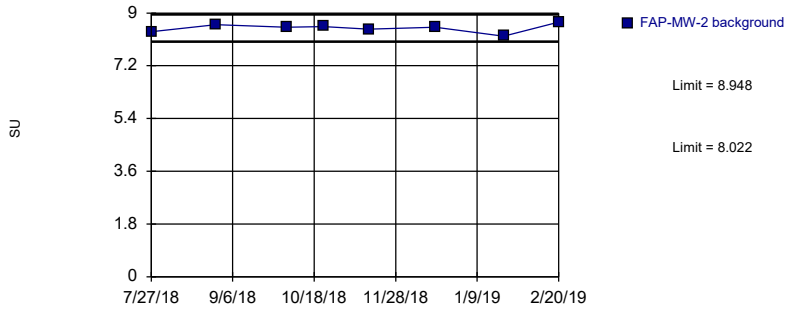
Background Data Summary: Mean=8.219, Std. Dev.=0.3396, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8795, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-2



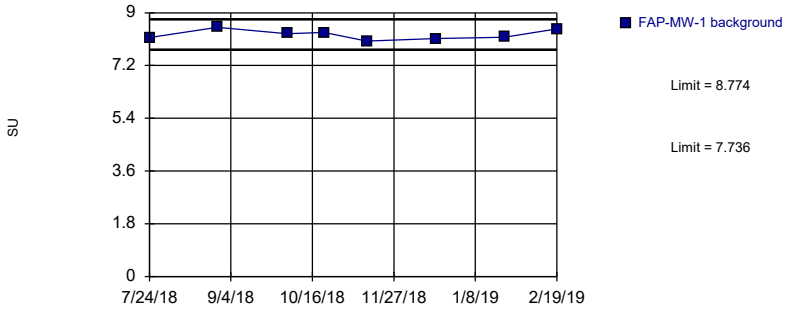
Background Data Summary: Mean=8.485, Std. Dev.=0.1476, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9597, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1



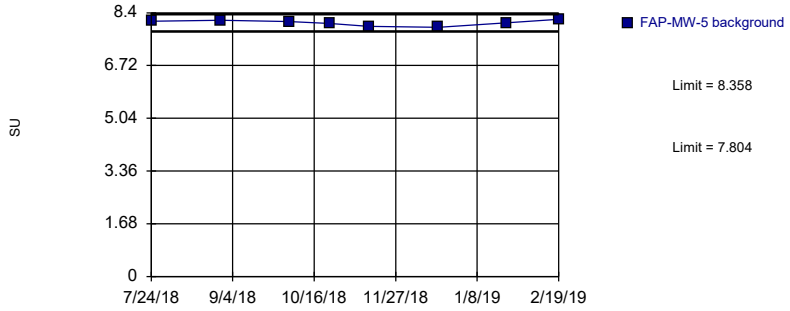
Background Data Summary: Mean=8.255, Std. Dev.=0.1656, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9495, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-5

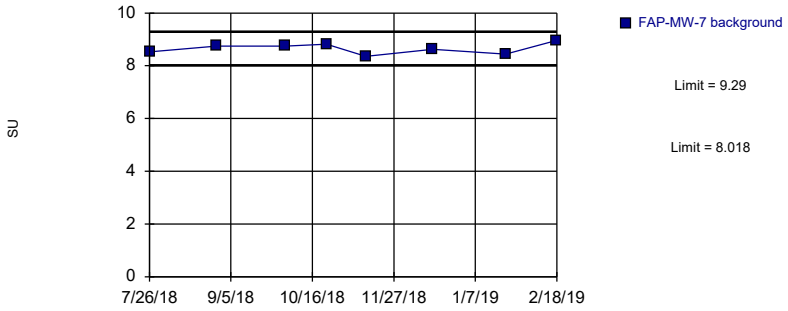


Background Data Summary: Mean=8.081, Std. Dev.=0.08839, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9328, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-7



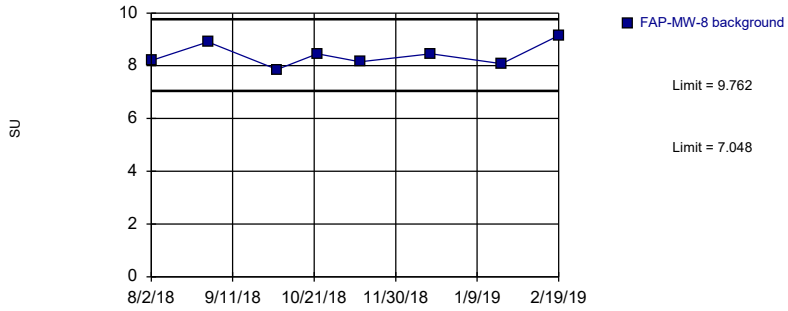
Background Data Summary: Mean=8.654, Std. Dev.=0.203, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9703, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-8



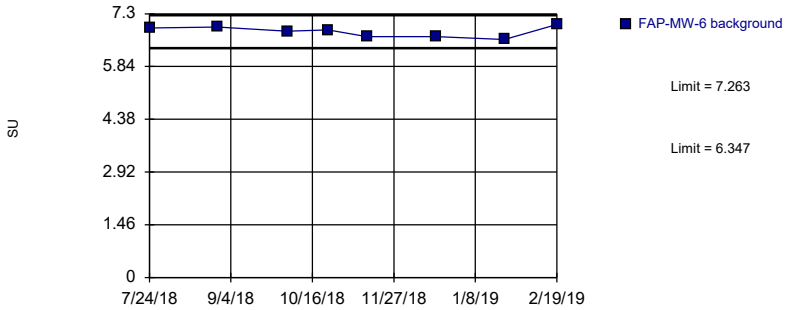
Background Data Summary: Mean=8.405, Std. Dev.=0.4332, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9319, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-6



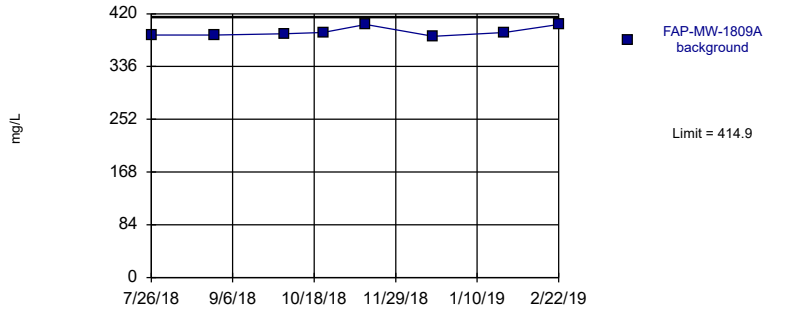
Background Data Summary: Mean=6.805, Std. Dev.=0.1462, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9346, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: pH Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1809A (bg)

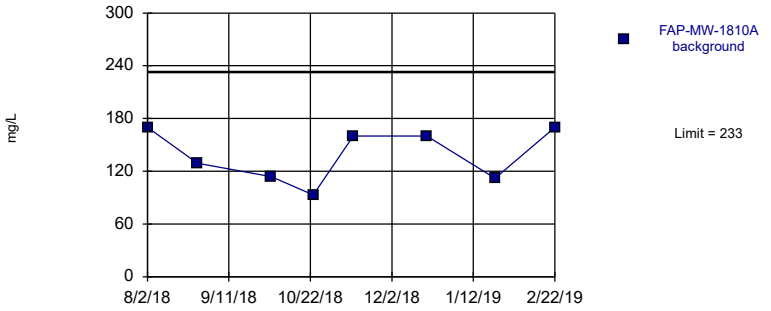


Background Data Summary: Mean=391.3, Std. Dev.=7.536, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.787, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1810A (bg)



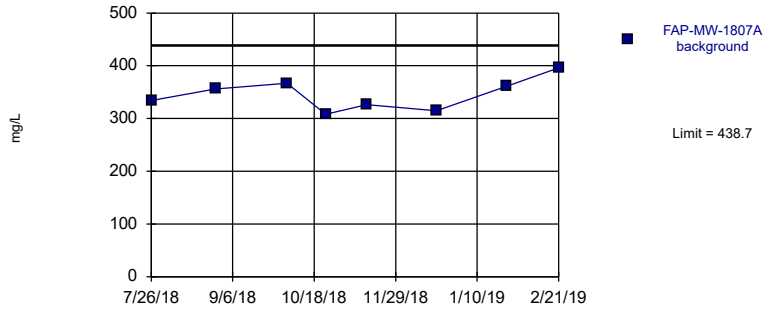
Background Data Summary: Mean=138.5, Std. Dev.=30.15, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8758, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807A (bg)



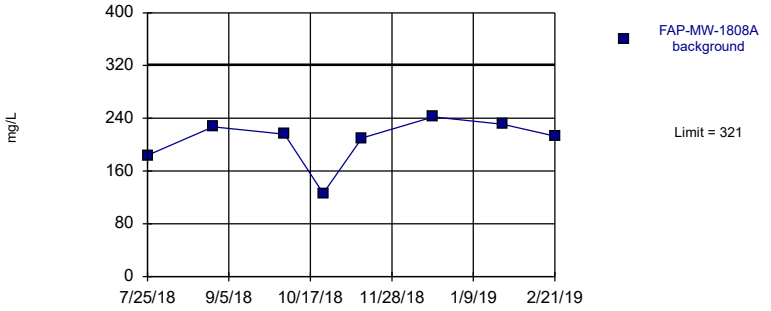
Background Data Summary: Mean=345.4, Std. Dev.=29.79, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9556, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1808A (bg)



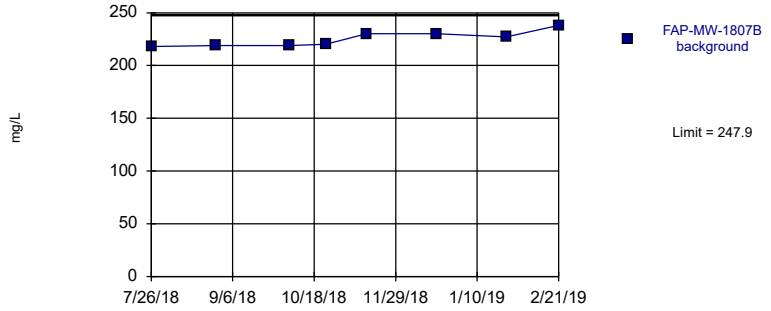
Background Data Summary: Mean=206.1, Std. Dev.=36.67, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8267, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807B (bg)

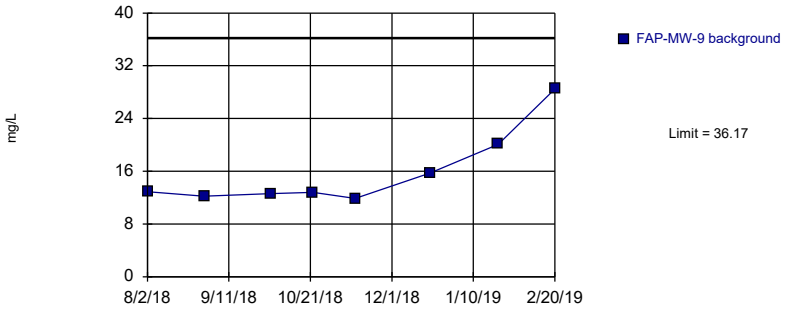


Background Data Summary: Mean=225.1, Std. Dev.=7.259, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8681, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-9



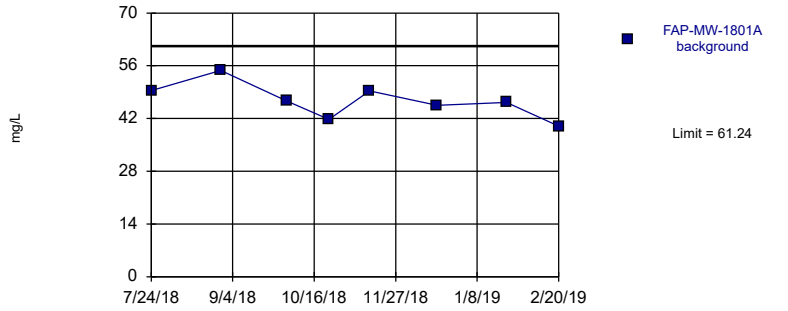
Background Data Summary (based on square root transformation): Mean=3.931, Std. Dev.=0.6651, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7553, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1801A



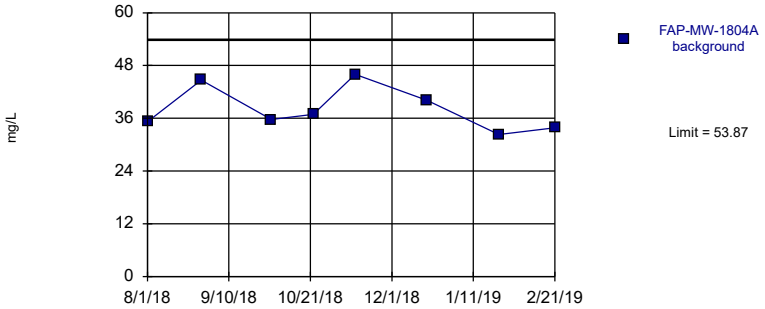
Background Data Summary: Mean=46.73, Std. Dev.=4.631, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9664, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1804A



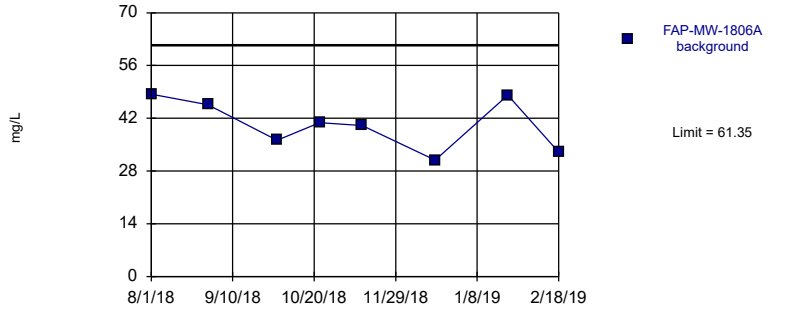
Background Data Summary: Mean=38.09, Std. Dev.=5.039, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9021, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1806A

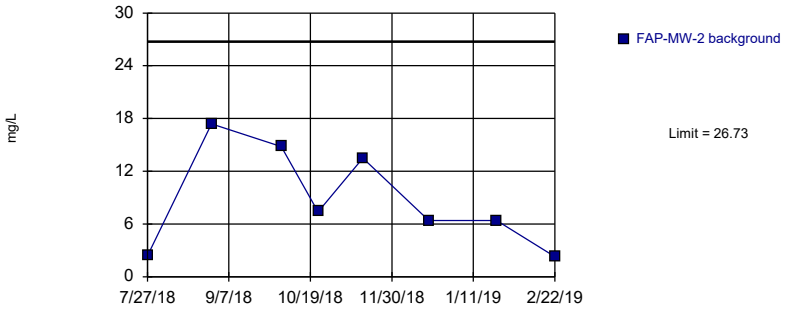


Background Data Summary: Mean=40.39, Std. Dev.=6.689, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9277, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-2

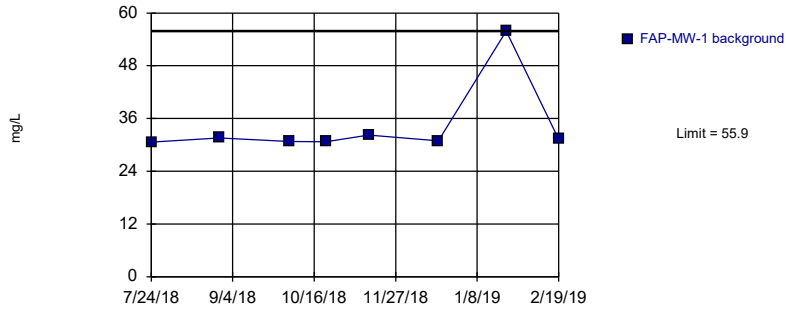


Background Data Summary: Mean=8.825, Std. Dev.=5.716, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.901, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Non-parametric, FAP-MW-1



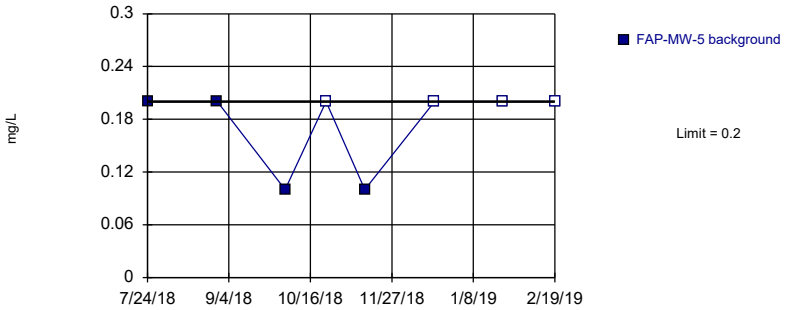
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, FAP-MW-5

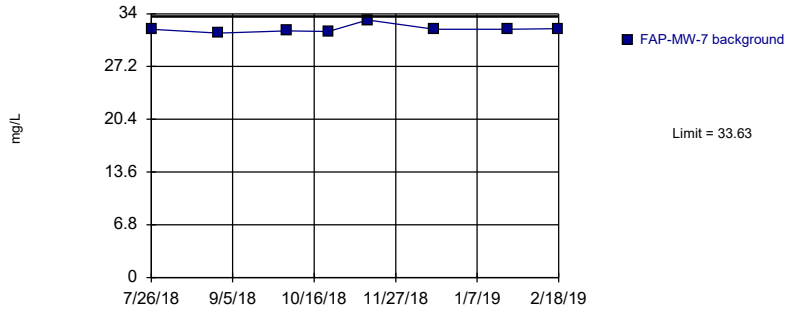


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 50% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-7

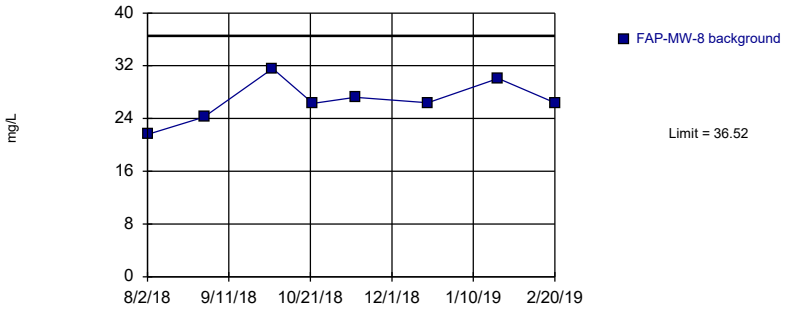


Background Data Summary: Mean=32.04, Std. Dev.=0.5097, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.779, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-8



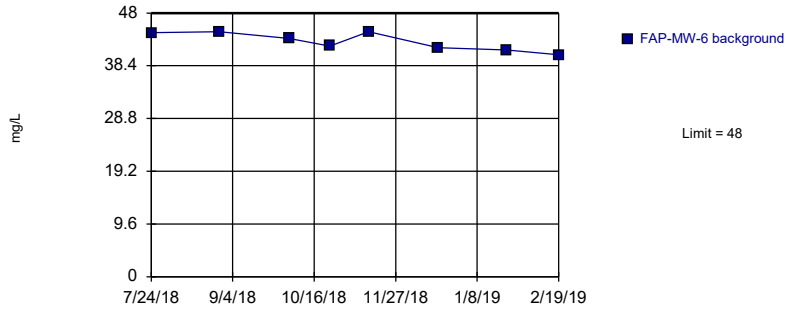
Background Data Summary: Mean=26.73, Std. Dev.=3.126, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9532, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-6



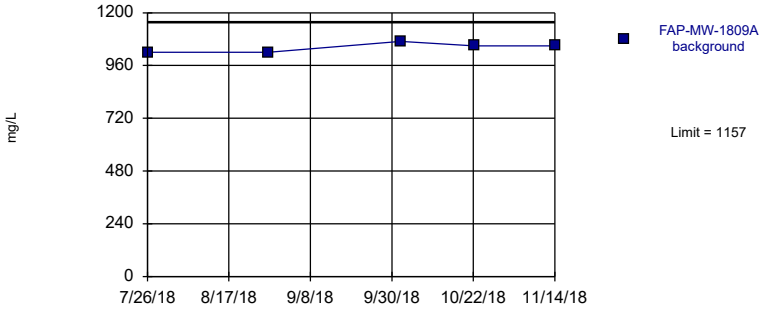
Background Data Summary: Mean=42.8, Std. Dev.=1.659, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8878, critical = 0.749. Kappa = 3.133 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/18/2019 9:17 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1809A (bg)



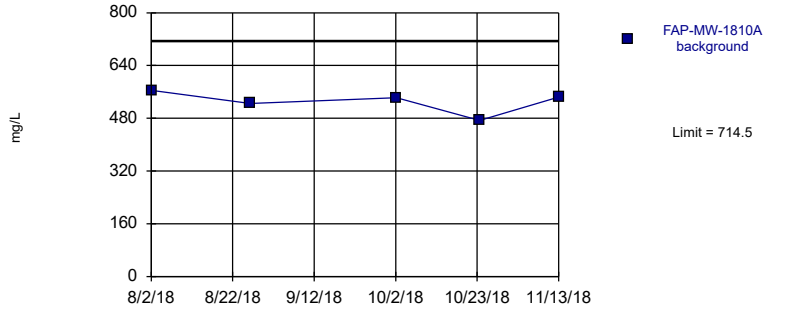
Background Data Summary: Mean=1042, Std. Dev.=21.68, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8711, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1810A (bg)

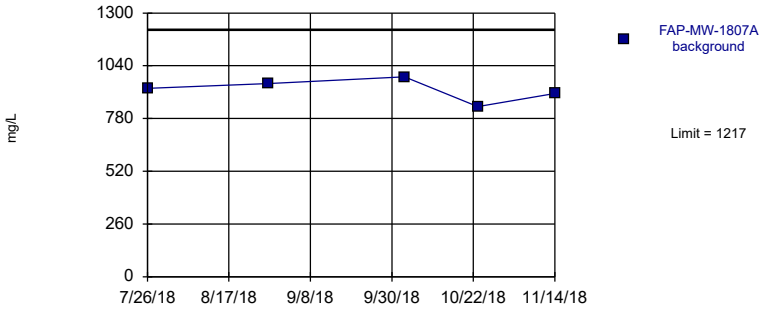


Background Data Summary: Mean=529.8, Std. Dev.=34.78, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8928, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1807A (bg)



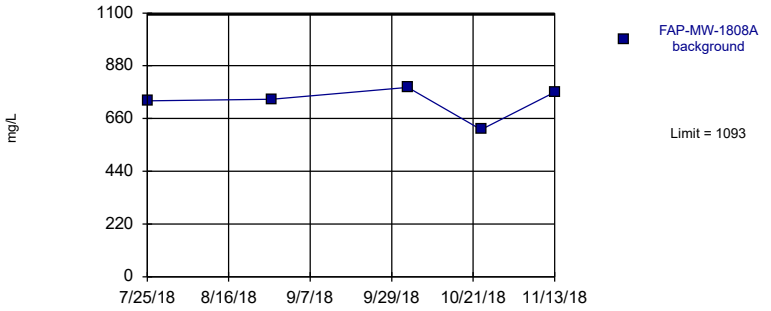
Background Data Summary: Mean=921.8, Std. Dev.=55.59, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9705, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1808A (bg)



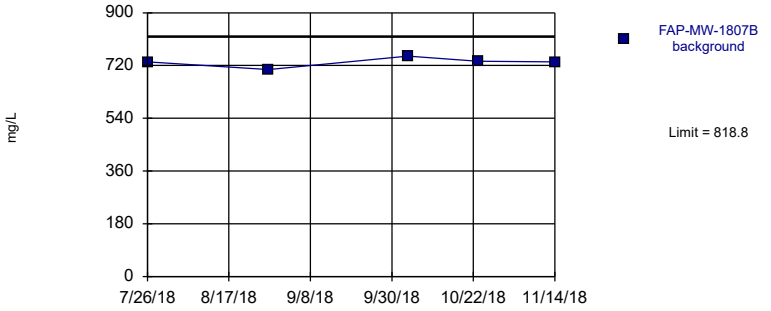
Background Data Summary: Mean=729.6, Std. Dev.=68.5, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8412, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1807B (bg)



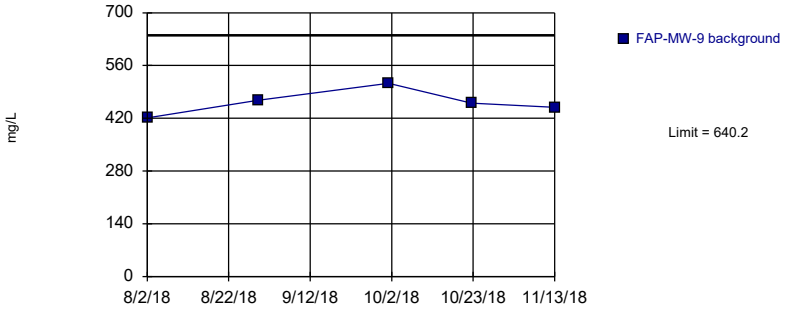
Background Data Summary: Mean=731.4, Std. Dev.=16.46, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9042, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-9

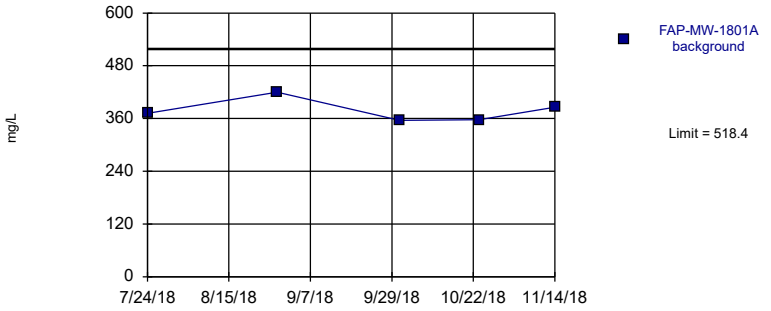


Background Data Summary: Mean=462.2, Std. Dev.=33.51, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.962, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1801A



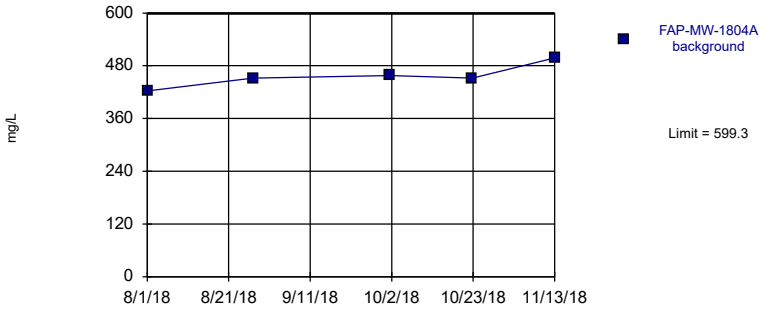
Background Data Summary: Mean=378.2, Std. Dev.=26.4, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8797, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1804A



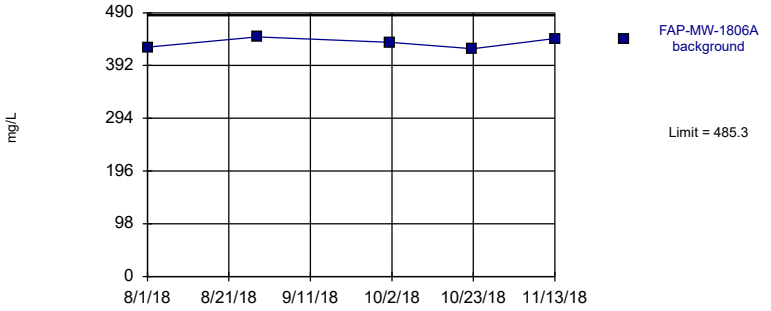
Background Data Summary: Mean=456.6, Std. Dev.=26.87, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9112, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-1806A



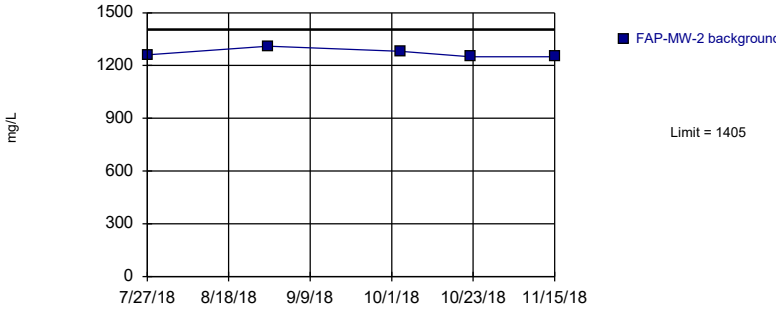
Background Data Summary: Mean=434.2, Std. Dev.=9.628, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9212, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-2

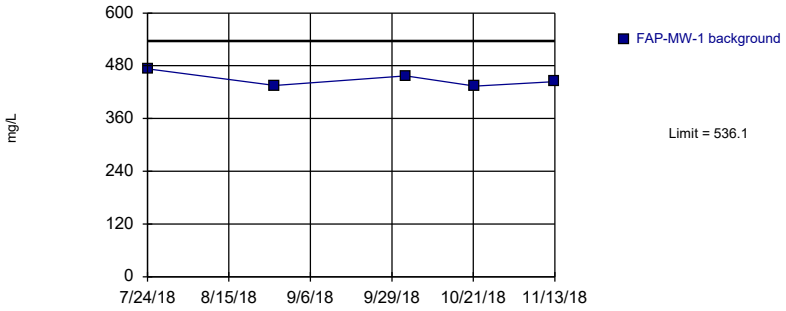


Background Data Summary: Mean=1270, Std. Dev.=25.5, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8538, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-1



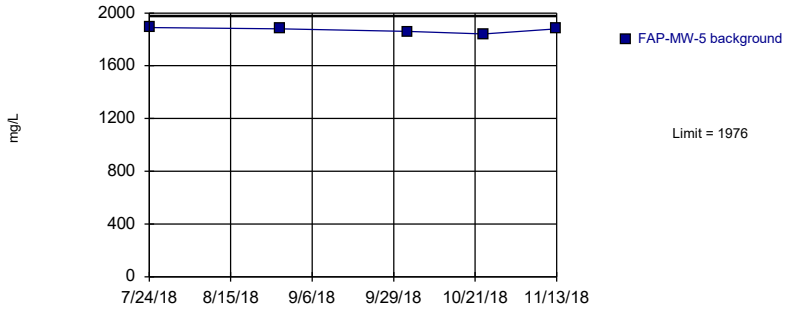
Background Data Summary: Mean=448.6, Std. Dev.=16.47, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8986, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-5



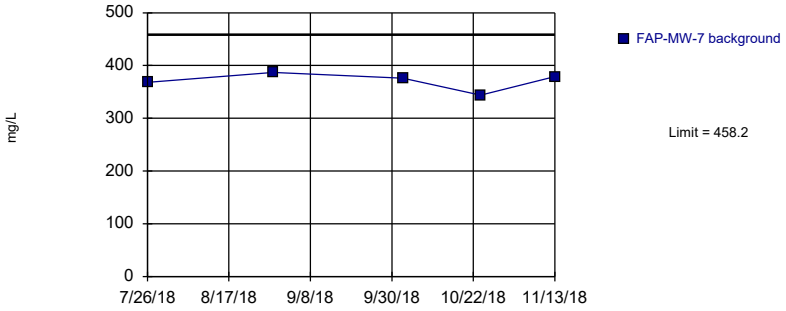
Background Data Summary: Mean=1870, Std. Dev.=20, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9052, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-7



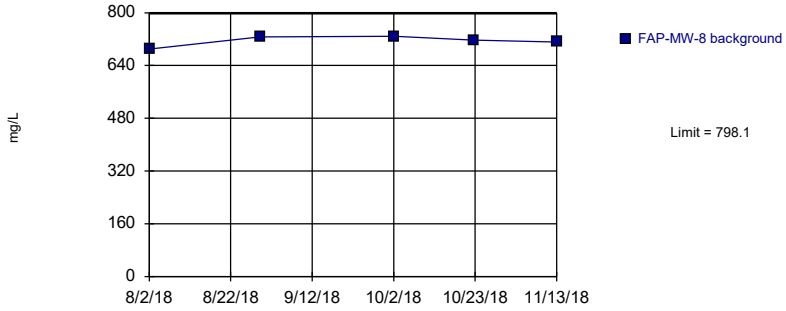
Background Data Summary: Mean=370.8, Std. Dev.=16.45, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9009, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Sanitas™ v.9.6.12h Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit

Intrawell Parametric, FAP-MW-8

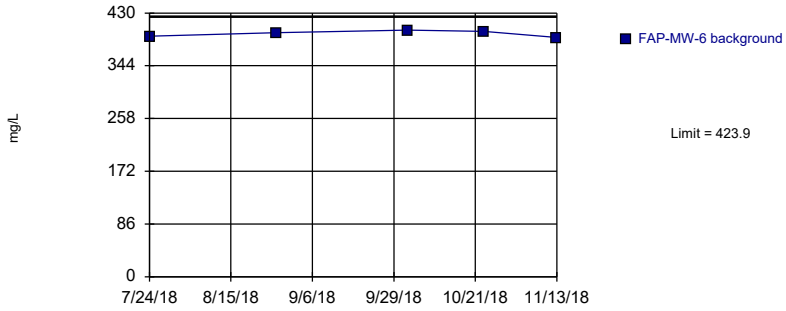


Background Data Summary: Mean=714.8, Std. Dev.=15.69, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9005, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell
Amos FAP Client: Geosyntec Data: Amos FAP

Prediction Limit

Intrawell Parametric, FAP-MW-6

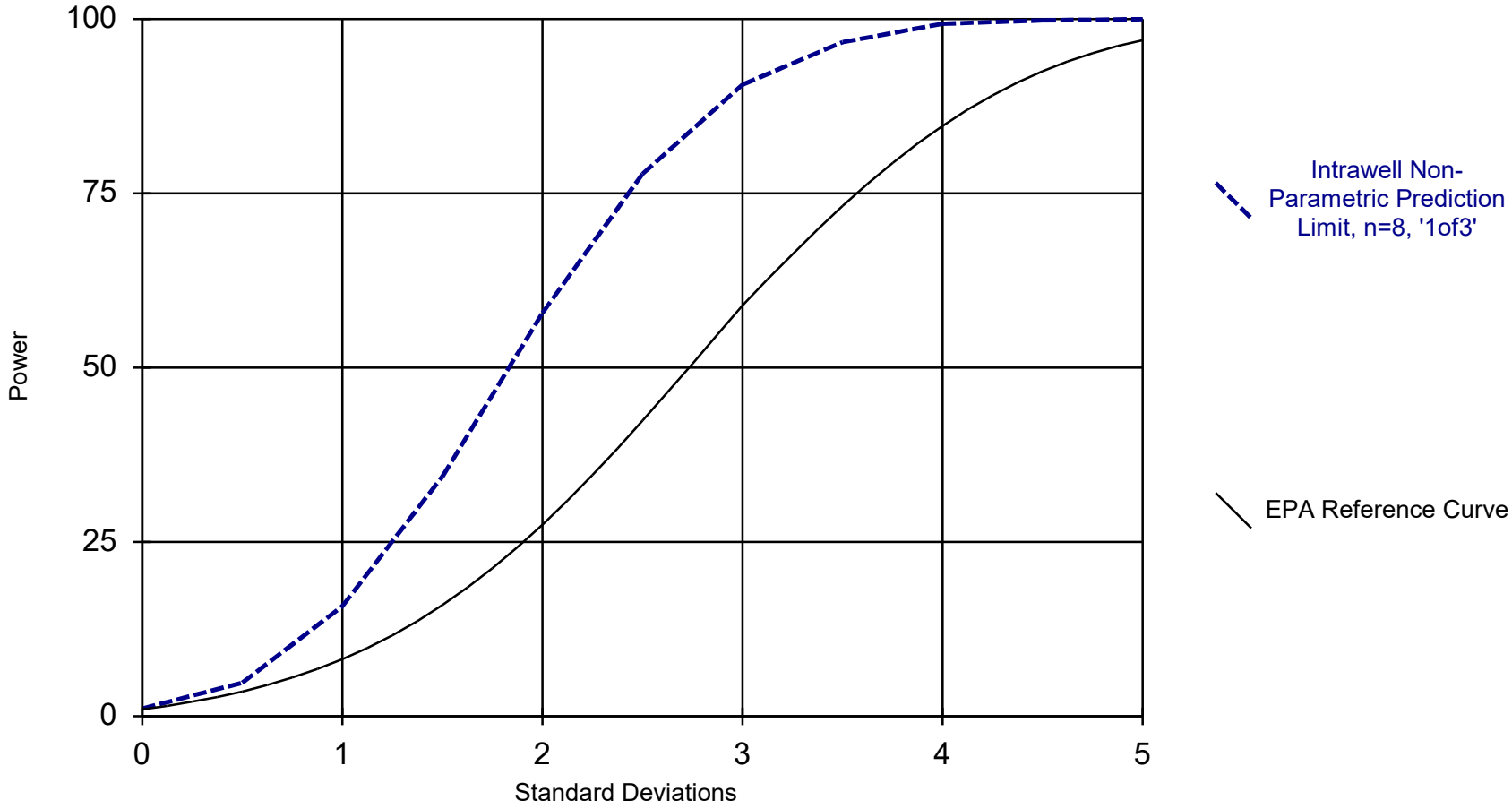


Background Data Summary: Mean=396.4, Std. Dev.=5.177, n=5. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9153, critical = 0.686. Kappa = 5.311 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523. Assumes 1 future value.

Constituent: Total Dissolved Solids Analysis Run 4/18/2019 9:18 AM View: PL's - Intrawell

Amos FAP Client: Geosyntec Data: Amos FAP

Power Curve

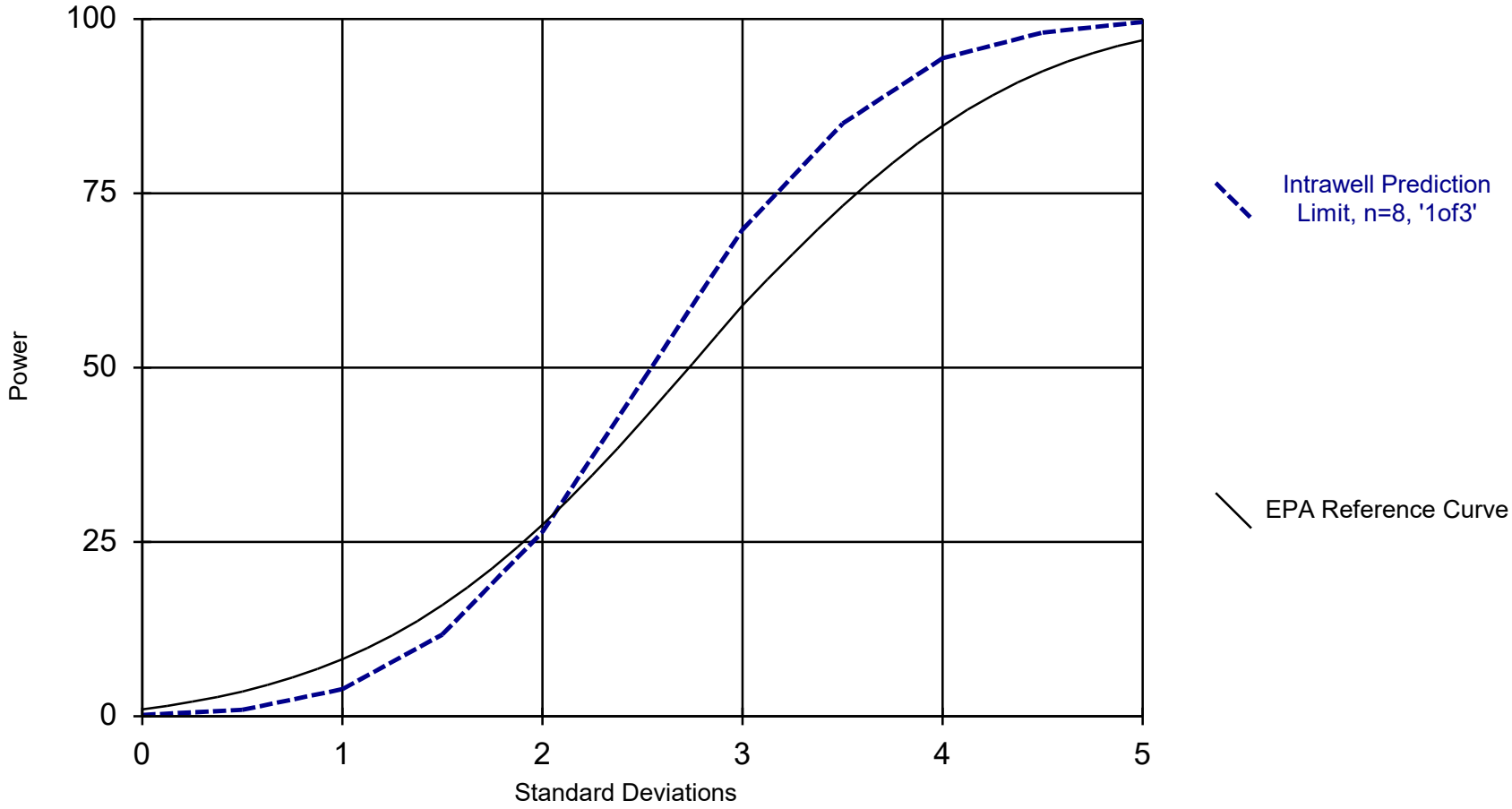


This report reflects annual total based on two evaluations per year.

Analysis Run 4/18/2019 9:13 AM View: Confidence Intervals - Appendix III

Amos FAP Client: Geosyntec Data: Amos FAP

Power Curve



Kappa = 2.21, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 4/18/2019 9:12 AM View: Confidence Intervals - Appendix III

Amos FAP Client: Geosyntec Data: Amos FAP