

**STATISTICAL ANALYSIS SUMMARY**  
**BOTTOM ASH POND**  
**Amos Plant**  
**Winfield, West Virginia**

*Submitted to*



1 Riverside Plaza  
Columbus, Ohio 43215-2372

*Submitted by*



engineers | scientists | innovators

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## LIST OF ACRONYMS AND ABBREVIATIONS

AEP	American Electric Power
BAP	Bottom Ash Pond
CCR	Coal Combustion Residuals
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
GWPS	Groundwater Protection Standard
LCL	Lower Confidence Limit
LFB	Laboratory Fortified Blanks
LRB	Laboratory Reagent Blanks
MCL	Maximum Contaminant Level
NELAP	National Environmental Laboratory Accreditation Program
QA	Quality Assurance
QC	Quality Control
RSL	Regional Screening Level
SSI	Statistically Significant Increase
SSL	Statistically Significant Level
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 257.90-257.98, "CCR rule"), groundwater monitoring has been conducted at the Bottom Ash Pond (BAP), an existing CCR unit at the Amos Power Plant located in Winfield, West Virginia.

Based on detection monitoring conducted in 2017 and 2018, statistically significant increases (SSIs) over background were concluded for calcium, chloride, total dissolved solids (TDS), and sulfate at the BAP. An alternate source was not identified at the time, so two assessment monitoring events were conducted at the BAP in 2018, in accordance with 40 CFR 257.95.

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. Groundwater protection standards (GWPSs) were established for the Appendix IV parameters. Confidence intervals were calculated for Appendix IV parameters at the compliance wells to assess whether Appendix IV parameters were present at a statistically significant level (SSL) above the GWPS. No SSLs were identified, but Appendix III concentrations for calcium, chloride, pH, sulfate, and TDS remained above background. Thus, either the unit will remain in assessment monitoring or an alternative source demonstration will be conducted to evaluate if the unit can return to detection monitoring. Certification of the selected statistical methods by a qualified professional engineer is documented in Attachment A.

## SECTION 2

### BOTTOM ASH POND EVALUATION

#### 2.1 Data Validation & QA/QC

During the assessment monitoring program, two sets of samples were collected for analysis from each upgradient and downgradient well to meet the requirements of 40 CFR 257.95(b) and 257.95(d)(1). Samples from both sampling events were analyzed for the Appendix III and Appendix IV parameters. A summary of data collected during assessment monitoring 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.9.5 statistics software. The export file 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

Statistical analyses for the BAP were conducted in accordance with the January 2017 *Statistical Analysis Plan* (AEP, 2017), except where noted below. Time series plots and results for all completed statistical tests are provided in Attachment B.

The data obtained to meet the requirements of 40 CFR 257.95(b) and 257.95(d)(1) were screened for potential outliers. No outliers were identified. Outliers identified from the background and detection monitoring events conducted through January 2018 were summarized in a previous report (Geosyntec, 2018).

##### 2.2.1 Establishment of GWPSs

A GWPS was established for each Appendix IV parameter in accordance with 40 CFR 257.95(h) and the *Statistical Analysis Plan* (AEP, 2017). The established GWPS was determined to be the greater value of the background concentration and the maximum contaminant level (MCL) or regional screening level (RSL) for each Appendix IV parameter. To determine background concentrations, an upper tolerance limit (UTL) was calculated using pooled data from the background wells collected during the background monitoring and assessment monitoring events.

Generally, tolerance limits were calculated parametrically with 95% coverage and 95% confidence. Non-parametric tolerance limits were calculated for arsenic, cadmium, fluoride, selenium, and thallium due to apparent non-normal distributions and for mercury due to a high non-detect frequency. Tolerance limits and the final GWPSs are summarized in Table 2.

### **2.2.2 Evaluation of Potential Appendix IV SSLs**

A confidence interval was constructed for each Appendix IV parameter at each compliance well. Confidence limits were generally calculated parametrically ( $\alpha = 0.01$ ); however, non-parametric confidence limits were calculated in some cases (e.g., when the data did not appear to be normally distributed or when the non-detect frequency was too high). An SSL was concluded if the lower confidence limit (LCL) exceeded the GWPS (i.e., if the entire confidence interval exceeded the GWPS). Calculated confidence limits are shown in Attachment B.

No SSLs were identified at the Amos BAP.

### **2.2.3 Evaluation of Potential Appendix III SSIs**

The CCR rule allows CCR units to move from assessment monitoring to detection monitoring if all Appendix III and Appendix IV parameters were at or below background levels for two consecutive sampling events [40 CFR 257.95(e)]. Since no Appendix IV SSLs were identified, Appendix III results were analyzed to assess whether concentrations of Appendix III parameters at the compliance wells exceeded background concentrations.

Prediction limits were calculated for the Appendix III parameters to represent background values. As described in the January 2018 *Statistical Analysis Summary* report (Geosyntec, 2018), intrawell tests were used to evaluate potential SSIs for fluoride and pH, whereas interwell tests were used to evaluate potential SSIs for boron, calcium, chloride, sulfate, and TDS.

Prediction limits for the interwell tests were recalculated using data collected during the 2018 assessment monitoring events. Eight data points (i.e., two samples from four background wells) were added to the background dataset for each interwell test. New data were tested for outliers prior to being added to the background dataset. The updated prediction limits were calculated for a one-of-two retesting procedure, as during detection monitoring. The values of the updated prediction limits were similar to the values of the prediction limits calculated during detection monitoring. The revised prediction limits were used to evaluate potential SSIs for boron, calcium, chloride, sulfate, and TDS.

For the intrawell tests, limited data made it possible to add only two data points (i.e., two samples from each compliance well) to each background dataset. Because two sample results are insufficient to compare against the existing background dataset, the prediction limits were not updated for the intrawell tests at this time. The prediction limits calculated during detection monitoring were used to evaluate potential SSIs for fluoride and pH.

Data collected during the second assessment monitoring event from each compliance well were compared to the prediction limits to evaluate SSIs. The results from this event and the prediction limits are summarized in Table 3. The following exceedances of the upper prediction limits (UPLs) were noted:

- Calcium concentrations exceeded the interwell UPL of 19.5 mg/L at MW-1 (39.9 mg/L and 38.3 mg/L), MW-1605 (47.0 mg/L and 49.4 mg/L), and MW-1606 (53.0 mg/L and 51.7 mg/L).
- Chloride concentrations exceeded the interwell UPL of 40 mg/L at MW-1 (71.9 mg/L and 67.9 mg/L), MW-1605 (97.1 mg/L for both events), and MW-1606 (119 mg/L and 133 mg/L).
- Sulfate concentrations exceeded the interwell UPL of 57.4 mg/L at MW-1 (154 mg/L and 145 mg/L), MW-1605 (246 mg/L and 213 mg/L), and MW-1606 (232 mg/L and 202 mg/L).
- TDS concentrations exceeded the interwell UPL of 250 mg/L at MW-1 (328 mg/L and 338 mg/L), MW-1605 (434 mg/L and 483 mg/L), and MW-1606 (478 mg/L and 507 mg/L).

Based on these results, concentrations of Appendix III parameters exceeded background levels at compliance wells at the Amos BAP during assessment monitoring. As a result, the Amos BAP CCR unit will remain in assessment monitoring.

### **2.3 Conclusions**

Two assessment monitoring events were conducted in 2018 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 no potential outliers in the 2018 data. GWPSs were established for the Appendix IV parameters. A confidence interval was constructed at each compliance well for each Appendix IV parameter; SSLs were concluded if the entire confidence interval exceeded the GWPS. No SSLs were identified.

The Appendix III results were evaluated to assess whether concentrations of Appendix III parameters exceeded background levels. Interwell tests were used to evaluate potential SSIs for boron, calcium, chloride, sulfate, and TDS, and intrawell tests were used to evaluate potential SSIs for fluoride and pH. The prediction limits for the interwell tests were updated with additional data collected from the background wells. Prediction limits were recalculated using a one-of-two retesting procedure. The prediction limits calculated during detection monitoring were used for the intrawell tests. Calcium, chloride, pH, sulfate, and TDS results exceeded background levels.

Based on this evaluation, the Amos BAP CCR unit will either remain in assessment monitoring or an ASD will be conducted to evaluate if the unit can return to detection monitoring.

### **SECTION 3**

#### **REFERENCES**

American Electric Power (AEP). 2017. Statistical Analysis Plan – Amos Plant. January 2017.

Geosyntec Consultants (Geosyntec). 2018. Statistical Analysis Summary – Bottom Ash Pond, John E. Amos Plant, Winfield, West Virginia. January 15, 2018.



# TABLES

**Table 1 – Groundwater Data Summary  
Amos – Bottom Ash Pond**

Parameter	Unit	BAP-MW-1		BAP-MW-4		BAP-MW-5		BAP-MW-6		BAP-MW-1601		BAP-MW-1602A		BAP-MW-1603A		BAP-MW-1604		BAP-MW-1605		BAP-MW-1606	
		5/3/2018	9/4/2018	5/3/2018	9/5/2018	5/3/2018	9/4/2018	5/3/2018	9/4/2018	5/4/2018	9/5/2018	5/10/2018	9/5/2018	5/2/2018	9/5/2018	5/3/2018	9/5/2018	5/3/2018	9/5/2018	5/4/2018	9/5/2018
Antimony	µg/L	0.0100 J	0.220	0.05 U	0.0500 J	0.0200 J	0.0200 J	0.0100 J	0.160	0.0100 J	0.0200 J	0.0300 J	0.0800	0.0400 J	0.0200 J	0.0200 J	0.0300 J	0.0100 J	0.0200 J	0.0100 J	0.0100 J
Arsenic	µg/L	0.130	0.180	1.15	11.0	3.18	2.34	34.1	29.8	6.44	5.39	20.4	20.5	80.0	87.1	6.33	6.11	3.34	3.19	2.81	2.21
Barium	µg/L	27.8	29.4	93.1	89.1	149	157	163	147	112	90.4	223	223	251	242	146	135	80.4	103	58.7	61.0
Beryllium	µg/L	0.143	0.130	0.0460	0.0370	0.0490	0.0340	0.0280	0.0100 J	0.0380	0.0100 J	0.0220	0.0550	0.0930	0.00600 J	0.0470	0.0430	0.0690	0.0740	0.0880	0.0730
Boron	mg/L	0.0950	0.0940	0.100	0.0670	0.156	0.0280	0.0560	0.005 U	0.0700	0.005 U	0.127	0.005 U	0.0510	0.005 U	0.200	0.0430	0.109	0.005 U	0.0770	0.0320
Cadmium	µg/L	3.12	2.97	0.0400	0.210	0.00600 J	0.0100 J	0.02 U	0.0300	0.0200	0.0200	0.02 U	0.0100 J	0.0100 J	0.00700 J	0.02 U	0.02 U	0.00900 J	0.0200 J	0.150	0.170
Calcium	mg/L	39.9	38.3	15.9	13.3	16.6	15.2	12.0	11.3	11.0	11.6	19.5	18.1	17.2	15.8	17.8	15.1	47.0	49.4	53.0	51.7
Chloride	mg/L	71.8	67.9	14.4	13.4	17.8	17.8	10.1	8.97	10.3	10.4	39.1	40.0	5.18	4.99	25.5	22.8	97.7	97.1	119	133
Chromium	µg/L	0.0930	0.548	0.175	0.200	0.237	0.122	0.455	0.380	0.353	0.270	0.437	0.855	1.82	0.180	0.556	0.649	0.176	0.260	0.289	0.249
Cobalt	µg/L	15.1	17.7	7.93	25.8	1.03	1.03	11.9	9.16	4.43	6.73	0.940	1.05	1.52	0.246	0.494	0.533	9.75	10.7	16.9	16.4
Combined Radium	pCi/L	1.74	0.575	1.57	0.623	1.63	0.338	2.01	0.769	1.72	0.252	0.438	0.941	0.231	0.577	1.33	0.248	1.07	0.916	1.01	0.181
Fluoride	mg/L	0.0200 J	0.0300 J	0.0600 J	0.0600	0.0400 J	0.0500 J	0.0700	0.0900	0.0500 J	0.0400 J	0.160	0.140	0.280	0.280	0.130	0.120	0.06 U	0.0300 J	0.0300 J	0.06 U
Lead	µg/L	0.0680	1.16	0.153	0.0830	0.147	0.0380	0.216	0.214	0.397	0.0450	0.982	5.99	1.60	0.0450	0.230	0.349	0.148	0.0800	0.286	0.0880
Lithium	mg/L	0.00400	0.00300	0.000800 J	0.00300	0.000400 J	0.00200	0.001 U	0.001 U	0.0100	0.00200	0.00400	0.00100	0.000800 J	0.00200	0.001 U	0.000800 J	0.00600	0.00300	0.00300	0.00300
Mercury	µg/L	0.005 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.005 U	-	0.005 U	-
Molybdenum	µg/L	0.620	0.340	0.310	0.280	0.310	0.150	0.500	0.460	0.200	0.0800 J	0.910	0.710	1.21	1.07	0.250	0.220	0.100	0.100 J	0.0700 J	0.0400 J
Selenium	µg/L	0.200	0.200	0.0600 J	0.0600 J	0.0500 J	0.1 U	0.200	0.100	0.100	0.1 U	0.100	0.200	0.300	0.0400 J	0.200	0.300	0.100	0.0700 J	0.100	0.0600 J
Total Dissolved Solids	mg/L	328	338	178	179	166	151	188	176	159	157	184	176	100	89.0	210	180	434	483	478	507
Sulfate	mg/L	154	145	49.2	42.4	51.9	45.4	2.90	1.30	53.0	52.2	13.2	12.7	0.1 U	0.1 U	0.1 U	0.1 U	246	213	232	202
Thallium	µg/L	0.0400 J	0.0500 J	0.0100 J	0.109	0.05 U	0.0300 J	0.0920	0.0840	0.0200 J	0.0200 J	0.05 U	0.0300 J	0.0200 J	0.0100 J	0.0100 J	0.0100 J	0.0100 J	0.0200 J	0.0200 J	0.0100 J
pH	SU	7.31	5.11	5.88	7.00	6.33	5.75	6.34	6.04	6.14	7.76	7.24	6.42	6.76	6.71	6.43	7.20	6.11	5.62	7.49	5.43

Notes:

µg/L: micrograms per liter

mg/L: milligrams per liter

pCi/L: picocuries per liter

SU: standard unit

U: Parameter was not present in concentrations above the method detection limit and is reported as the reporting limit

J: Estimated value. Parameter was detected in concentrations below the reporting limit

-: Not analyzed

**Table 2: Groundwater Protection Standards  
Amos Plant - Bottom Ash Pond**

Constituent Name	MCL	RSL	Calculated UTL
Antimony, Total (mg/L)	0.006		0.0001
Arsenic, Total (mg/L)	0.01		0.087
Barium, Total (mg/L)	2		0.31
Beryllium, Total (mg/L)	0.004		0.000092
Cadmium, Total (mg/L)	0.005		0.00003
Chromium, Total (mg/L)	0.1		0.0026
Cobalt, Total (mg/L)	n/a	0.006	0.031
Combined Radium, Total (pCi/L)	5		5.2
Fluoride, Total (mg/L)	4		0.29
Lead, Total (mg/L)	n/a	0.015	0.0066
Lithium, Total (mg/L)	n/a	0.04	0.012
Mercury, Total (mg/L)	0.002		0.000005
Molybdenum, Total (mg/L)	n/a	0.1	0.003
Selenium, Total (mg/L)	0.05		0.0003
Thallium, Total (mg/L)	0.002		0.00022

Notes:

Grey cell indicates calculated UTL is higher than MCL.

MCL = Maximum Contaminant Level

RSL = Regional Screening Level

Calculated UTL (Upper Tolerance Limit) represents site-specific background values.

The higher of the calculated UTL or MCL/RSL is used as the GWPS.

**Table 3: Appendix III Data Evaluation  
Amos Plant - Bottom Ash Pond**

*Geosyntec Consultants, Inc.*

Parameter	Units	Description	MW-1		MW-4		MW-5		MW-1604		MW-1605		MW-1606	
			5/3/2018	9/4/2018	5/3/2018	9/5/2018	5/3/2018	9/4/2018	5/3/2018	9/5/2018	5/3/2018	9/5/2018	5/4/2018	9/5/2018
Boron	mg/L	Interwell Background Value (UPL)	0.165											
		Assessment Monitoring Result	0.095	0.094	0.1	0.067	0.156	0.028	<b>0.200</b>	0.043	0.109	0.002	0.077	0.032
Calcium	mg/L	Interwell Background Value (UPL)	19.5											
		Assessment Monitoring Result	<b>39.9</b>	<b>38.3</b>	15.9	13.3	16.6	15.2	17.8	15.1	<b>47.0</b>	<b>49.4</b>	<b>53.0</b>	<b>51.7</b>
Chloride	mg/L	Interwell Background Value (UPL)	40											
		Assessment Monitoring Result	<b>71.8</b>	<b>67.9</b>	14.4	13.4	17.8	17.8	25.5	22.8	<b>97.7</b>	<b>97.1</b>	<b>119</b>	<b>133</b>
Fluoride	mg/L	Intrawell Background Value (UPL)	0.06		0.247		0.2		0.127		0.108		0.2	
		Assessment Monitoring Result	0.02	0.03	0.06	0.06	0.04	0.05	<b>0.13</b>	0.12	0.02	0.03	0.03	0.02
pH	SU	Intrawell Background Value (UPL)	6.13		6.39		6.66		6.43		6.74		5.97	
		Intrawell Background Value (LPL)	4.90		5.04		4.96		6.00		5.18		5.03	
		Assessment Monitoring Result	<b>7.31</b>	5.11	5.88	<b>7.00</b>	6.33	5.75	6.43	<b>7.20</b>	6.11	5.62	<b>7.49</b>	5.43
Sulfate	mg/L	Interwell Background Value (UPL)	57											
		Assessment Monitoring Result	<b>154</b>	<b>145</b>	49.2	42.4	51.9	45.4	0.04	0.04	<b>246</b>	<b>213</b>	<b>232</b>	<b>202</b>
Total Dissolved Solids	mg/L	Interwell Background Value (UPL)	250											
		Assessment Monitoring Result	<b>328</b>	<b>338</b>	178	179	166	151	210	180	<b>434</b>	<b>483</b>	<b>478</b>	<b>507</b>

Notes:

UPL: Upper prediction limit

LPL: Lower prediction limit

NA: Not analyzed

**Bold values exceed the background value.**

Background values are shaded gray.

## ATTACHMENT A

Certification by Qualified Professional Engineer

**Certification by Qualified Professional Engineer**

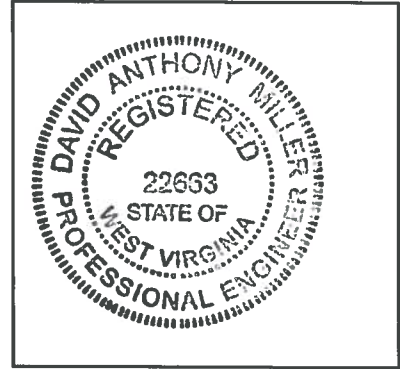
I certify that the selected and above described statistical method is appropriate for evaluating the groundwater monitoring data for the Amos Bottom Ash Pond CCR management area and that the requirements of 40 CFR 257.93(f) have been met.

DAVID ANTHONY MILLER

Printed Name of Licensed Professional Engineer

David Anthony Miller

Signature



22663

License Number

WEST VIRGINIA

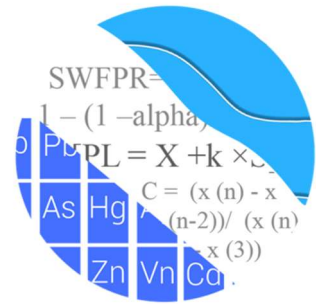
Licensing State

01.08.19

Date

**ATTACHMENT B**  
**Statistical Analysis Output**

# GROUNDWATER STATS CONSULTING



November 11, 2018

Geosyntec Consultants  
Attn: Ms. Allison Kreinberg  
150 E. Wilson Bridge Rd., #232  
Worthington, OH 43085

Re: Amos Bottom Ash Pond  
Assessment Monitoring Event – September 2018

Dear Ms. Kreinberg,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the evaluation of groundwater data for the September 2018 Assessment Monitoring event for American Electric Power Company's Amos Bottom Ash Pond. 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 at the site for the CCR program in 2016. The monitoring well network, as provided by Geosyntec Consultants, consists of the following:

- **Upgradient wells:** BAP-MW-1601, BAP-MW-1602A, BAP-MW-1603A, and BAP-MW-6; and
- **Downgradient wells:** BAP-MW-1, BAP-MW-1604, BAP-MW-1605, BAP-MW-1606, BAP-MW-4, and BAP-MW-5.

Data were sent electronically, and the statistical analysis was conducted according to the Statistical Analysis Plan and screening evaluation prepared by GSC and approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to GSC.



The CCR program consists of the following constituents:

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS;
- **Appendix IV** (Assessment Monitoring) – 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 are provided for all wells and constituents; and are used to evaluate concentrations over the entire record. Values in background which have previously been flagged as outliers may be seen in a lighter font and disconnected symbol on the graphs.

### **Evaluation of Appendix III Parameters**

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, sulfate and TDS; and intrawell prediction limits combined with a 1-of-2 verification strategy were constructed for fluoride and pH. In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms 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). If the resample falls within the statistical limit, the initial exceedance is considered a false positive result and, therefore, no further action is necessary. SSIs were noted for some of the Appendix III parameters and the results of those findings may be found in the Prediction Limit Summary tables following this letter.

When a statistically significant increase is identified, the data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether data are statistically increasing, decreasing or stable. No statistically significant trends were found except for a statistically significant increasing trend for chloride in upgradient well MW-BAP-1601 and in downgradient well MW-BAP-1606. The Trend Test Summary Table follows this letter. Typically when trends are noted in upgradient wells, it is an indication of changing groundwater quality unrelated to the facility.

### **Evaluation of Appendix IV Parameters**

Parametric tolerance limits were used to calculate background limits from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and

95% coverage to determine the Alternate Contaminant Level (ACL). The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. These limits were compared to the Maximum Contaminant Levels (MCLs) and Regional Screening Levels (RSLs) in the Groundwater Protection Standard (GWPS) table following this letter to determine the highest limit for use as the GWPS in the Confidence Interval comparisons.

Confidence intervals were then constructed on downgradient wells for each of the Appendix IV parameters using the highest limit of either the MCL, RSL, or ACL as discussed above. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. No exceedances were noted for any of the well/constituent pairs. A summary of the confidence interval results follows this letter.

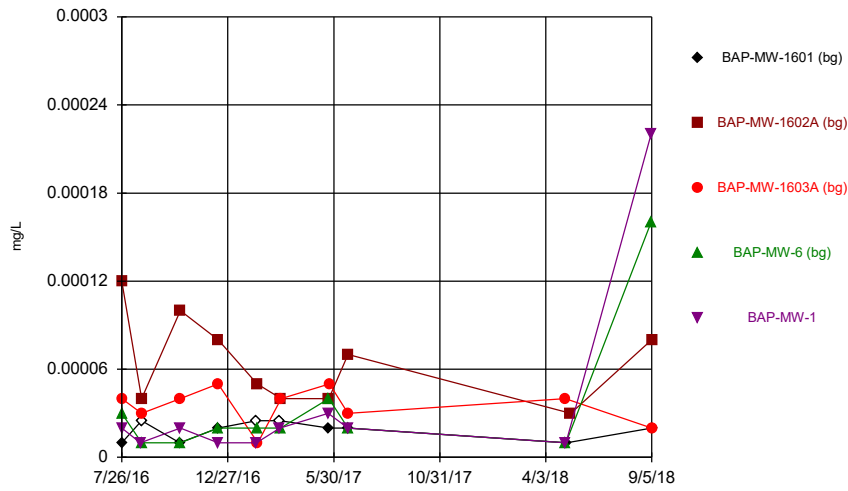
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Amos Bottom Ash Pond. If you have any questions or comments, please feel free to contact me.

For Groundwater Stats Consulting,

A handwritten signature in black ink that reads "Kristina Rayner". The signature is written in a cursive, flowing style.

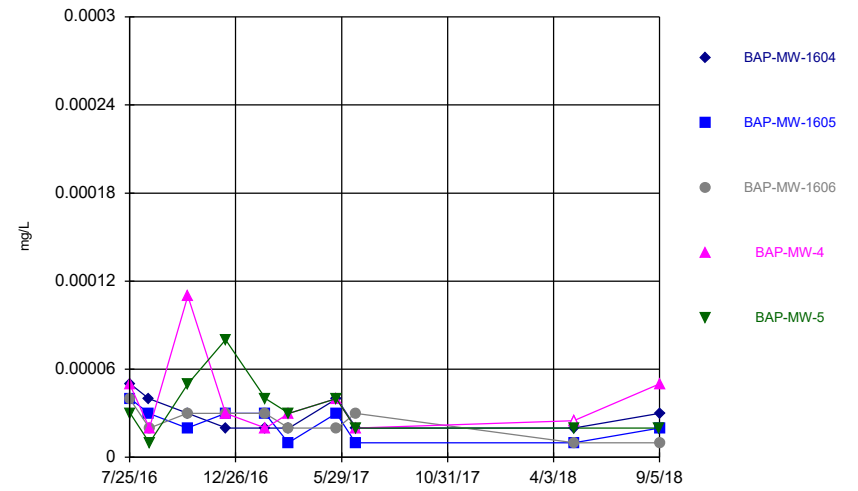
Kristina L. Rayner  
Groundwater Statistician

Time Series



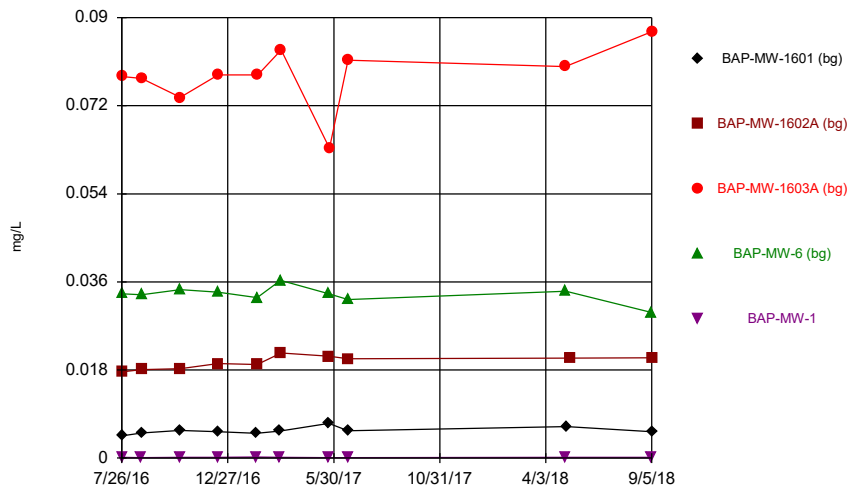
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



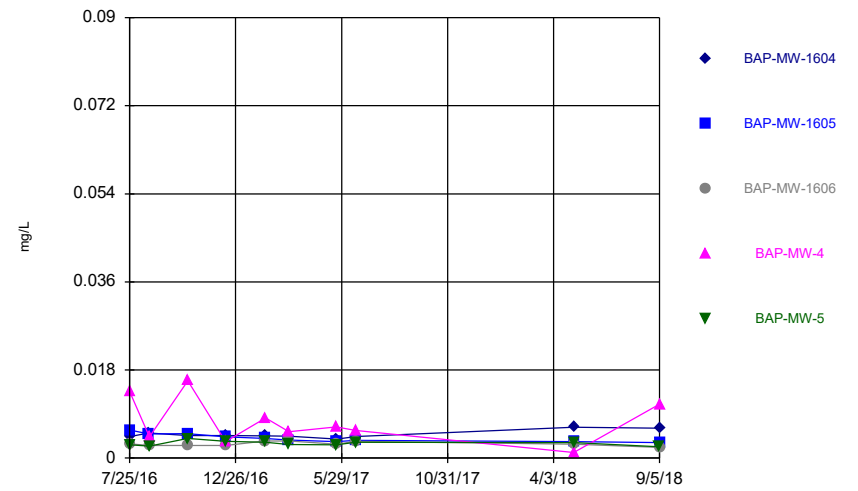
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



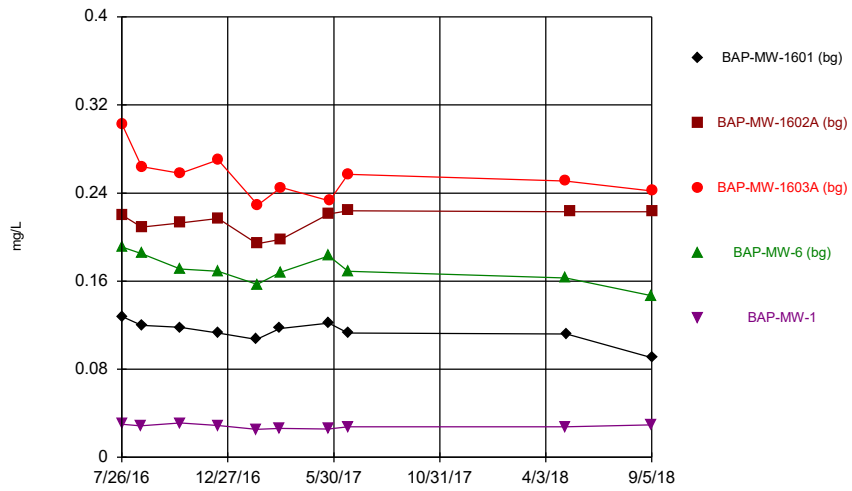
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



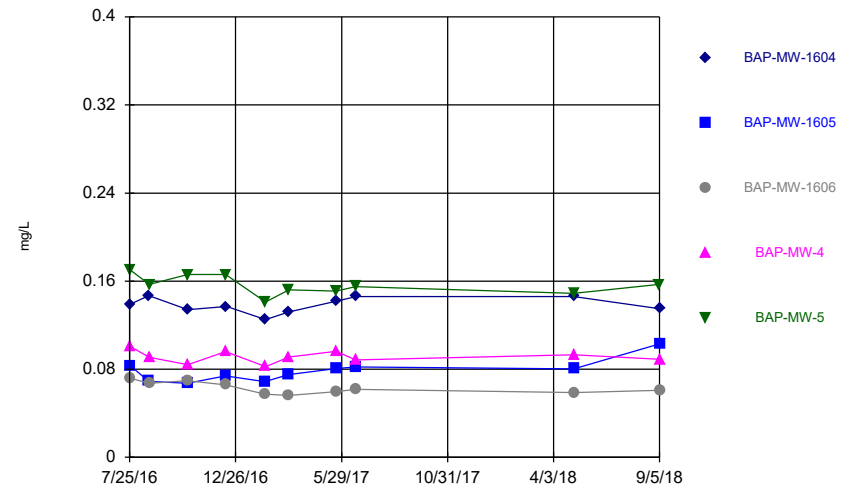
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Time Series



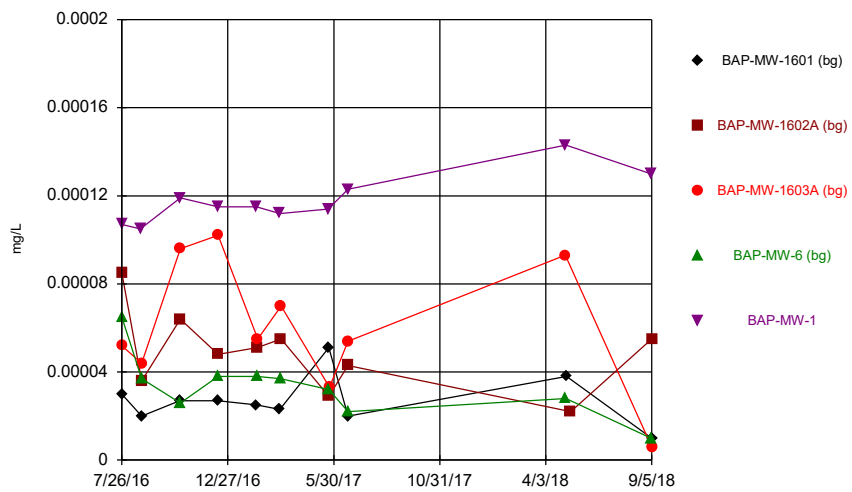
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



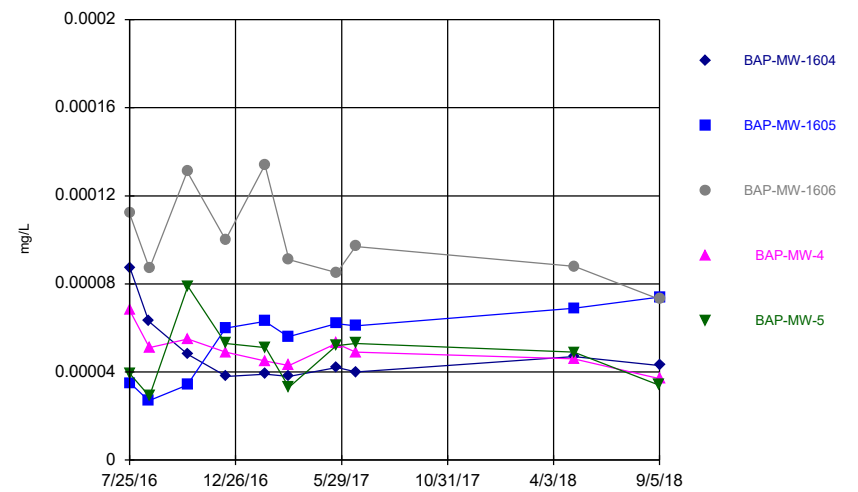
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



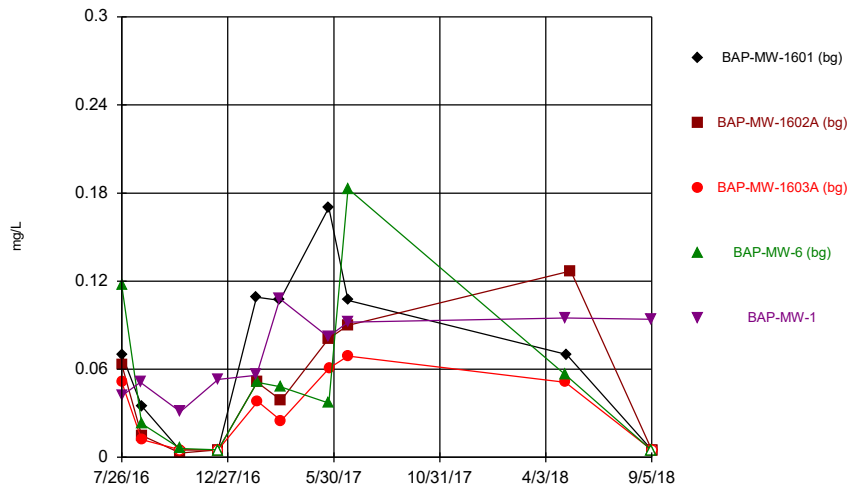
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



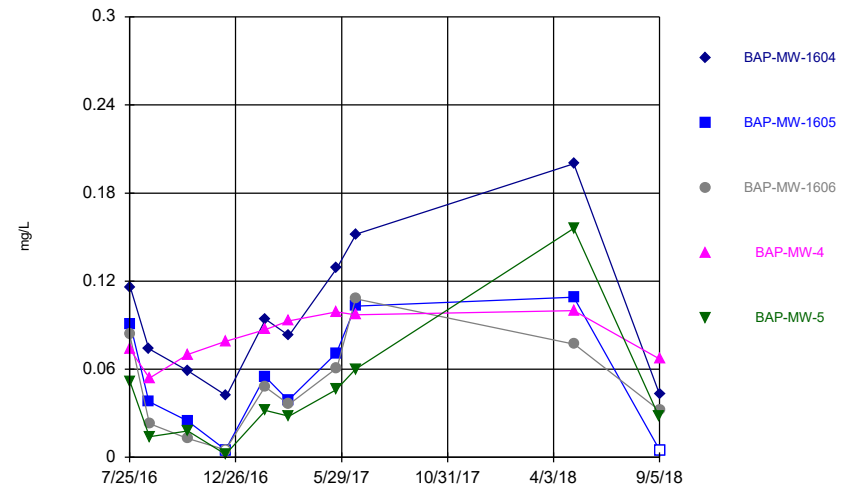
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



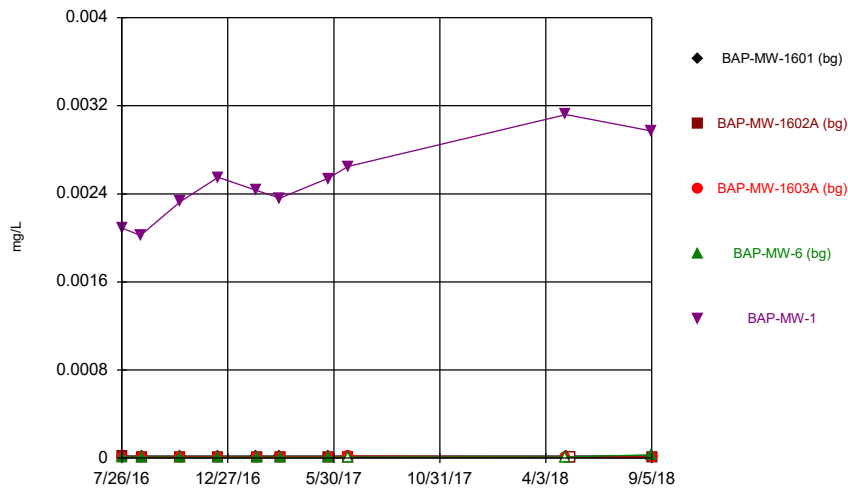
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



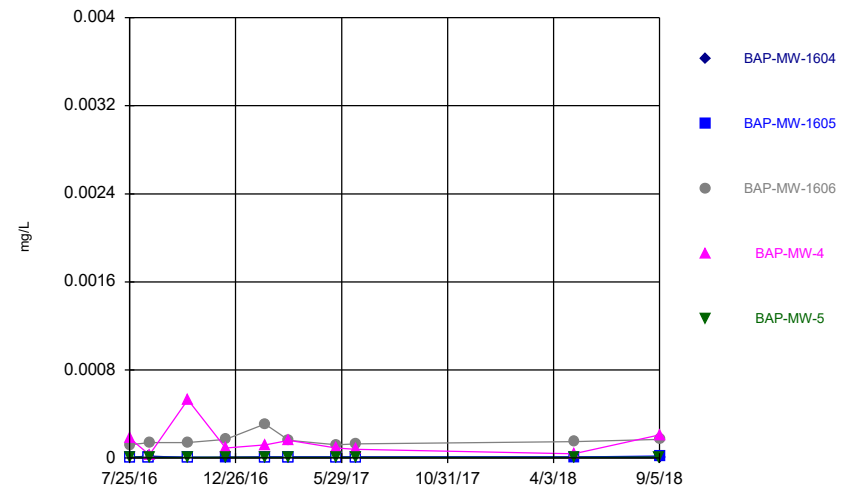
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



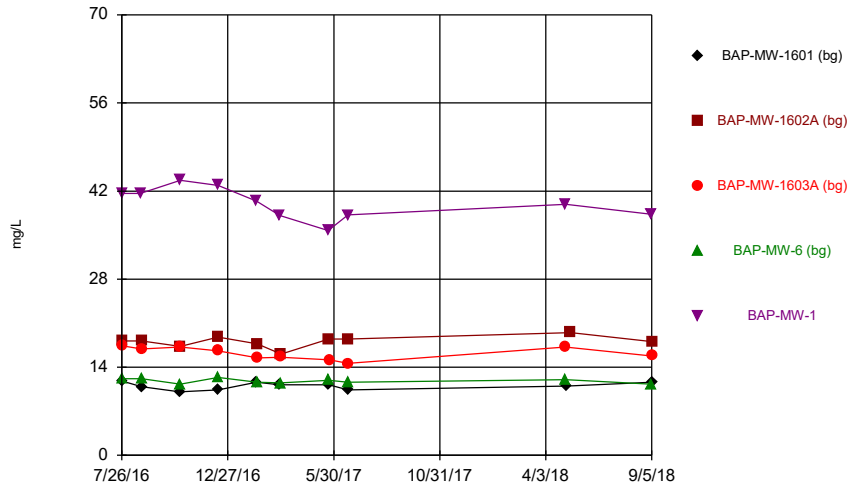
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



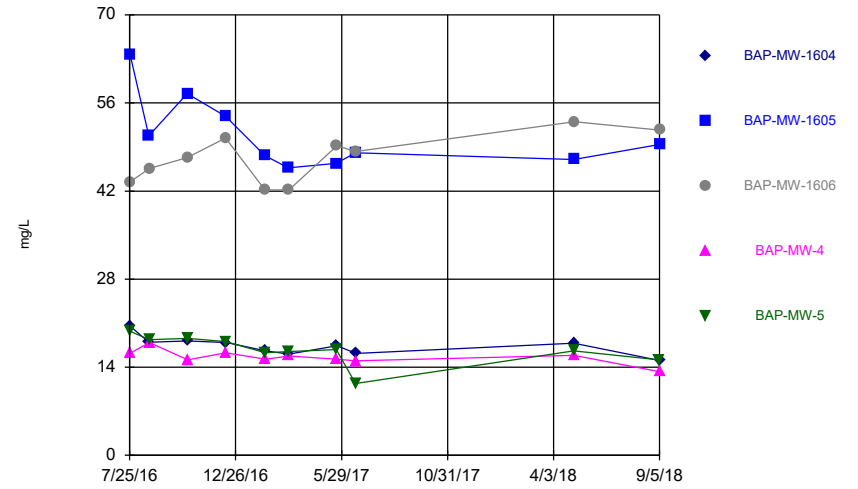
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Time Series



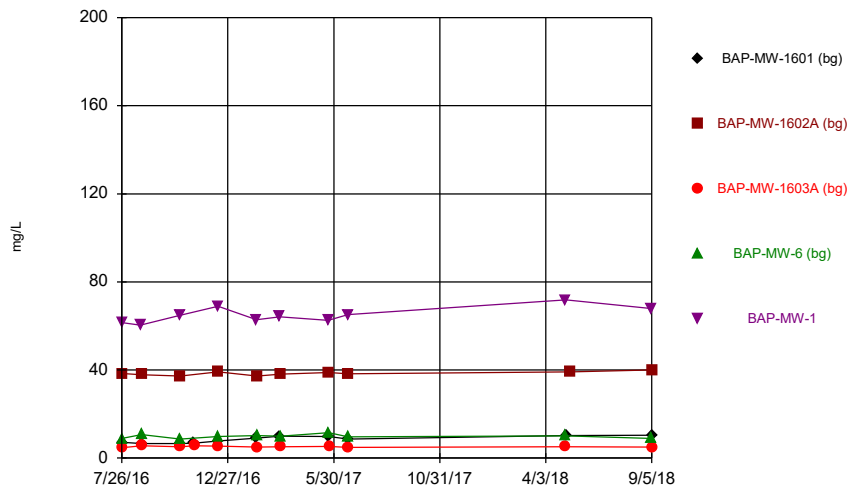
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



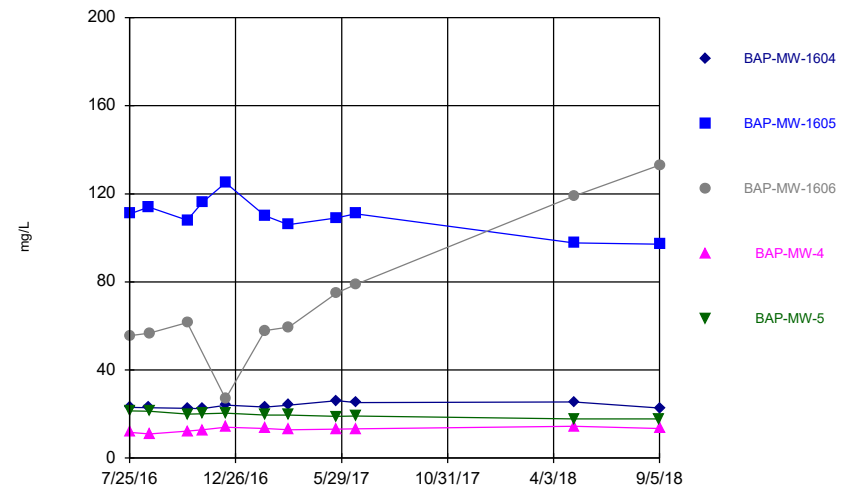
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Time Series



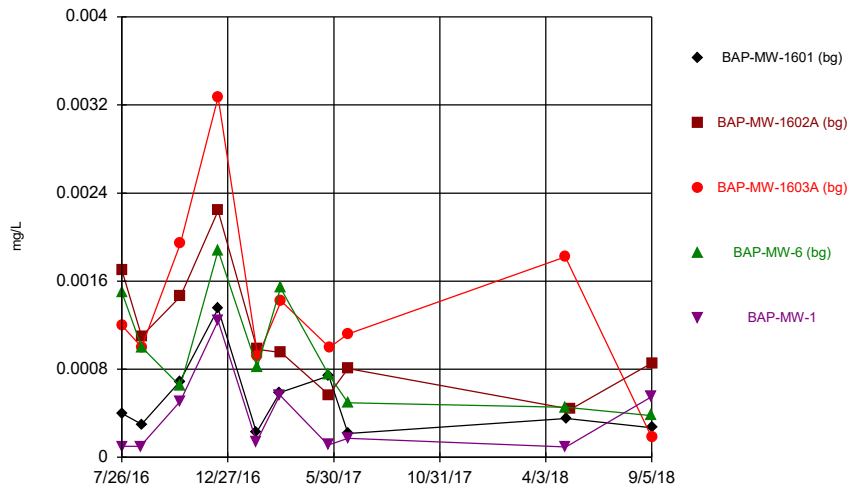
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



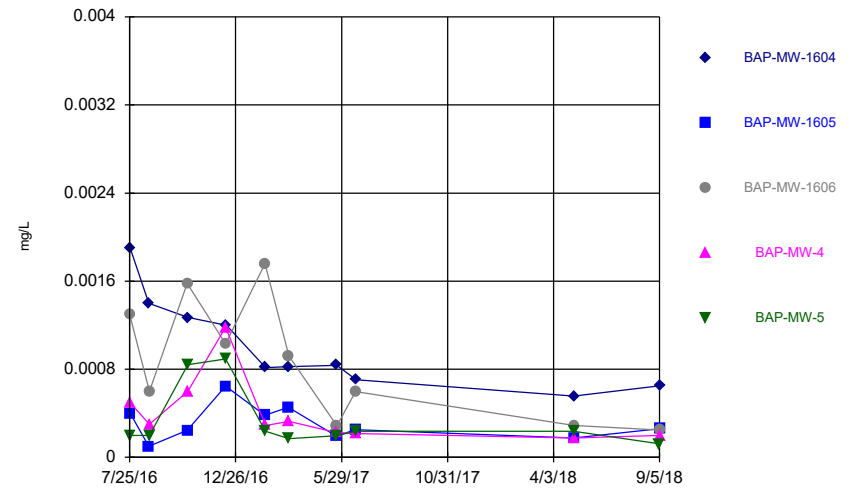
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



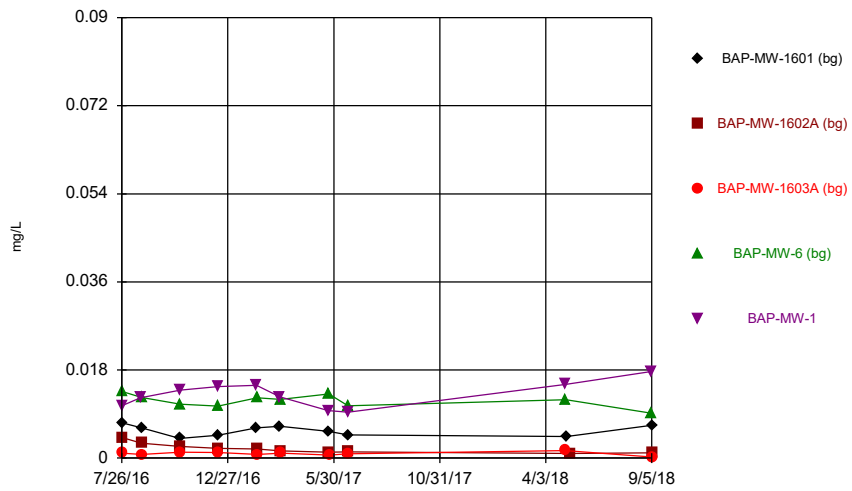
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



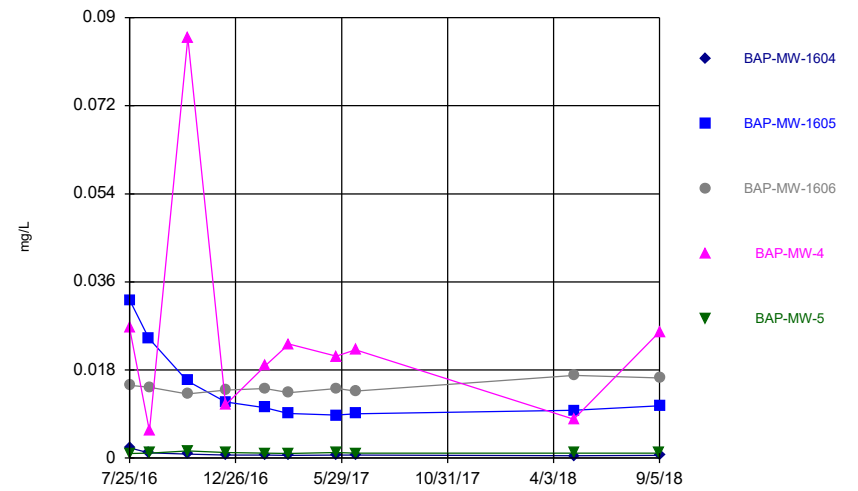
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



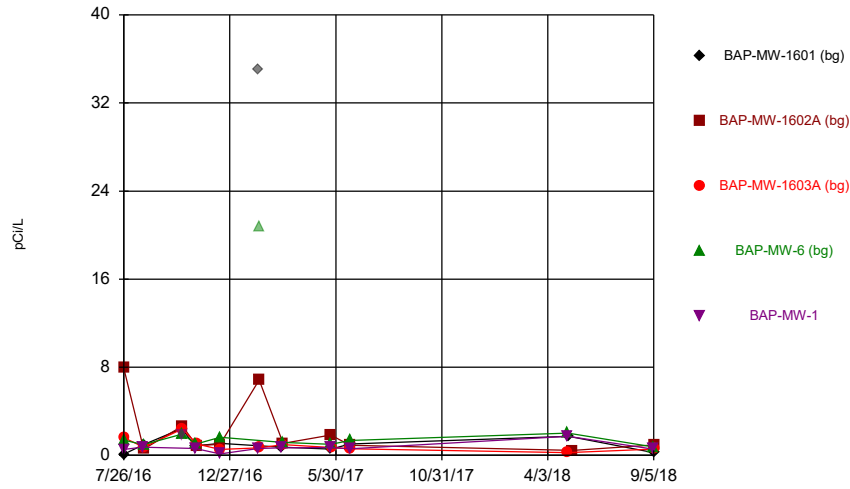
Constituent: Cobalt, total Analysis Run 10/30/2018 5:21 AM View: Descriptive  
Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



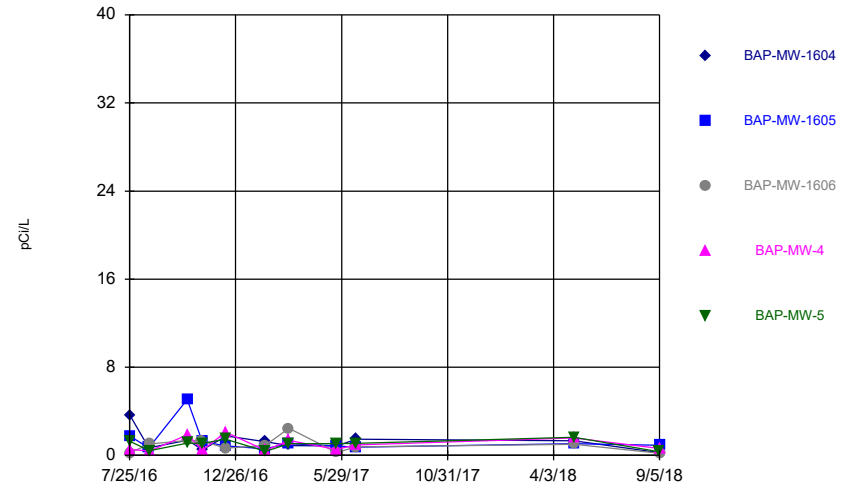
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



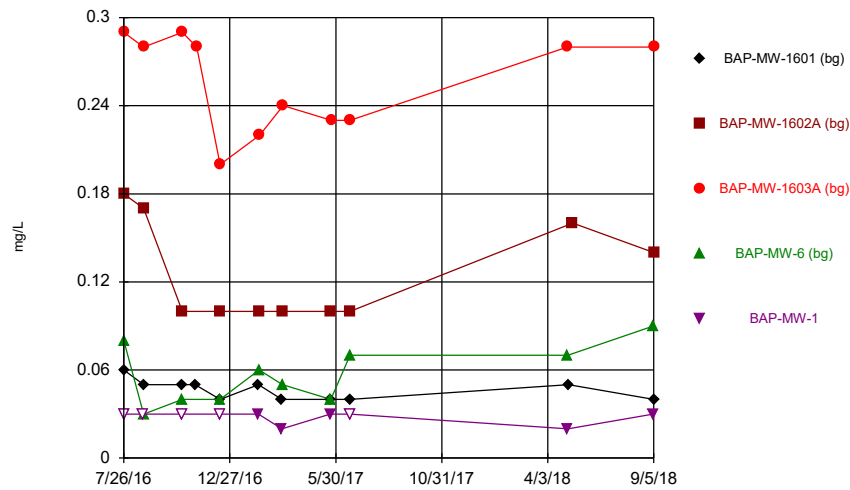
Constituent: Combined Radium 226 + 228 Analysis Run 10/30/2018 5:21 AM View: Descriptive  
Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



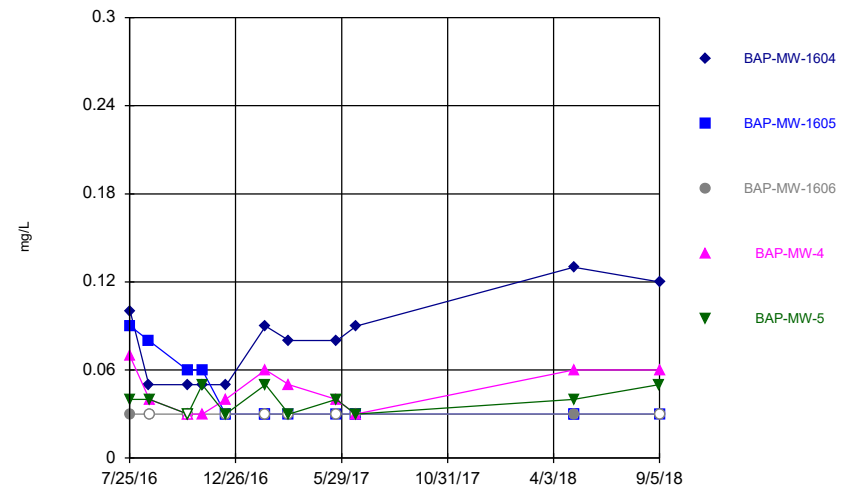
Constituent: Combined Radium 226 + 228 Analysis Run 10/30/2018 5:21 AM View: Descriptive  
Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



Constituent: Fluoride, total Analysis Run 10/30/2018 5:21 AM View: Descriptive  
Amos BAP Client: Geosyntec Data: Amos BAP

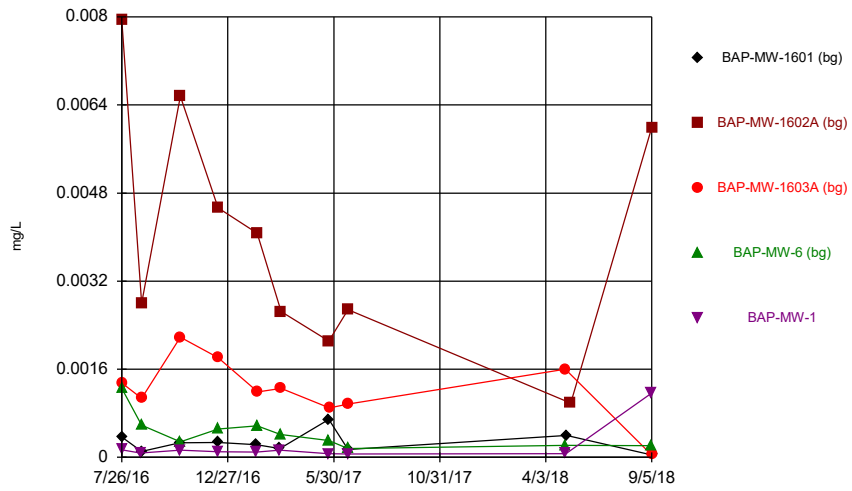
Time Series



Constituent: Fluoride, total Analysis Run 10/30/2018 5:21 AM View: Descriptive  
Amos BAP Client: Geosyntec Data: Amos BAP

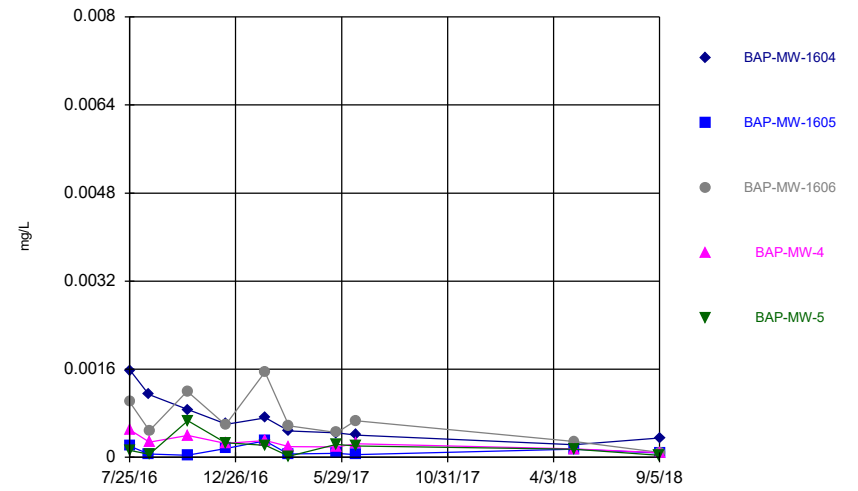


Time Series



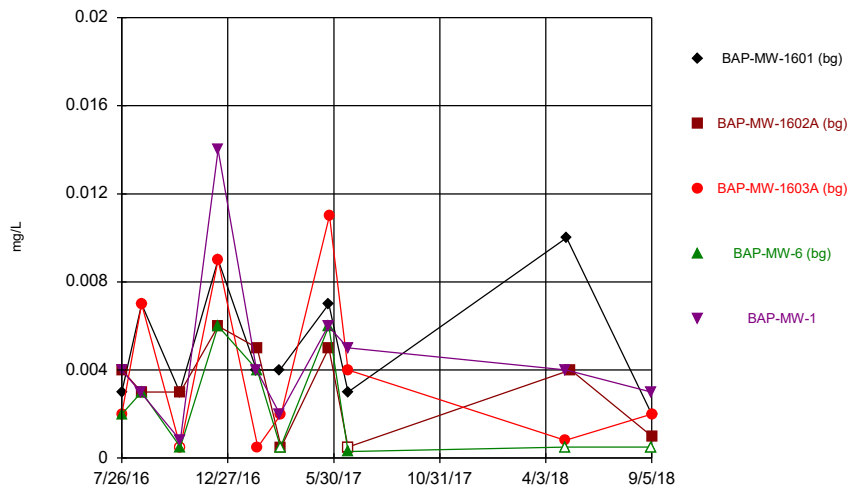
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



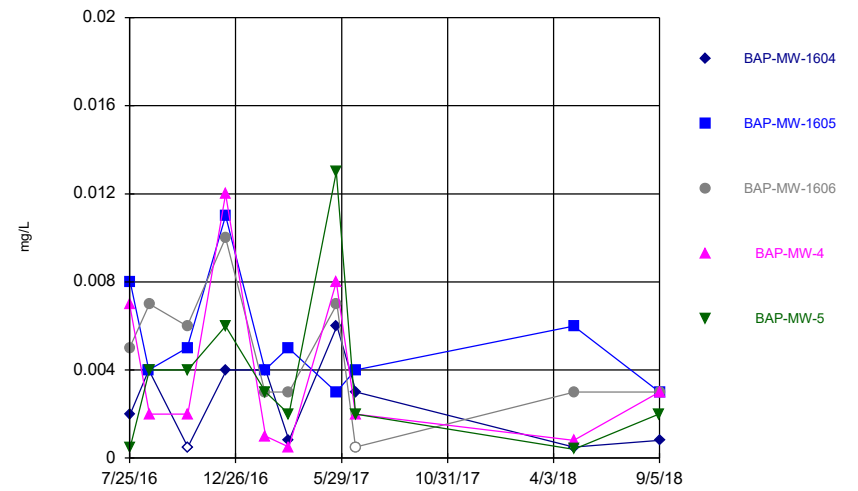
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Time Series



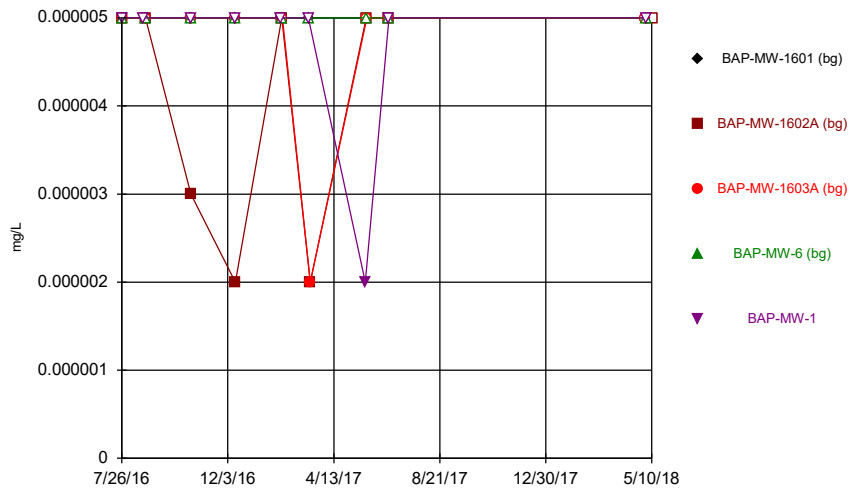
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



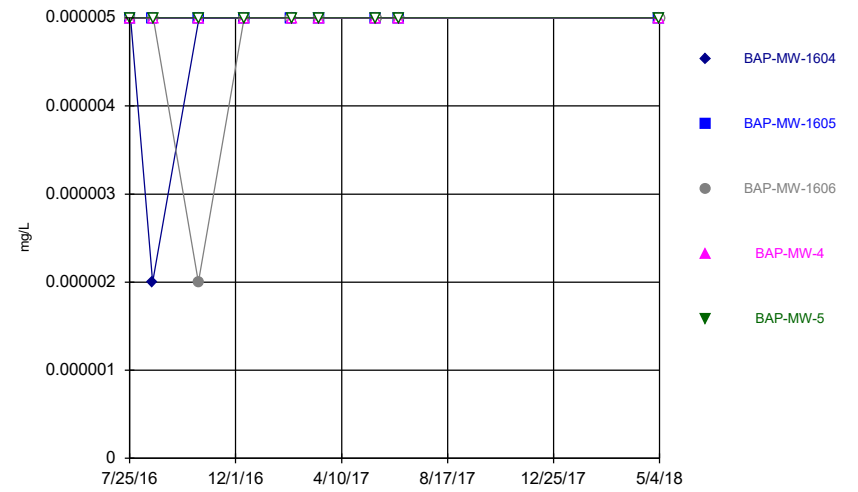
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### Time Series



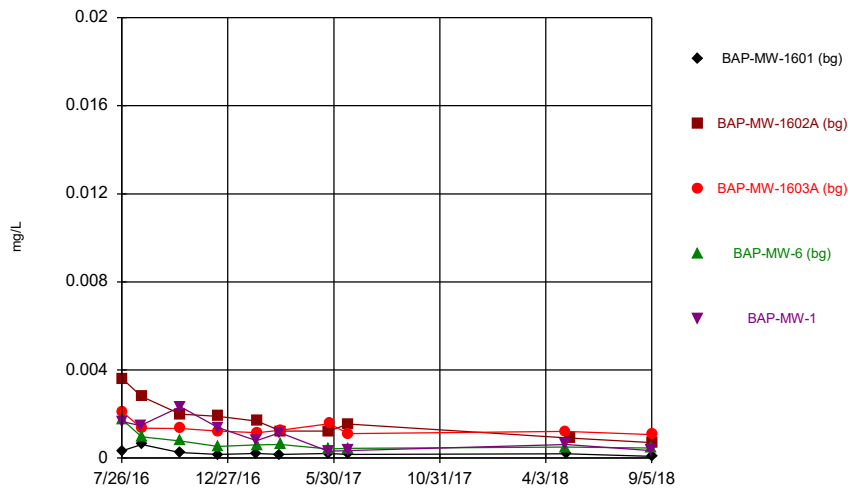
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Amos BAP Client: Geosyntec Data: Amos BAP

### Time Series



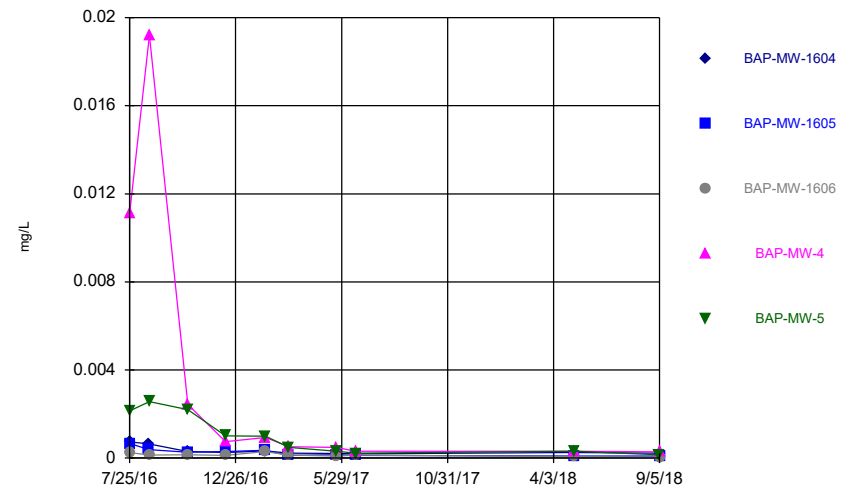
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Amos BAP Client: Geosyntec Data: Amos BAP

### Time Series



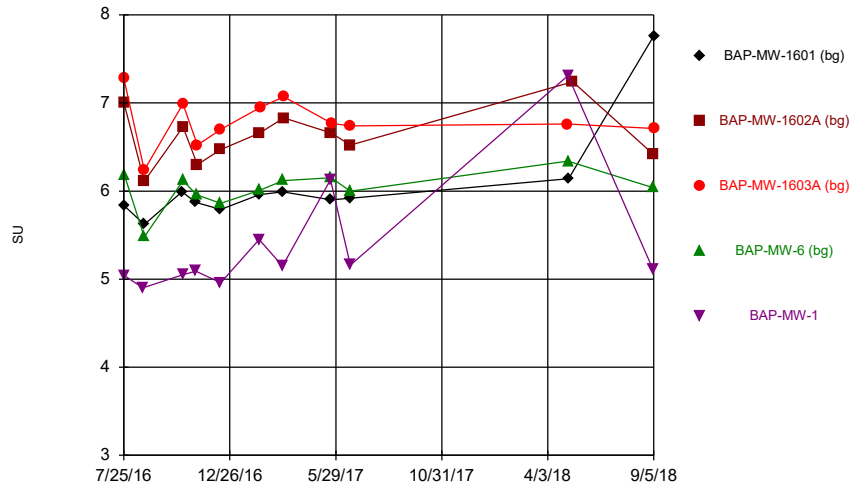
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Amos BAP Client: Geosyntec Data: Amos BAP

### Time Series



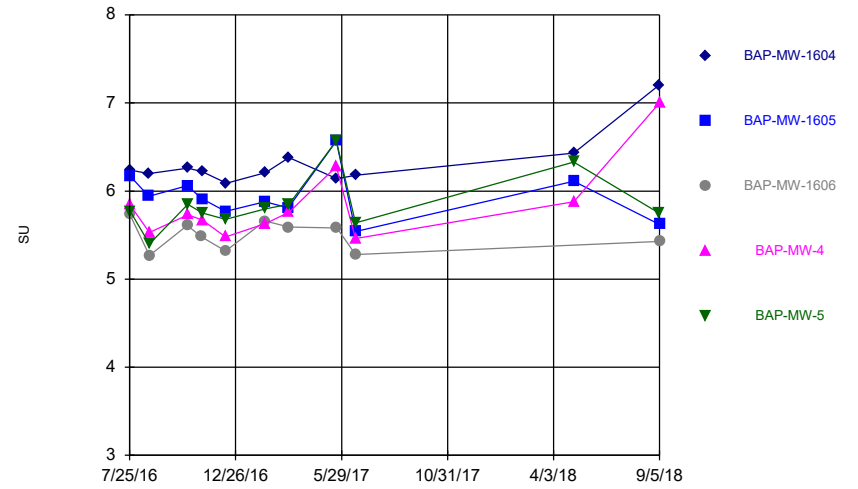
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



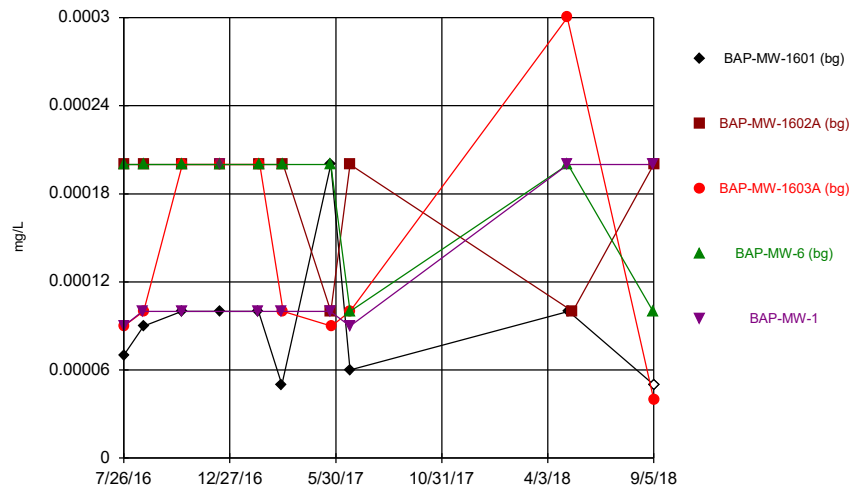
Constituent: pH, field Analysis Run 10/30/2018 5:22 AM View: Descriptive  
Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



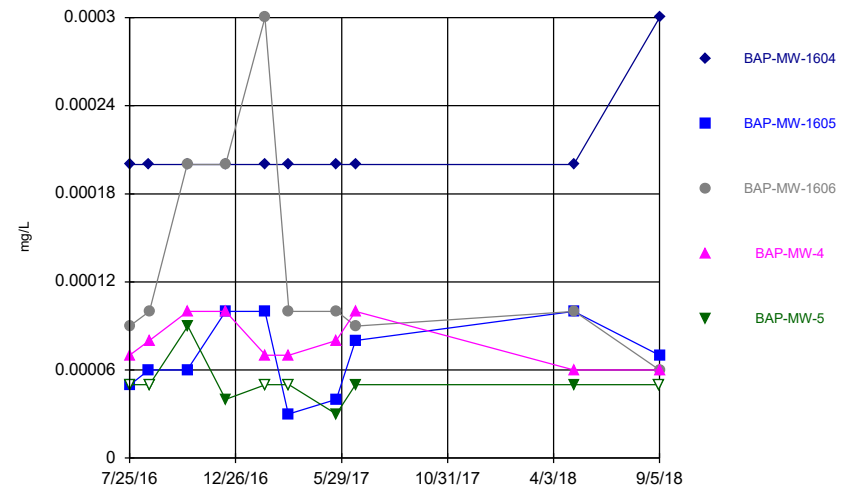
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Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



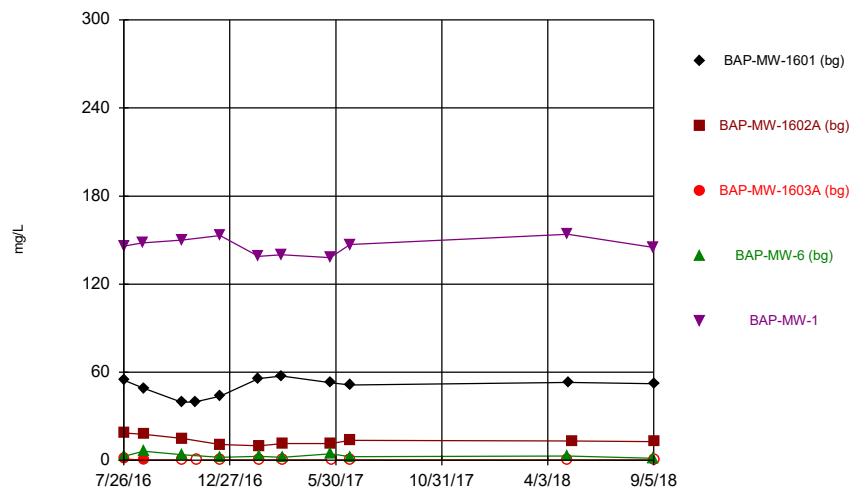
Constituent: Selenium, total Analysis Run 10/30/2018 5:22 AM View: Descriptive  
Amos BAP Client: Geosyntec Data: Amos BAP

Time Series



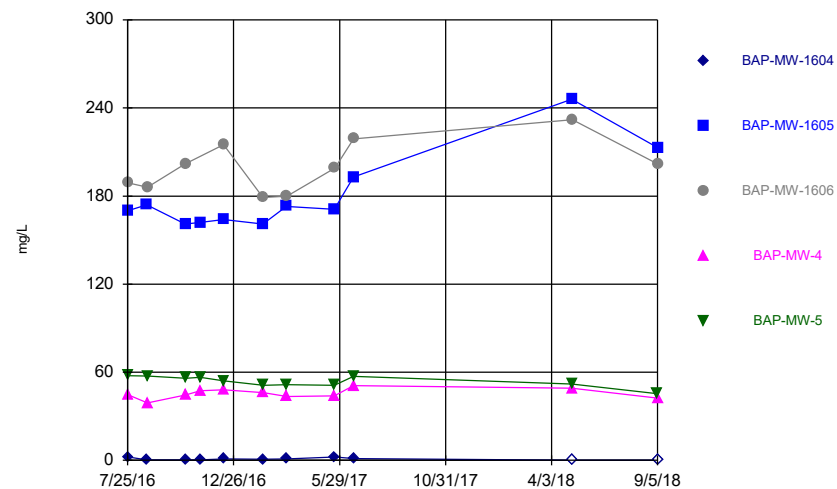
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### Time Series



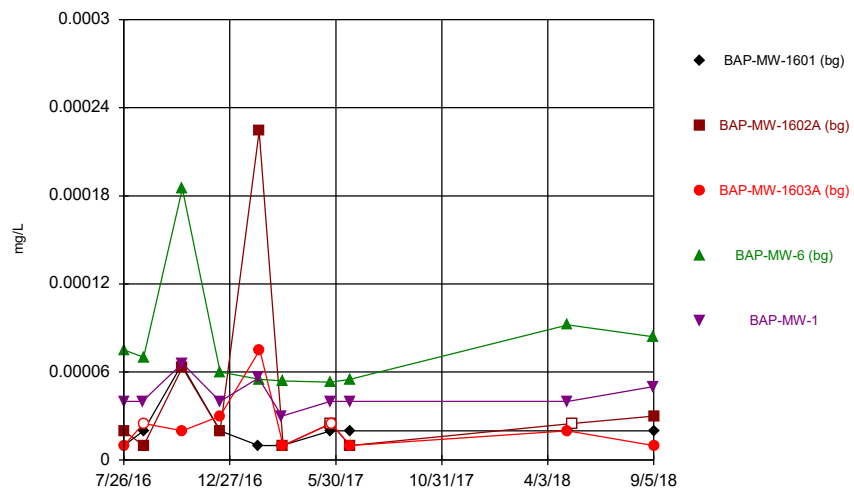
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### Time Series



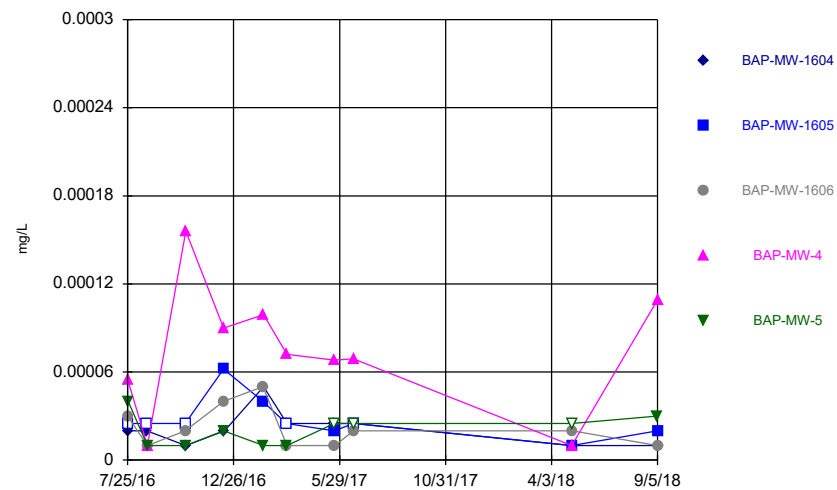
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### Time Series



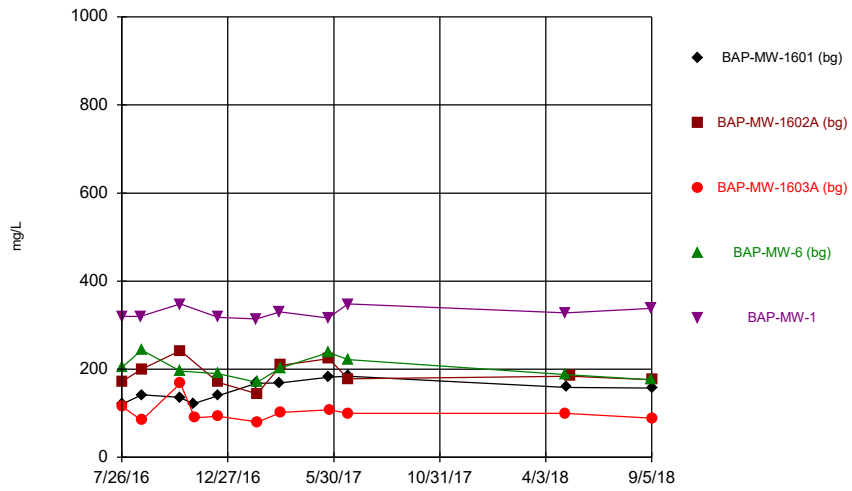
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Amos BAP Client: Geosyntec Data: Amos BAP

### Time Series



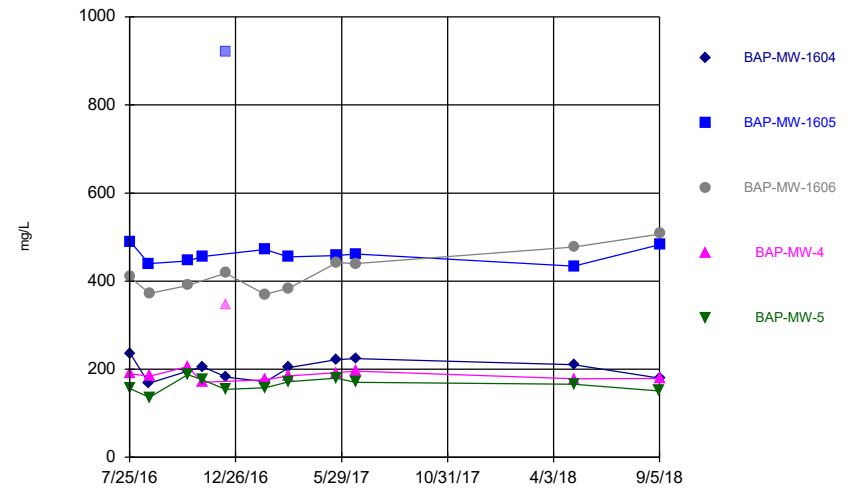
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Amos BAP Client: Geosyntec Data: Amos BAP

### Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/30/2018 5:22 AM View: Descriptive  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/30/2018 5:22 AM View: Descriptive  
 Amos BAP Client: Geosyntec Data: Amos BAP

# Interwell Prediction Limit Summary Table - Significant Results

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 8:51 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium, total (mg/L)	BAP-MW-1	19.5	9/4/2018	38.3	Yes	40	n/a	n/a	0	n/a	n/a	0.001129	NP Inter (normality) ...
Calcium, total (mg/L)	BAP-MW-1605	19.5	9/5/2018	49.4	Yes	40	n/a	n/a	0	n/a	n/a	0.001129	NP Inter (normality) ...
Calcium, total (mg/L)	BAP-MW-1606	19.5	9/5/2018	51.7	Yes	40	n/a	n/a	0	n/a	n/a	0.001129	NP Inter (normality) ...
Chloride, total (mg/L)	BAP-MW-1	40	9/4/2018	67.9	Yes	42	n/a	n/a	0	n/a	n/a	0.001052	NP Inter (normality) ...
Chloride, total (mg/L)	BAP-MW-1605	40	9/5/2018	97.1	Yes	42	n/a	n/a	0	n/a	n/a	0.001052	NP Inter (normality) ...
Chloride, total (mg/L)	BAP-MW-1606	40	9/5/2018	133	Yes	42	n/a	n/a	0	n/a	n/a	0.001052	NP Inter (normality) ...
Sulfate, total (mg/L)	BAP-MW-1	57.4	9/4/2018	145	Yes	42	n/a	n/a	21.43	n/a	n/a	0.001052	NP Inter (normality) ...
Sulfate, total (mg/L)	BAP-MW-1605	57.4	9/5/2018	213	Yes	42	n/a	n/a	21.43	n/a	n/a	0.001052	NP Inter (normality) ...
Sulfate, total (mg/L)	BAP-MW-1606	57.4	9/5/2018	202	Yes	42	n/a	n/a	21.43	n/a	n/a	0.001052	NP Inter (normality) ...
Total Dissolved Solids [TDS] (mg/L)	BAP-MW-1	249.7	9/4/2018	338	Yes	42	160.5	46.33	0	None	No	0.001254	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BAP-MW-1605	249.7	9/5/2018	483	Yes	42	160.5	46.33	0	None	No	0.001254	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BAP-MW-1606	249.7	9/5/2018	507	Yes	42	160.5	46.33	0	None	No	0.001254	Param Inter 1 of 2

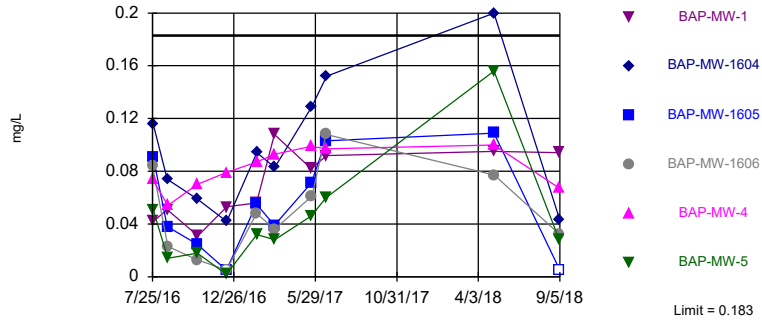
# Interwell Prediction Limit Summary Table - All Results

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 8:51 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	BAP-MW-1	0.183	9/4/2018	0.094	No	40	n/a	n/a	25	n/a	n/a	0.001129	NP Inter (normality) ...
Boron, total (mg/L)	BAP-MW-1604	0.183	9/5/2018	0.043	No	40	n/a	n/a	25	n/a	n/a	0.001129	NP Inter (normality) ...
Boron, total (mg/L)	BAP-MW-1605	0.183	9/5/2018	0.005ND	No	40	n/a	n/a	25	n/a	n/a	0.001129	NP Inter (normality) ...
Boron, total (mg/L)	BAP-MW-1606	0.183	9/5/2018	0.032	No	40	n/a	n/a	25	n/a	n/a	0.001129	NP Inter (normality) ...
Boron, total (mg/L)	BAP-MW-4	0.183	9/5/2018	0.067	No	40	n/a	n/a	25	n/a	n/a	0.001129	NP Inter (normality) ...
Boron, total (mg/L)	BAP-MW-5	0.183	9/4/2018	0.028	No	40	n/a	n/a	25	n/a	n/a	0.001129	NP Inter (normality) ...
<b>Calcium, total (mg/L)</b>	<b>BAP-MW-1</b>	<b>19.5</b>	<b>9/4/2018</b>	<b>38.3</b>	<b>Yes</b>	<b>40</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001129</b>	<b>NP Inter (normality) ...</b>
Calcium, total (mg/L)	BAP-MW-1604	19.5	9/5/2018	15.1	No	40	n/a	n/a	0	n/a	n/a	0.001129	NP Inter (normality) ...
<b>Calcium, total (mg/L)</b>	<b>BAP-MW-1605</b>	<b>19.5</b>	<b>9/5/2018</b>	<b>49.4</b>	<b>Yes</b>	<b>40</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001129</b>	<b>NP Inter (normality) ...</b>
<b>Calcium, total (mg/L)</b>	<b>BAP-MW-1606</b>	<b>19.5</b>	<b>9/5/2018</b>	<b>51.7</b>	<b>Yes</b>	<b>40</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001129</b>	<b>NP Inter (normality) ...</b>
Calcium, total (mg/L)	BAP-MW-4	19.5	9/5/2018	13.3	No	40	n/a	n/a	0	n/a	n/a	0.001129	NP Inter (normality) ...
Calcium, total (mg/L)	BAP-MW-5	19.5	9/4/2018	15.2	No	40	n/a	n/a	0	n/a	n/a	0.001129	NP Inter (normality) ...
<b>Chloride, total (mg/L)</b>	<b>BAP-MW-1</b>	<b>40</b>	<b>9/4/2018</b>	<b>67.9</b>	<b>Yes</b>	<b>42</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001052</b>	<b>NP Inter (normality) ...</b>
Chloride, total (mg/L)	BAP-MW-1604	40	9/5/2018	22.8	No	42	n/a	n/a	0	n/a	n/a	0.001052	NP Inter (normality) ...
<b>Chloride, total (mg/L)</b>	<b>BAP-MW-1605</b>	<b>40</b>	<b>9/5/2018</b>	<b>97.1</b>	<b>Yes</b>	<b>42</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001052</b>	<b>NP Inter (normality) ...</b>
<b>Chloride, total (mg/L)</b>	<b>BAP-MW-1606</b>	<b>40</b>	<b>9/5/2018</b>	<b>133</b>	<b>Yes</b>	<b>42</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001052</b>	<b>NP Inter (normality) ...</b>
Chloride, total (mg/L)	BAP-MW-4	40	9/5/2018	13.4	No	42	n/a	n/a	0	n/a	n/a	0.001052	NP Inter (normality) ...
Chloride, total (mg/L)	BAP-MW-5	40	9/4/2018	17.8	No	42	n/a	n/a	0	n/a	n/a	0.001052	NP Inter (normality) ...
<b>Sulfate, total (mg/L)</b>	<b>BAP-MW-1</b>	<b>57.4</b>	<b>9/4/2018</b>	<b>145</b>	<b>Yes</b>	<b>42</b>	<b>n/a</b>	<b>n/a</b>	<b>21.43</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001052</b>	<b>NP Inter (normality) ...</b>
Sulfate, total (mg/L)	BAP-MW-1604	57.4	9/5/2018	0.1ND	No	42	n/a	n/a	21.43	n/a	n/a	0.001052	NP Inter (normality) ...
<b>Sulfate, total (mg/L)</b>	<b>BAP-MW-1605</b>	<b>57.4</b>	<b>9/5/2018</b>	<b>213</b>	<b>Yes</b>	<b>42</b>	<b>n/a</b>	<b>n/a</b>	<b>21.43</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001052</b>	<b>NP Inter (normality) ...</b>
<b>Sulfate, total (mg/L)</b>	<b>BAP-MW-1606</b>	<b>57.4</b>	<b>9/5/2018</b>	<b>202</b>	<b>Yes</b>	<b>42</b>	<b>n/a</b>	<b>n/a</b>	<b>21.43</b>	<b>n/a</b>	<b>n/a</b>	<b>0.001052</b>	<b>NP Inter (normality) ...</b>
Sulfate, total (mg/L)	BAP-MW-4	57.4	9/5/2018	42.4	No	42	n/a	n/a	21.43	n/a	n/a	0.001052	NP Inter (normality) ...
Sulfate, total (mg/L)	BAP-MW-5	57.4	9/4/2018	45.4	No	42	n/a	n/a	21.43	n/a	n/a	0.001052	NP Inter (normality) ...
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BAP-MW-1</b>	<b>249.7</b>	<b>9/4/2018</b>	<b>338</b>	<b>Yes</b>	<b>42</b>	<b>160.5</b>	<b>46.33</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Total Dissolved Solids [TDS] (mg/L)	BAP-MW-1604	249.7	9/5/2018	180	No	42	160.5	46.33	0	None	No	0.001254	Param Inter 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BAP-MW-1605</b>	<b>249.7</b>	<b>9/5/2018</b>	<b>483</b>	<b>Yes</b>	<b>42</b>	<b>160.5</b>	<b>46.33</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BAP-MW-1606</b>	<b>249.7</b>	<b>9/5/2018</b>	<b>507</b>	<b>Yes</b>	<b>42</b>	<b>160.5</b>	<b>46.33</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Total Dissolved Solids [TDS] (mg/L)	BAP-MW-4	249.7	9/5/2018	179	No	42	160.5	46.33	0	None	No	0.001254	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BAP-MW-5	249.7	9/4/2018	151	No	42	160.5	46.33	0	None	No	0.001254	Param Inter 1 of 2

Within Limit

Prediction Limit  
 Interwell Non-parametric

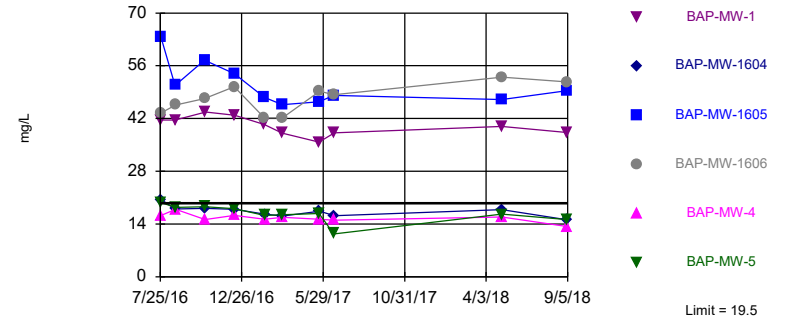


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 25% NDs. Annual per-constituent alpha = 0.01347. Individual comparison alpha = 0.001129 (1 of 2). Comparing 6 points to limit.

Constituent: Boron, total Analysis Run 10/29/2018 8:49 AM View: PL's - Interwell  
 Amos BAP Client: Geosyntec Data: Amos BAP

Exceeds Limit: BAP-MW-1, BAP-MW-1605,  
 BAP-MW-1606

Prediction Limit  
 Interwell Non-parametric

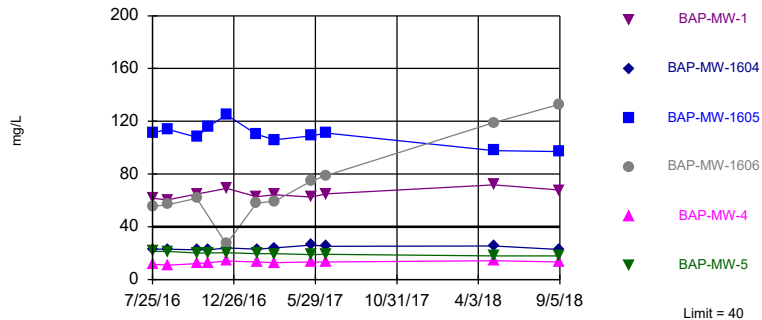


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. Annual per-constituent alpha = 0.01347. Individual comparison alpha = 0.001129 (1 of 2). Comparing 6 points to limit.

Constituent: Calcium, total Analysis Run 10/29/2018 8:49 AM View: PL's - Interwell  
 Amos BAP Client: Geosyntec Data: Amos BAP

Exceeds Limit: BAP-MW-1, BAP-MW-1605,  
 BAP-MW-1606

Prediction Limit  
 Interwell Non-parametric

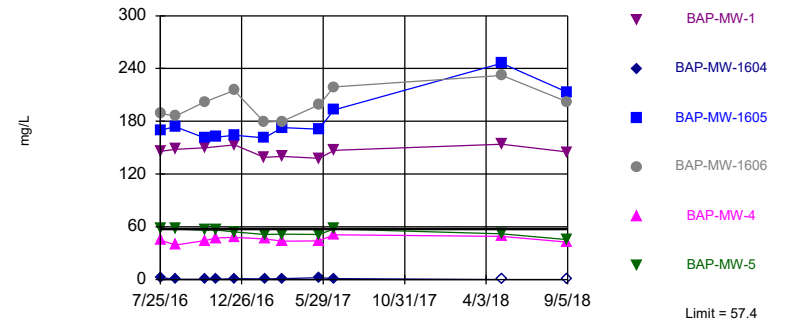


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. 0.1255% NDs. Annual per-constituent alpha = 0.01255. Individual comparison alpha = 0.001052 (1 of 2). Comparing 6 points to limit.

Constituent: Chloride, total Analysis Run 10/29/2018 8:49 AM View: PL's - Interwell  
 Amos BAP Client: Geosyntec Data: Amos BAP

Exceeds Limit: BAP-MW-1, BAP-MW-1605,  
 BAP-MW-1606

Prediction Limit  
 Interwell Non-parametric



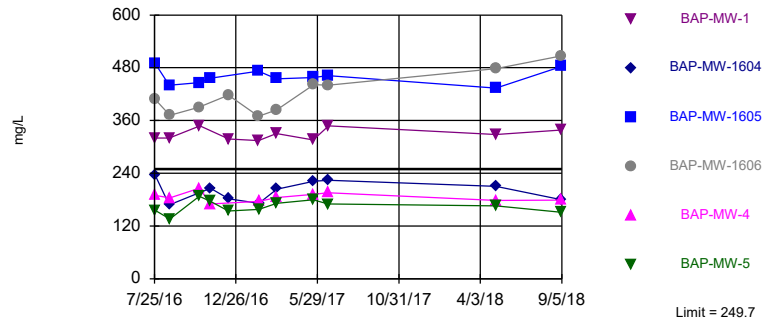
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. 21.43% NDs. Annual per-constituent alpha = 0.01255. Individual comparison alpha = 0.001052 (1 of 2). Comparing 6 points to limit.

Constituent: Sulfate, total Analysis Run 10/29/2018 8:49 AM View: PL's - Interwell  
 Amos BAP Client: Geosyntec Data: Amos BAP



Exceeds Limit: BAP-MW-1, BAP-MW-1605,  
BAP-MW-1606

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=160.5, Std. Dev.=46.33, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.922. Kappa = 1.926 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:49 AM View: PL's - Interwell  
Amos BAP Client: Geosyntec Data: Amos BAP

# Intrawell Prediction Limit Summary Table - Significant Results

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/30/2018, 10:43 AM

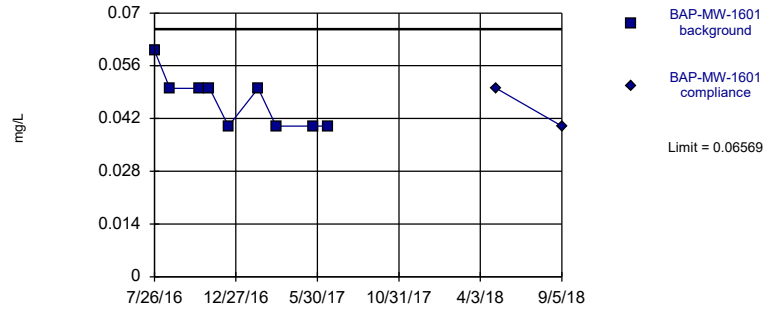
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH, field (SU)	BAP-MW-1601	6.191	5.558	9/5/2018	7.76	Yes	9	5.874	0.1176	0	None	No	0.0006268	Param 1 of 2
pH, field (SU)	BAP-MW-1604	6.431	5.995	9/4/2018	7.2	Yes	9	6.213	0.08109	0	None	No	0.0006268	Param 1 of 2
pH, field (SU)	BAP-MW-4	6.385	5.035	9/5/2018	7	Yes	9	5.71	0.2508	0	None	No	0.0006268	Param 1 of 2

# Intrawell Prediction Limit Summary Table - All Results

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 8:54 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride, total (mg/L)	BAP-MW-1601	0.06569	9/5/2018	0.04	No	9	0.04667	0.007071	0	None	No	0.001254	Param 1 of 2
Fluoride, total (mg/L)	BAP-MW-1602A	0.18	9/5/2018	0.14	No	8	n/a	n/a	0	n/a	n/a	0.02144	NP (normality) 1 of 2
Fluoride, total (mg/L)	BAP-MW-1603A	0.3428	9/5/2018	0.28	No	9	0.2511	0.03408	0	None	No	0.001254	Param 1 of 2
Fluoride, total (mg/L)	BAP-MW-6	0.1001	9/4/2018	0.09	No	8	0.05125	0.01727	0	None	No	0.001254	Param 1 of 2
Fluoride, total (mg/L)	BAP-MW-1	0.06	9/4/2018	0.03	No	8	n/a	n/a	62.5	n/a	n/a	0.02144	NP (NDs) 1 of 2
Fluoride, total (mg/L)	BAP-MW-1604	0.1273	9/5/2018	0.12	No	9	0.07111	0.02088	0	None	No	0.001254	Param 1 of 2
Fluoride, total (mg/L)	BAP-MW-1605	0.1078	9/5/2018	0.03	No	9	0.04556	0.02315	33.33	Kapla...	No	0.001254	Param 1 of 2
Fluoride, total (mg/L)	BAP-MW-1606	0.06	9/5/2018	0.06ND	No	8	n/a	n/a	87.5	n/a	n/a	0.02144	NP (NDs) 1 of 2
Fluoride, total (mg/L)	BAP-MW-4	0.1119	9/5/2018	0.06	No	9	0.05111	0.02261	11.11	None	No	0.001254	Param 1 of 2
Fluoride, total (mg/L)	BAP-MW-5	0.1109	9/4/2018	0.05	No	9	0.351	0.04812	11.11	None	x^(1/3)	0.001254	Param 1 of 2
<b>pH, field (SU)</b>	<b>BAP-MW-1601</b>	<b>6.191</b>	<b>9/5/2018</b>	<b>7.76</b>	<b>Yes</b>	<b>9</b>	<b>5.874</b>	<b>0.1176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0006268</b>	Param 1 of 2
pH, field (SU)	BAP-MW-1602A	7.323	9/4/2018	6.42	No	9	6.588	0.2732	0	None	No	0.0006268	Param 1 of 2
pH, field (SU)	BAP-MW-1603A	7.64	9/5/2018	6.71	No	9	6.807	0.3098	0	None	No	0.0006268	Param 1 of 2
pH, field (SU)	BAP-MW-6	6.568	9/4/2018	6.04	No	9	5.987	0.2162	0	None	No	0.0006268	Param 1 of 2
pH, field (SU)	BAP-MW-1	6.13	9/4/2018	5.11	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP (normality) 1 of 2
<b>pH, field (SU)</b>	<b>BAP-MW-1604</b>	<b>6.431</b>	<b>9/4/2018</b>	<b>7.2</b>	<b>Yes</b>	<b>9</b>	<b>6.213</b>	<b>0.08109</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0006268</b>	Param 1 of 2
pH, field (SU)	BAP-MW-1605	6.74	9/5/2018	5.62	No	9	5.961	0.2895	0	None	No	0.0006268	Param 1 of 2
pH, field (SU)	BAP-MW-1606	5.973	9/5/2018	5.43	No	9	5.503	0.1746	0	None	No	0.0006268	Param 1 of 2
<b>pH, field (SU)</b>	<b>BAP-MW-4</b>	<b>6.385</b>	<b>9/5/2018</b>	<b>7</b>	<b>Yes</b>	<b>9</b>	<b>5.71</b>	<b>0.2508</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0006268</b>	Param 1 of 2
pH, field (SU)	BAP-MW-5	6.663	9/4/2018	5.75	No	9	5.812	0.3162	0	None	No	0.0006268	Param 1 of 2

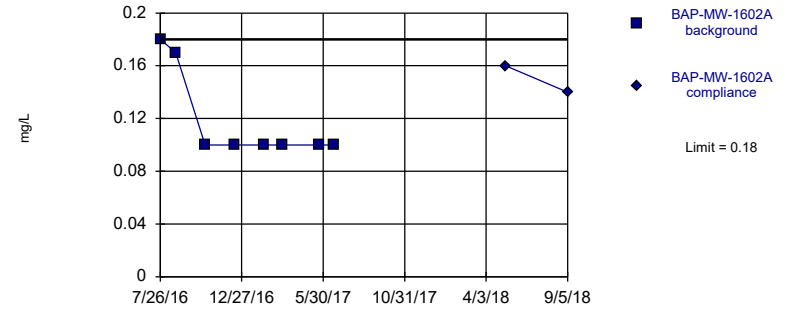
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.04667, Std. Dev.=0.007071, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8049, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

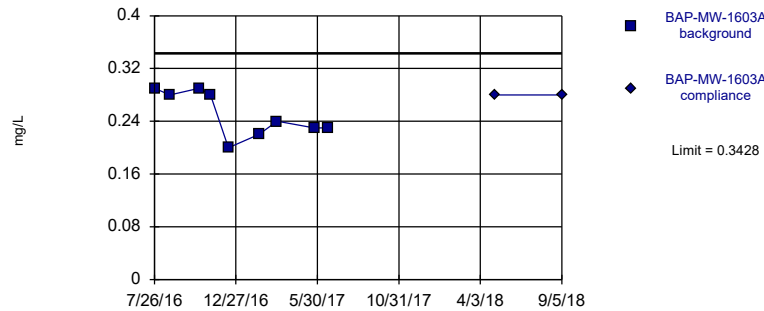
Within Limit Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

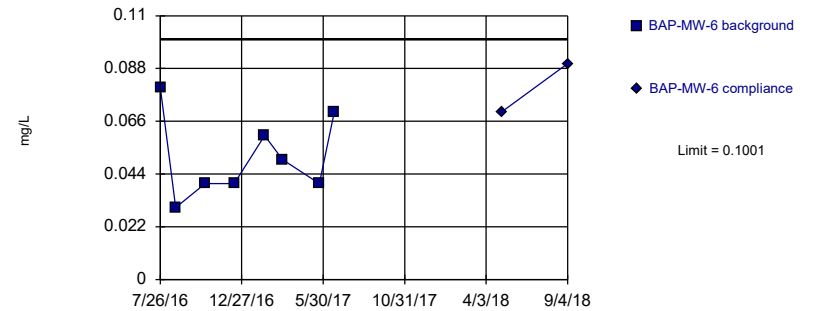
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.2511, Std. Dev.=0.03408, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8781, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

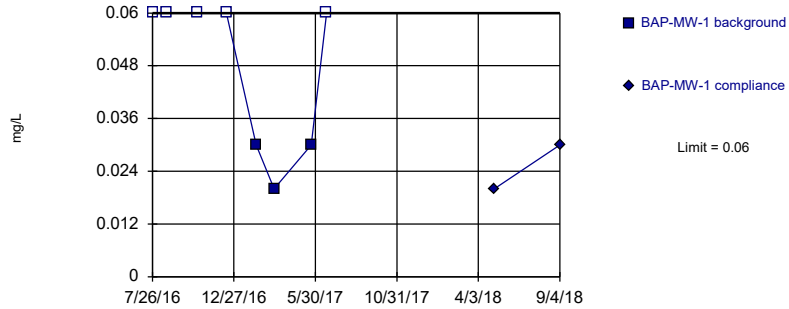
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.05125, Std. Dev.=0.01727, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.919, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

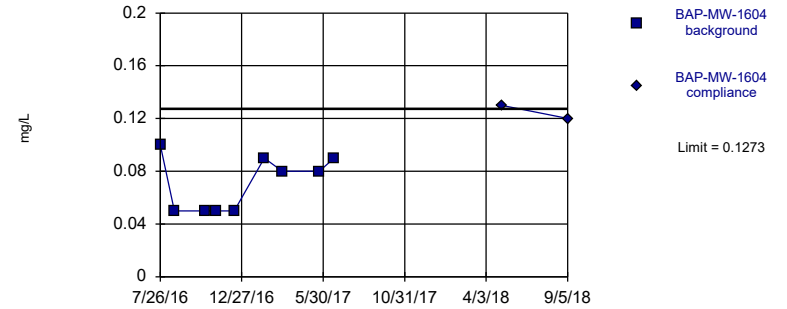
Within Limit Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

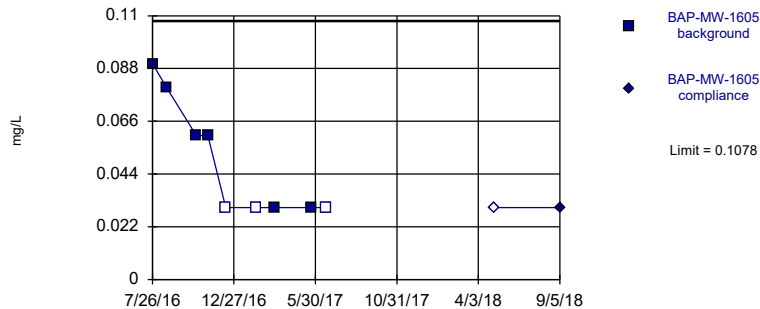
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=0.07111, Std. Dev.=0.02088, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.81, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

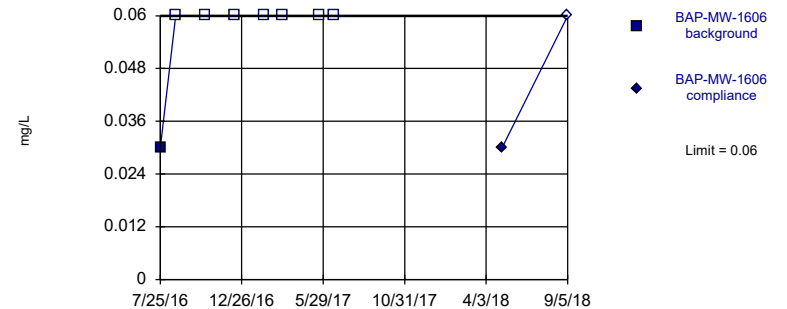
Within Limit Prediction Limit  
Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.04556, Std. Dev.=0.02315, n=9, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8602, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limit Prediction Limit  
Intrawell Non-parametric

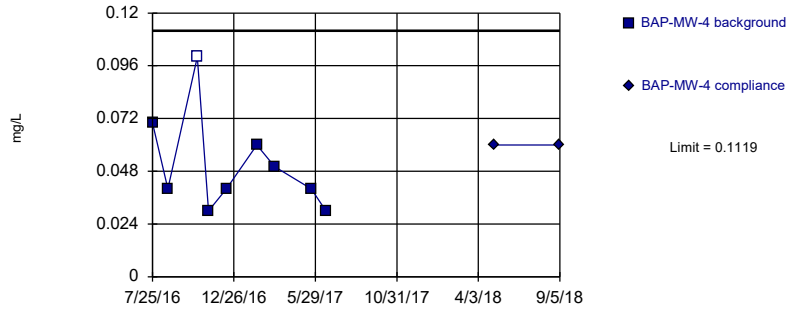


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limit

Prediction Limit  
Intrawell Parametric

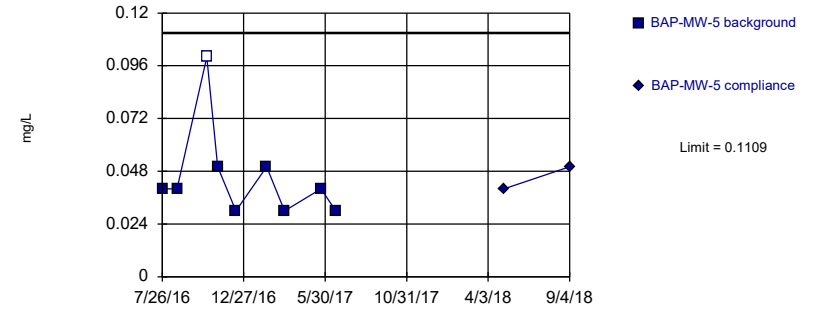


Background Data Summary: Mean=0.05111, Std. Dev.=0.02261, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.854, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limit

Prediction Limit  
Intrawell Parametric

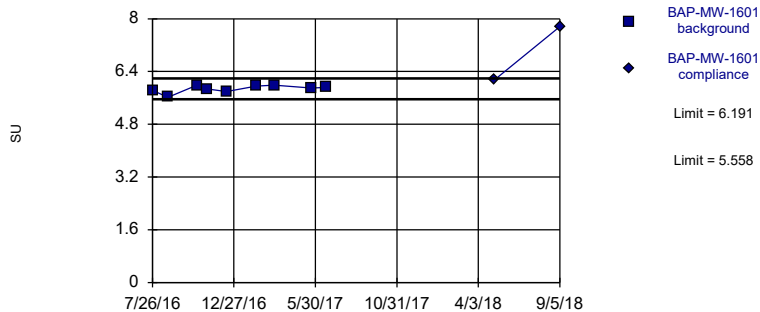


Background Data Summary (based on cube root transformation): Mean=0.351, Std. Dev.=0.04812, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7834, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride, total Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Exceeds Limits

Prediction Limit  
Intrawell Parametric

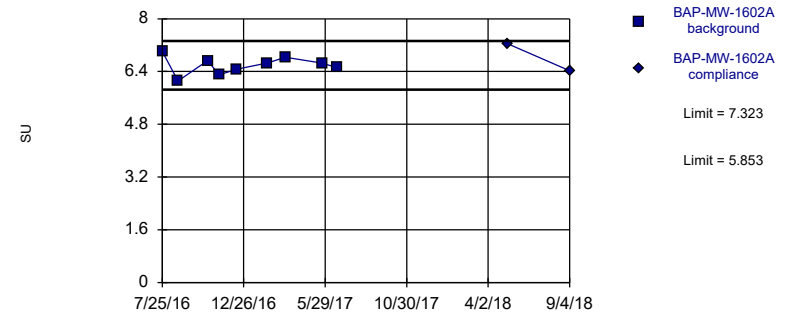


Background Data Summary: Mean=5.874, Std. Dev.=0.1176, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8865, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limits

Prediction Limit  
Intrawell Parametric

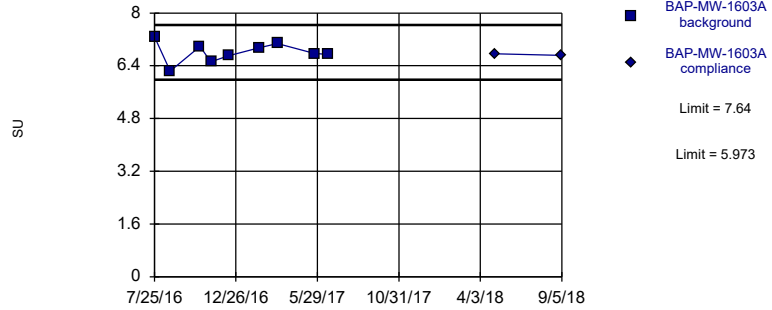


Background Data Summary: Mean=6.588, Std. Dev.=0.2732, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9838, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limits

Prediction Limit  
Intrawell Parametric

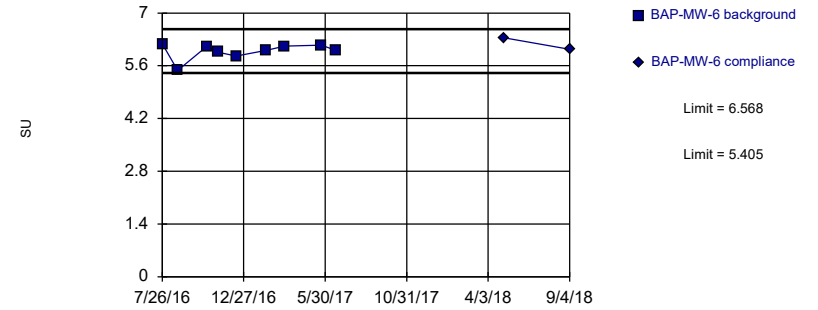


Background Data Summary: Mean=6.807, Std. Dev.=0.3098, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9809, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:52 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limits

Prediction Limit  
Intrawell Parametric

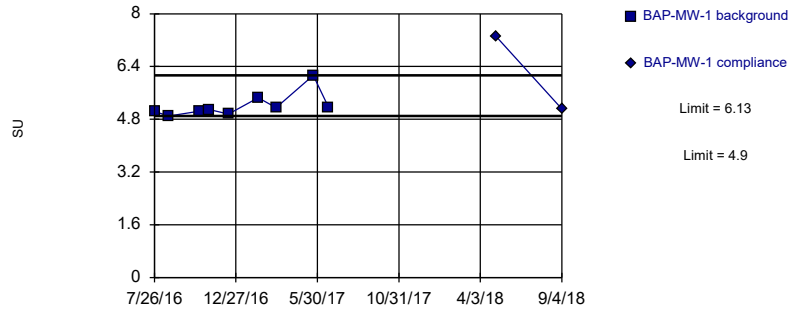


Background Data Summary: Mean=5.987, Std. Dev.=0.2162, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.807, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:53 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limits

Prediction Limit  
Intrawell Non-parametric

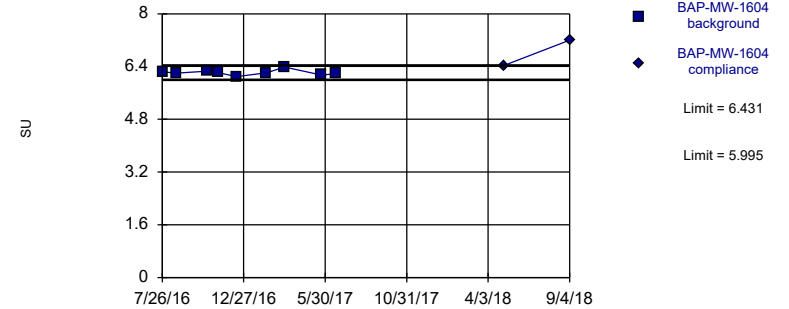


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 9 background values. Well-constituent pair annual alpha = 0.07172. Individual comparison alpha = 0.03619 (1 of 2).

Constituent: pH, field Analysis Run 10/29/2018 8:53 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Exceeds Limits

Prediction Limit  
Intrawell Parametric

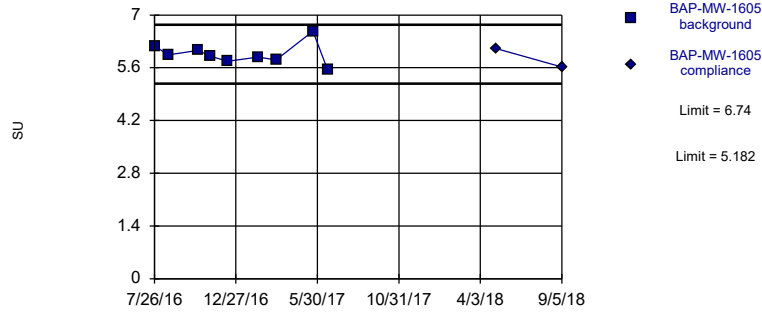


Background Data Summary: Mean=6.213, Std. Dev.=0.08109, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9491, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:53 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limits

Prediction Limit  
Intrawell Parametric

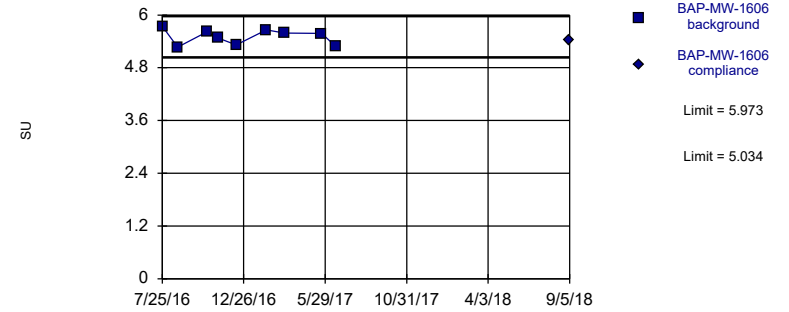


Background Data Summary: Mean=5.961, Std. Dev.=0.2895, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9339, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:53 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limits

Prediction Limit  
Intrawell Parametric

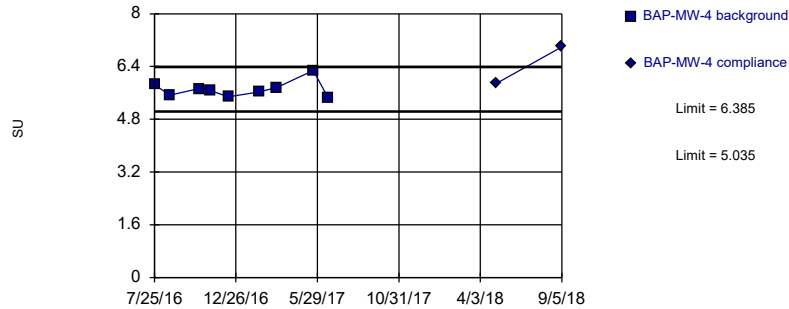


Background Data Summary: Mean=5.503, Std. Dev.=0.1746, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8973, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:53 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Exceeds Limits

Prediction Limit  
Intrawell Parametric

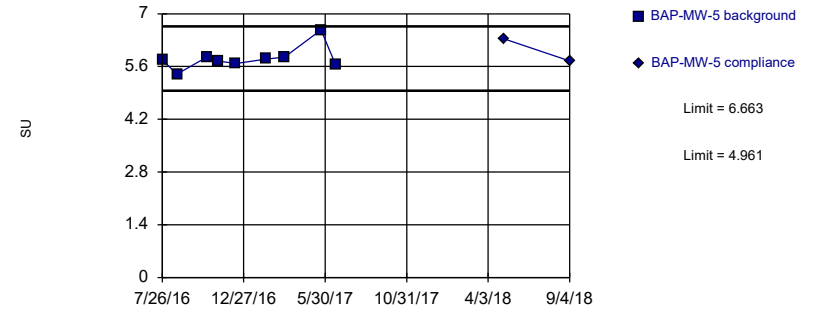


Background Data Summary: Mean=5.71, Std. Dev.=0.2508, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8598, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:53 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP

Within Limits

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=5.812, Std. Dev.=0.3162, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7908, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH, field Analysis Run 10/29/2018 8:53 AM View: PL's - Intrawell  
Amos BAP Client: Geosyntec Data: Amos BAP



# Trend Test Summary Table - Significant Results

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 8:59 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Chloride, total (mg/L)	BAP-MW-1601 (bg)	2.04	41	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	BAP-MW-1606	37.21	35	30	Yes	10	0	n/a	n/a	0.01	NP

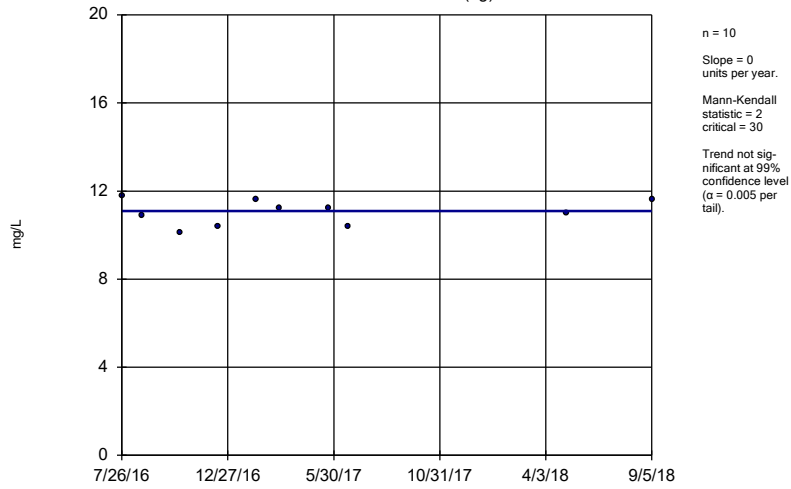
# Trend Test Summary Table - All Results

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 8:59 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium, total (mg/L)	BAP-MW-1601 (bg)	0	2	30	No	10	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BAP-MW-1602A (bg)	0.3638	7	30	No	10	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BAP-MW-1603A (bg)	-2.086	-20	-30	No	10	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BAP-MW-6 (bg)	-0.2483	-12	-30	No	10	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BAP-MW-1	-2.592	-20	-30	No	10	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BAP-MW-1605	-5.883	-19	-30	No	10	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BAP-MW-1606	3.689	20	30	No	10	0	n/a	n/a	0.01	NP
<b>Chloride, total (mg/L)</b>	<b>BAP-MW-1601 (bg)</b>	<b>2.04</b>	<b>41</b>	<b>34</b>	<b>Yes</b>	<b>11</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, total (mg/L)	BAP-MW-1602A (bg)	0.7575	20	30	No	10	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	BAP-MW-1603A (bg)	-0.1662	-11	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	BAP-MW-6 (bg)	0.1599	3	30	No	10	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	BAP-MW-1	3.318	21	30	No	10	0	n/a	n/a	0.01	NP
Chloride, total (mg/L)	BAP-MW-1605	-7.282	-24	-34	No	11	0	n/a	n/a	0.01	NP
<b>Chloride, total (mg/L)</b>	<b>BAP-MW-1606</b>	<b>37.21</b>	<b>35</b>	<b>30</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH, field (SU)	BAP-MW-1601 (bg)	0.2525	30	34	No	11	0	n/a	n/a	0.01	NP
pH, field (SU)	BAP-MW-1602A (bg)	0.09656	4	34	No	11	0	n/a	n/a	0.01	NP
pH, field (SU)	BAP-MW-1603A (bg)	-0.0467	-5	-34	No	11	0	n/a	n/a	0.01	NP
pH, field (SU)	BAP-MW-6 (bg)	0.0904	12	34	No	11	0	n/a	n/a	0.01	NP
pH, field (SU)	BAP-MW-1604	0.1104	11	34	No	11	0	n/a	n/a	0.01	NP
pH, field (SU)	BAP-MW-4	0.2067	13	34	No	11	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	BAP-MW-1601 (bg)	2.048	11	34	No	11	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	BAP-MW-1602A (bg)	-2.244	-12	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	BAP-MW-1603A (bg)	0	-10	-34	No	11	81.82	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	BAP-MW-6 (bg)	-0.8295	-13	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	BAP-MW-1	-0.474	-1	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	BAP-MW-1605	25.59	26	34	No	11	0	n/a	n/a	0.01	NP
Sulfate, total (mg/L)	BAP-MW-1606	14.6	16	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (m...	BAP-MW-1601 (bg)	43.91	29	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (m...	BAP-MW-1602A (bg)	-1.652	-1	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (m...	BAP-MW-1603A (bg)	-2.314	-6	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (m...	BAP-MW-6 (bg)	-10.66	-13	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (m...	BAP-MW-1	5.407	7	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (m...	BAP-MW-1605	9.821	5	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (m...	BAP-MW-1606	54.07	25	30	No	10	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator

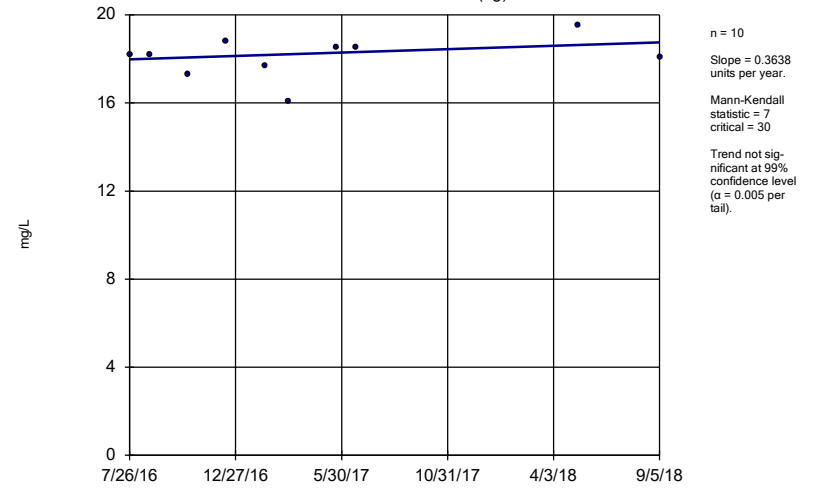
BAP-MW-1601 (bg)



Constituent: Calcium, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

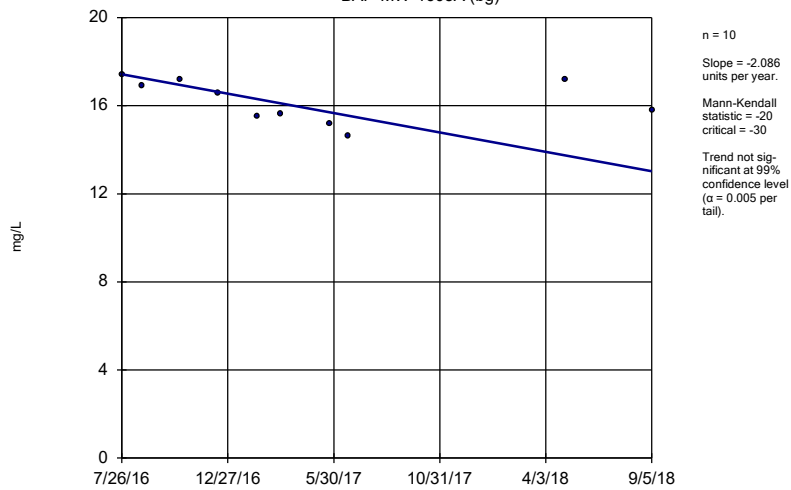
BAP-MW-1602A (bg)



Constituent: Calcium, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

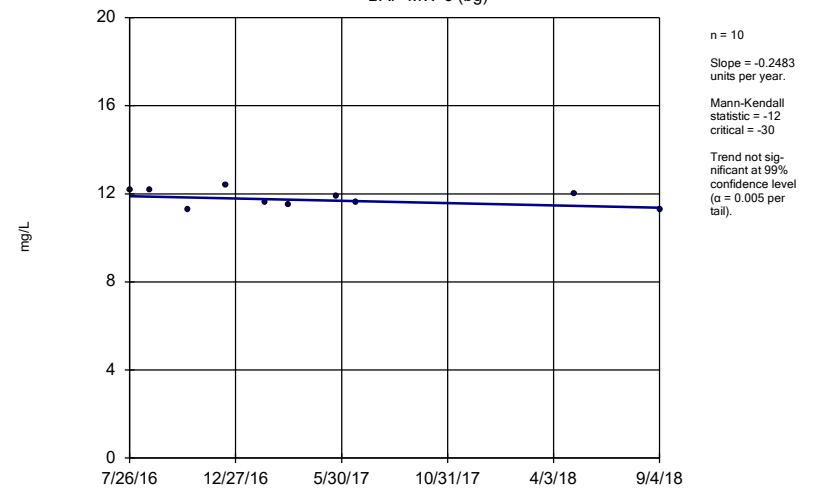
BAP-MW-1603A (bg)



Constituent: Calcium, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

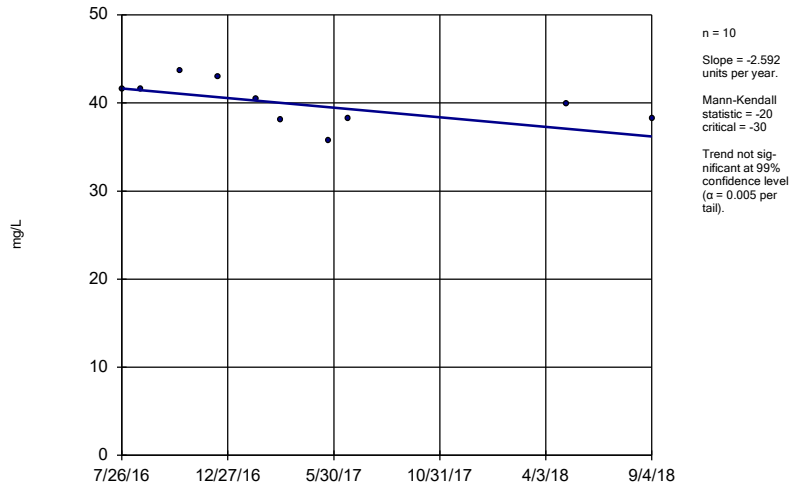
BAP-MW-6 (bg)



Constituent: Calcium, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

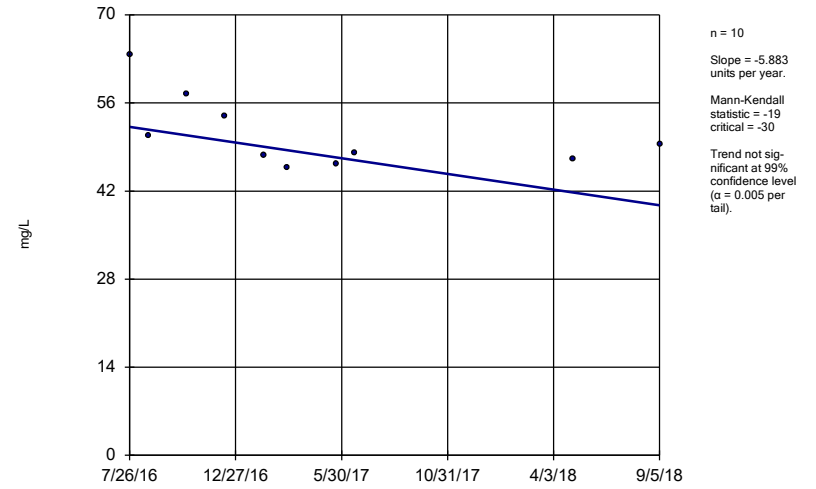
BAP-MW-1



Constituent: Calcium, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

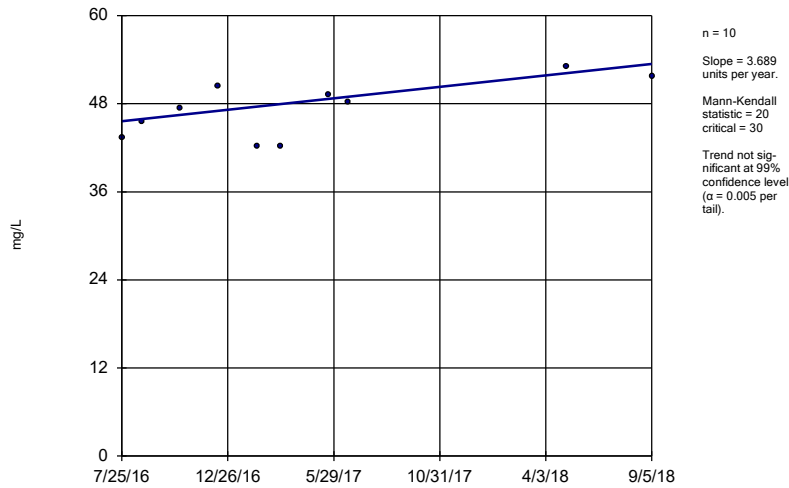
BAP-MW-1605



Constituent: Calcium, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

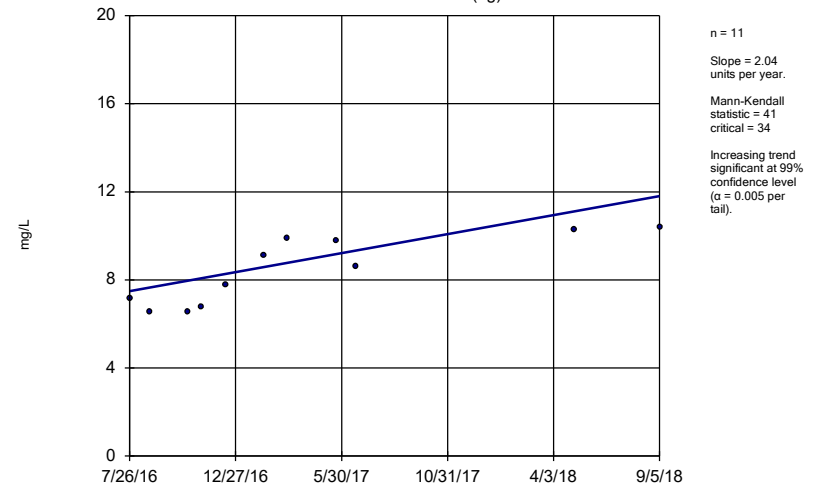
BAP-MW-1606



Constituent: Calcium, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

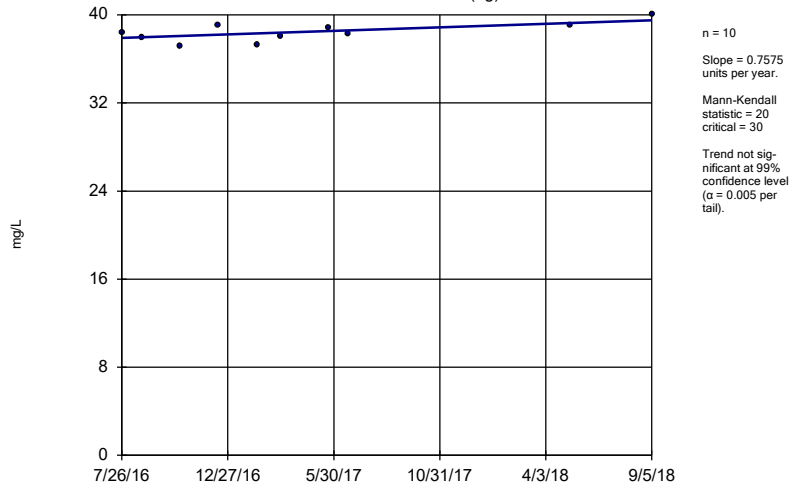
BAP-MW-1601 (bg)



Constituent: Chloride, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

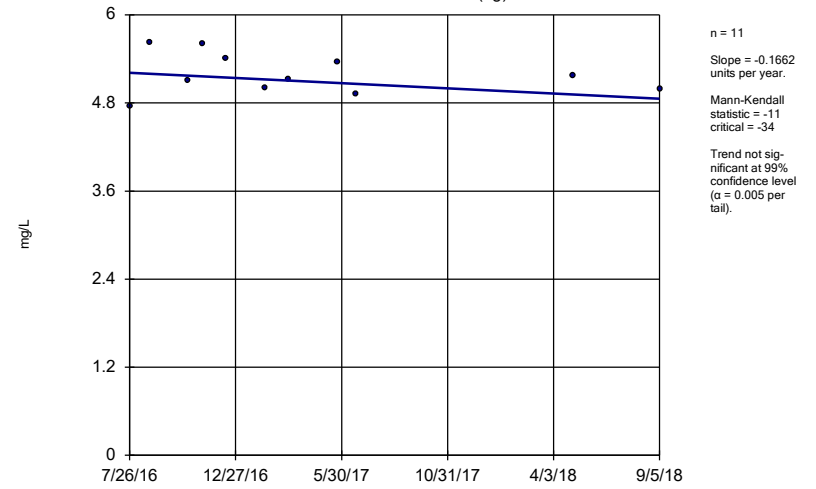
BAP-MW-1602A (bg)



Constituent: Chloride, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

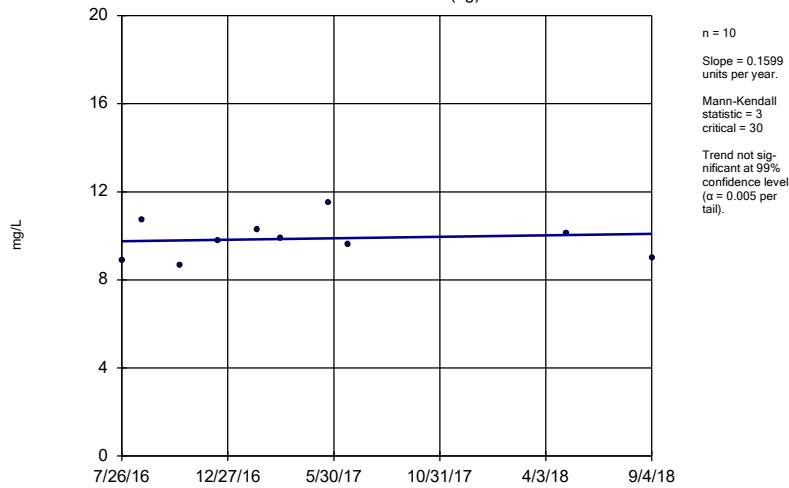
BAP-MW-1603A (bg)



Constituent: Chloride, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

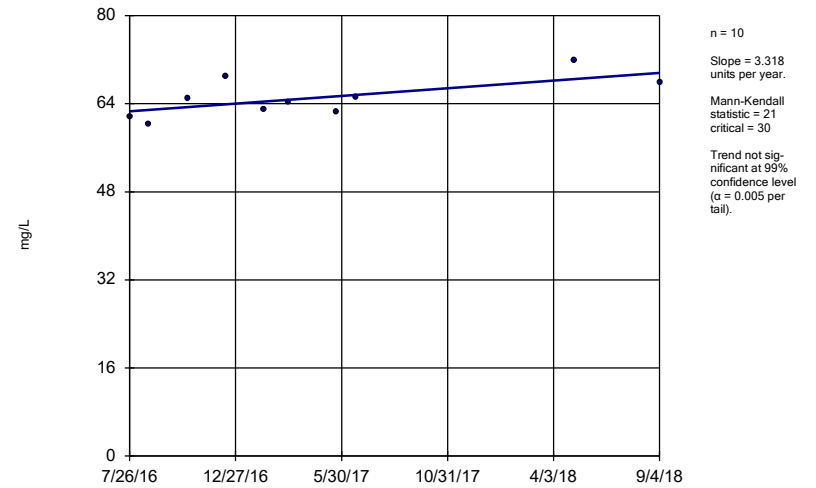
BAP-MW-6 (bg)



Constituent: Chloride, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

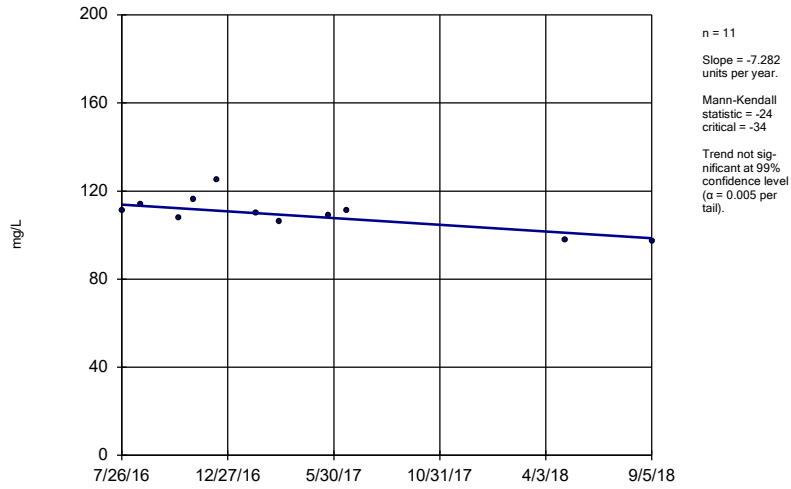
BAP-MW-1



Constituent: Chloride, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

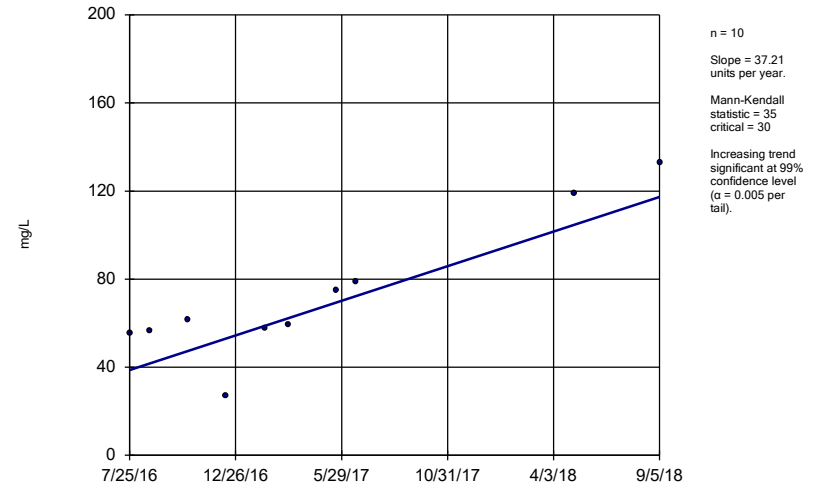
BAP-MW-1605



Constituent: Chloride, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

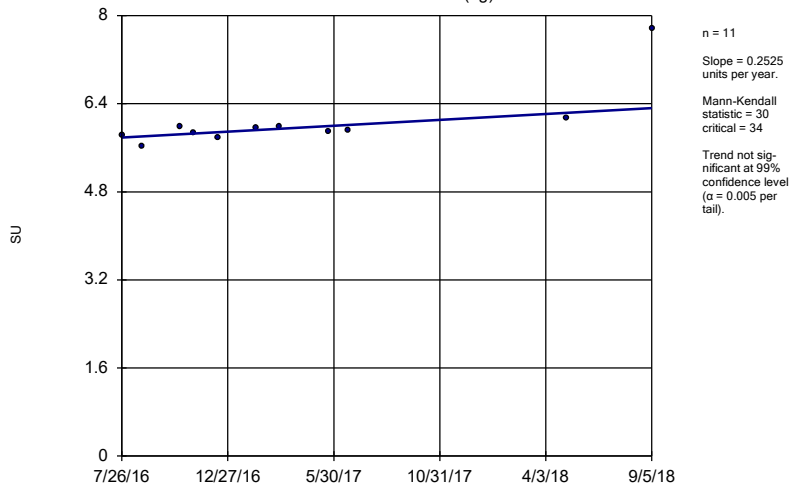
BAP-MW-1606



Constituent: Chloride, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

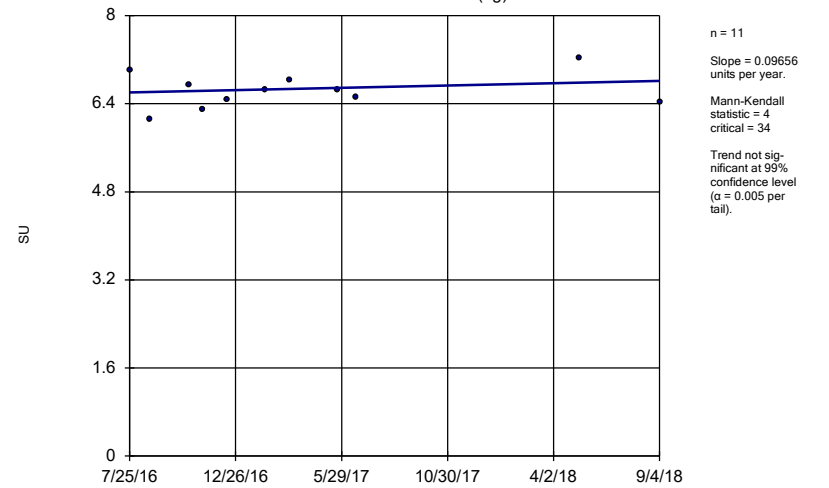
BAP-MW-1601 (bg)



Constituent: pH, field Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

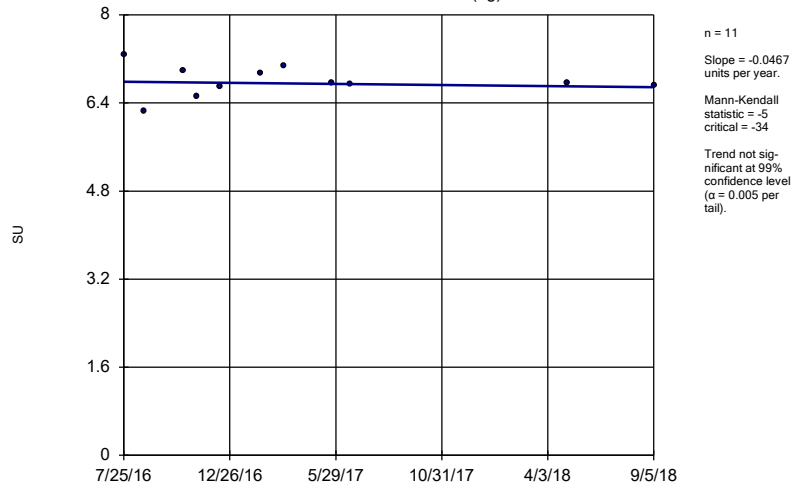
BAP-MW-1602A (bg)



Constituent: pH, field Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

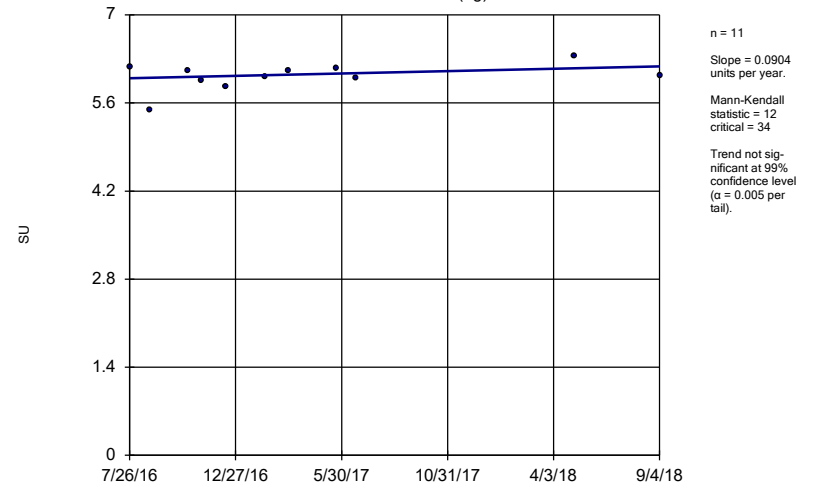
BAP-MW-1603A (bg)



Constituent: pH, field Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

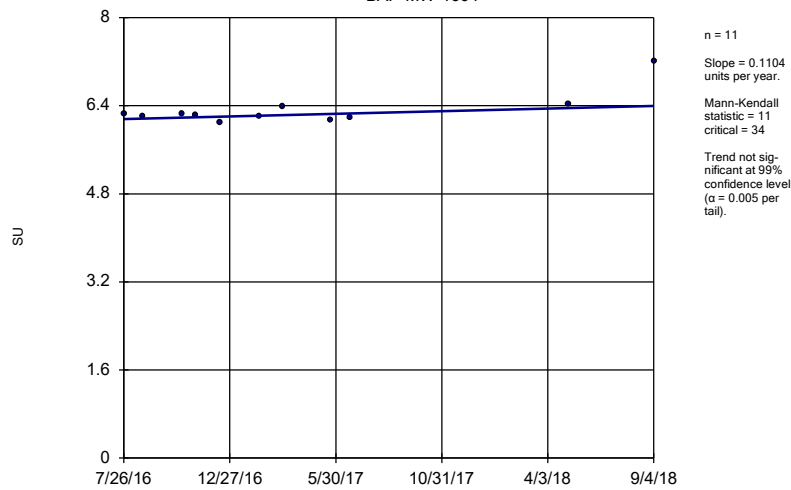
BAP-MW-6 (bg)



Constituent: pH, field Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

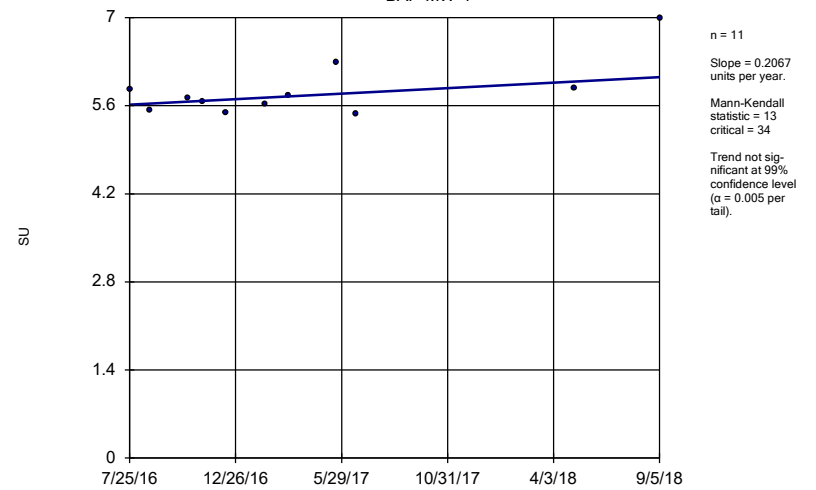
BAP-MW-1604



Constituent: pH, field Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

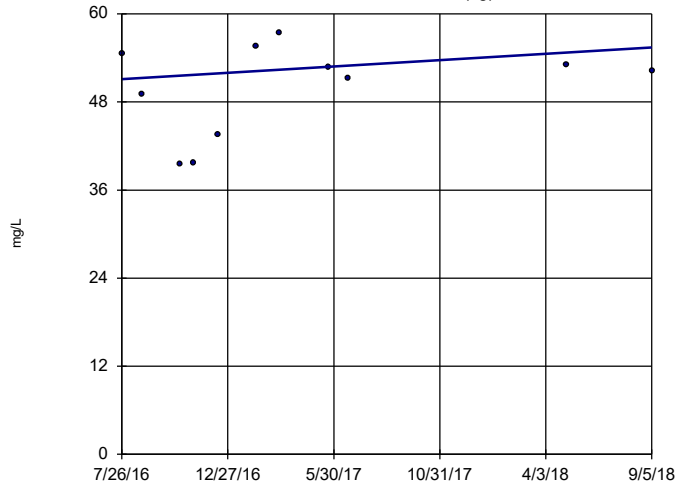
BAP-MW-4



Constituent: pH, field Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-1601 (bg)

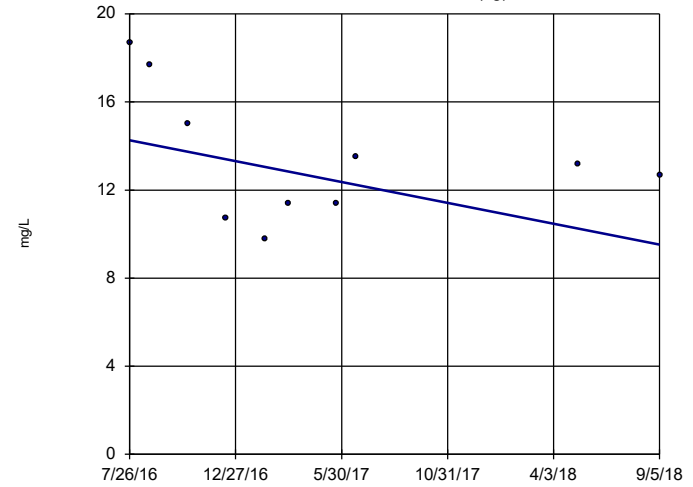


n = 11  
 Slope = 2.048 units per year.  
 Mann-Kendall statistic = 11  
 critical = 34  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-1602A (bg)

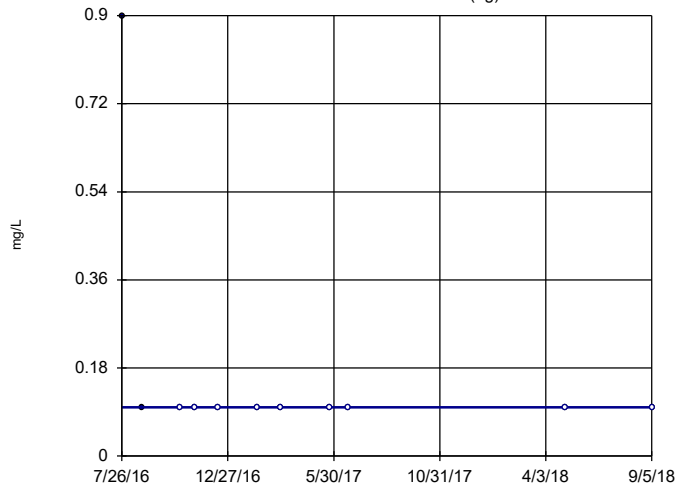


n = 10  
 Slope = -2.244 units per year.  
 Mann-Kendall statistic = -12  
 critical = -30  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-1603A (bg)

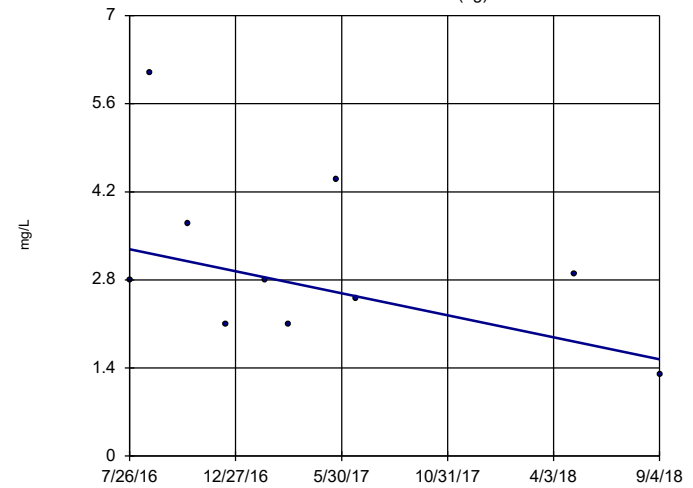


n = 11  
 Slope = 0 units per year.  
 Mann-Kendall statistic = -10  
 critical = -34  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-6 (bg)



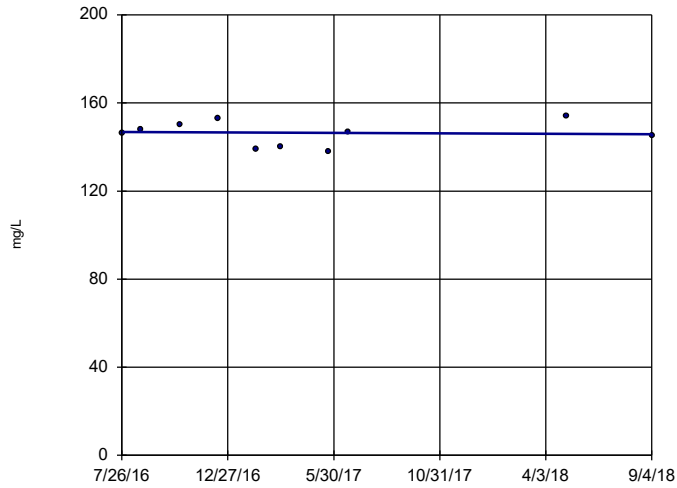
n = 10  
 Slope = -0.8295 units per year.  
 Mann-Kendall statistic = -13  
 critical = -30  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
 Amos BAP Client: Geosyntec Data: Amos BAP



### Sen's Slope Estimator

BAP-MW-1

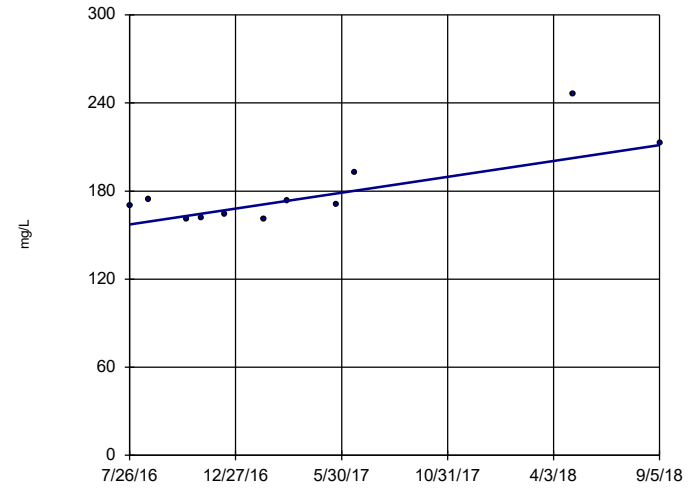


n = 10  
 Slope = -0.474  
 units per year.  
 Mann-Kendall  
 statistic = -1  
 critical = -30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-1605

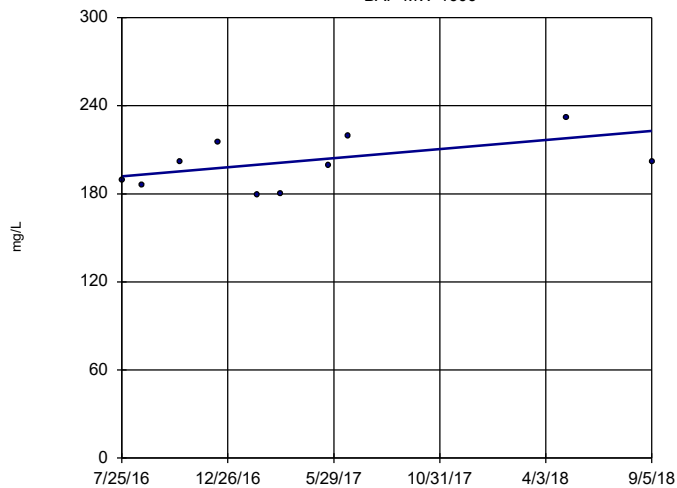


n = 11  
 Slope = 25.59  
 units per year.  
 Mann-Kendall  
 statistic = 26  
 critical = 34  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-1606

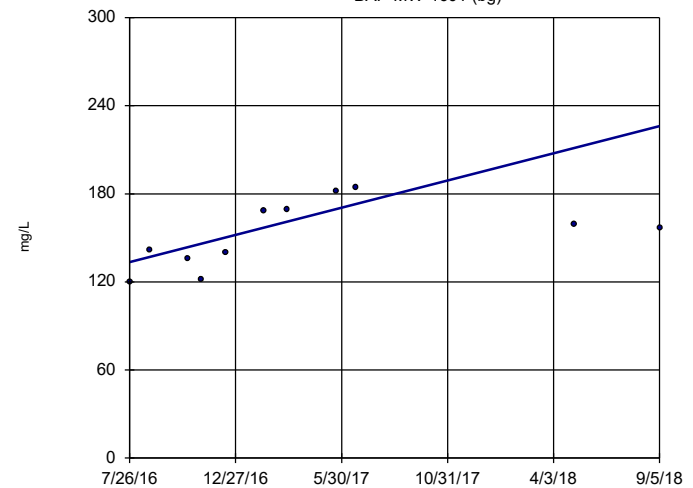


n = 10  
 Slope = 14.6  
 units per year.  
 Mann-Kendall  
 statistic = 16  
 critical = 30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate, total Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix III  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-1601 (bg)

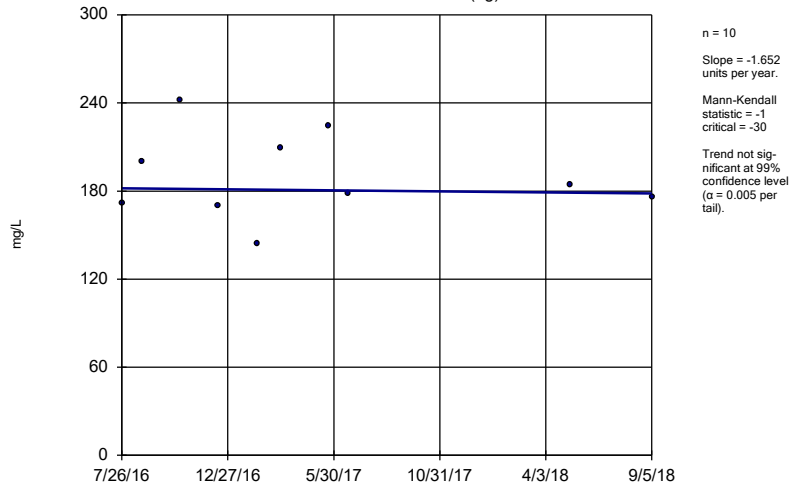


n = 11  
 Slope = 43.91  
 units per year.  
 Mann-Kendall  
 statistic = 29  
 critical = 34  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendi  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

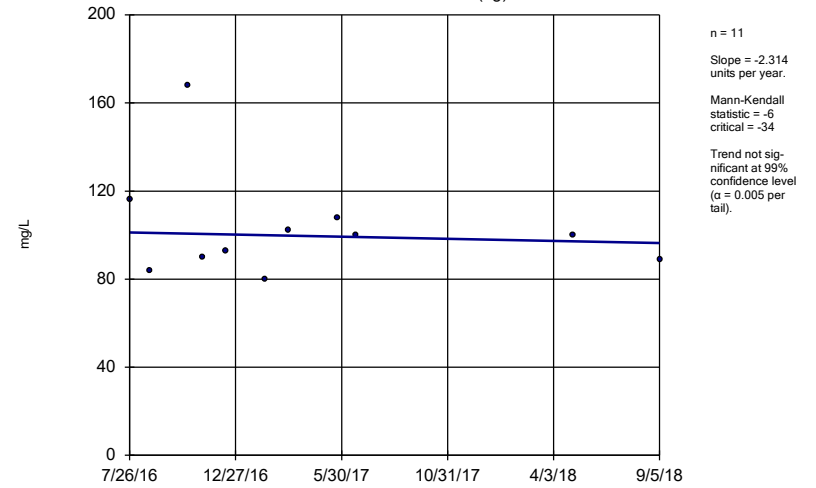
BAP-MW-1602A (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

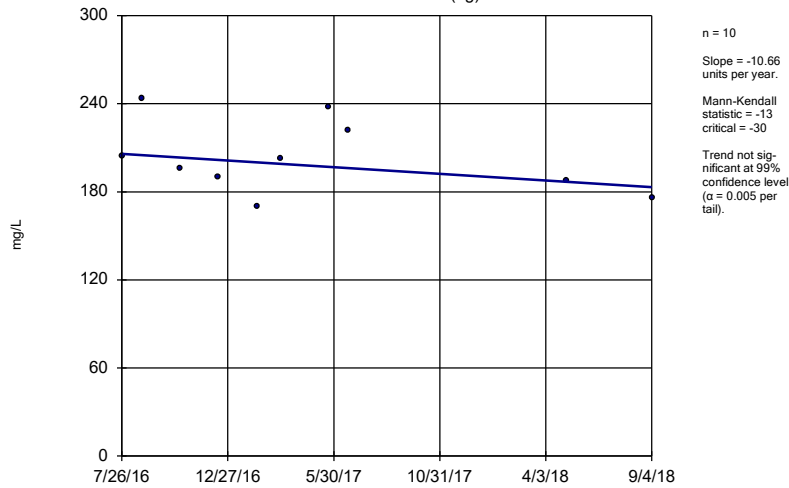
BAP-MW-1603A (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

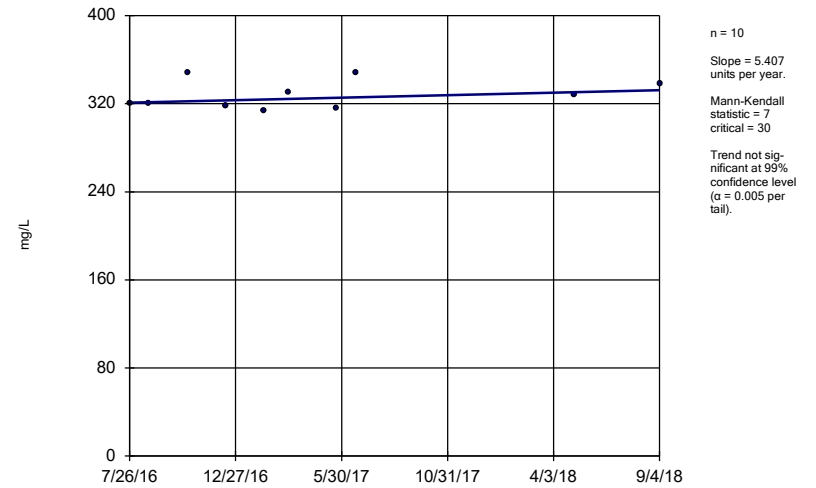
BAP-MW-6 (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

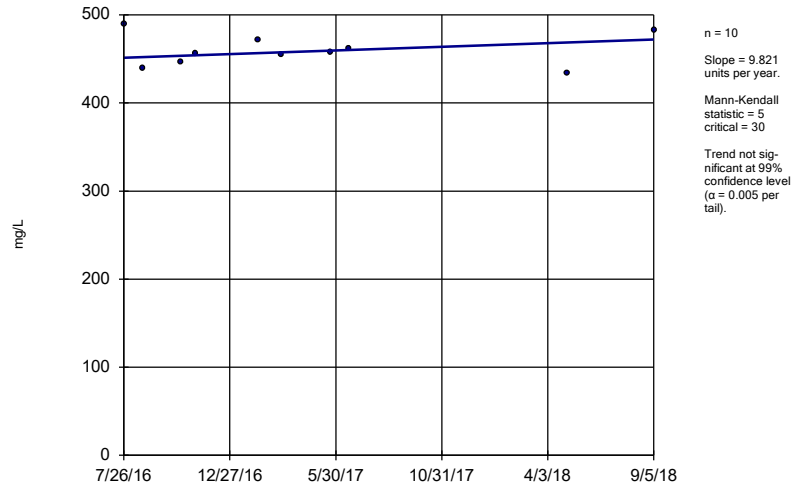
BAP-MW-1



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendix  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

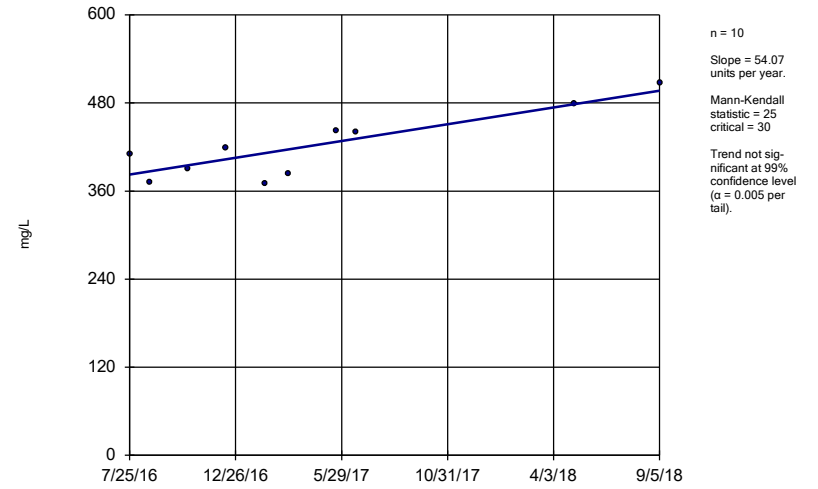
BAP-MW-1605



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendi  
Amos BAP Client: Geosyntec Data: Amos BAP

### Sen's Slope Estimator

BAP-MW-1606



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/29/2018 8:57 AM View: Trend Tests - Appendi  
Amos BAP Client: Geosyntec Data: Amos BAP

# Tolerance Limits - All Results

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg.N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony, total (mg/L)	n/a	0.0001355	n/a	n/a	n/a	n/a	40	-10.44	0.7208	7.5	None	ln(x)	0.05	Inter
Arsenic, total (mg/L)	n/a	0.0871	n/a	n/a	n/a	n/a	40	n/a	n/a	0	n/a	n/a	0.1285	NP Inter(normal...
Barium, total (mg/L)	n/a	0.3051	n/a	n/a	n/a	n/a	40	0.1884	0.05488	0	None	No	0.05	Inter
Beryllium, total (mg/L)	n/a	0.00009176	n/a	n/a	n/a	n/a	40	0.000042430.0000...	0	0	None	No	0.05	Inter
Cadmium, total (mg/L)	n/a	0.00003	n/a	n/a	n/a	n/a	40	n/a	n/a	7.5	n/a	n/a	0.1285	NP Inter(normal...
Chromium, total (mg/L)	n/a	0.002601	n/a	n/a	n/a	n/a	40	0.02988	0.009935	0	None	sqrt(x)	0.05	Inter
Cobalt, total (mg/L)	n/a	0.03144	n/a	n/a	n/a	n/a	40	-5.775	1.089	0	None	ln(x)	0.05	Inter
Combined Radium 226 + 228 (pCi/L)	n/a	5.202	n/a	n/a	n/a	n/a	42	0.009383	0.7762	0	None	ln(x)	0.05	Inter
Fluoride, total (mg/L)	n/a	0.29	n/a	n/a	n/a	n/a	42	n/a	n/a	0	n/a	n/a	0.116	NP Inter(normal...
Lead, total (mg/L)	n/a	0.006603	n/a	n/a	n/a	n/a	40	0.09786	0.04221	0	None	x^(1/3)	0.05	Inter
Lithium, total (mg/L)	n/a	0.01172	n/a	n/a	n/a	n/a	40	0.05518	0.02496	12.5	None	sqrt(x)	0.05	Inter
Mercury, total (mg/L)	n/a	0.000005	n/a	n/a	n/a	n/a	36	n/a	n/a	88.89	n/a	n/a	0.1578	NP Inter(NDs)
Molybdenum, total (mg/L)	n/a	0.003033	n/a	n/a	n/a	n/a	40	0.02951	0.01202	0	None	sqrt(x)	0.05	Inter
Selenium, total (mg/L)	n/a	0.0003	n/a	n/a	n/a	n/a	40	n/a	n/a	2.5	n/a	n/a	0.1285	NP Inter(normal...
Thallium, total (mg/L)	n/a	0.000224	n/a	n/a	n/a	n/a	40	n/a	n/a	10	n/a	n/a	0.1285	NP Inter(normal...

# Confidence Interval - All Results (No Significant Results)

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 2:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony, total (mg/L)	BAP-MW-1	0.00003	0.00001	0.006	No	10	0	No	0.011	NP (normality)
Antimony, total (mg/L)	BAP-MW-1604	0.00004	0.00002	0.006	No	10	0	No	0.011	NP (normality)
Antimony, total (mg/L)	BAP-MW-1605	0.00003245	0.00001355	0.006	No	10	0	No	0.01	Param.
Antimony, total (mg/L)	BAP-MW-1606	0.00003262	0.00001538	0.006	No	10	0	No	0.01	Param.
Antimony, total (mg/L)	BAP-MW-4	0.00005506	0.00002082	0.006	No	10	10	ln(x)	0.01	Param.
Antimony, total (mg/L)	BAP-MW-5	0.00005194	0.00001606	0.006	No	10	0	No	0.01	Param.
Arsenic, total (mg/L)	BAP-MW-1	0.0001703	0.0001097	0.087	No	10	0	No	0.01	Param.
Arsenic, total (mg/L)	BAP-MW-1604	0.005498	0.00419	0.087	No	10	0	ln(x)	0.01	Param.
Arsenic, total (mg/L)	BAP-MW-1605	0.004879	0.003371	0.087	No	10	0	No	0.01	Param.
Arsenic, total (mg/L)	BAP-MW-1606	0.003291	0.002487	0.087	No	10	0	No	0.01	Param.
Arsenic, total (mg/L)	BAP-MW-4	0.01164	0.003321	0.087	No	10	0	No	0.01	Param.
Arsenic, total (mg/L)	BAP-MW-5	0.003461	0.002559	0.087	No	10	0	No	0.01	Param.
Barium, total (mg/L)	BAP-MW-1	0.02979	0.02643	2	No	10	0	No	0.01	Param.
Barium, total (mg/L)	BAP-MW-1604	0.1447	0.1319	2	No	10	0	No	0.01	Param.
Barium, total (mg/L)	BAP-MW-1605	0.08767	0.06901	2	No	10	0	No	0.01	Param.
Barium, total (mg/L)	BAP-MW-1606	0.06768	0.0582	2	No	10	0	No	0.01	Param.
Barium, total (mg/L)	BAP-MW-4	0.09626	0.0862	2	No	10	0	No	0.01	Param.
Barium, total (mg/L)	BAP-MW-5	0.1643	0.1485	2	No	10	0	No	0.01	Param.
Beryllium, total (mg/L)	BAP-MW-1	0.0001284	0.0001082	0.004	No	10	0	No	0.01	Param.
Beryllium, total (mg/L)	BAP-MW-1604	0.000063	0.000038	0.004	No	10	0	No	0.011	NP (normality)
Beryllium, total (mg/L)	BAP-MW-1605	0.00006851	0.00003969	0.004	No	10	0	No	0.01	Param.
Beryllium, total (mg/L)	BAP-MW-1606	0.0001177	0.00008191	0.004	No	10	0	No	0.01	Param.
Beryllium, total (mg/L)	BAP-MW-4	0.000057	0.0000422	0.004	No	10	0	No	0.01	Param.
Beryllium, total (mg/L)	BAP-MW-5	0.00006014	0.00003426	0.004	No	10	0	No	0.01	Param.
Cadmium, total (mg/L)	BAP-MW-1	0.002816	0.002196	0.005	No	10	0	No	0.01	Param.
Cadmium, total (mg/L)	BAP-MW-1604	0.00001	0.000005	0.005	No	10	70	No	0.011	NP (normality)
Cadmium, total (mg/L)	BAP-MW-1605	0.00001	0.000005	0.005	No	10	70	No	0.011	NP (normality)
Cadmium, total (mg/L)	BAP-MW-1606	0.00017	0.00012	0.005	No	10	0	No	0.011	NP (normality)
Cadmium, total (mg/L)	BAP-MW-4	0.0002523	0.00004855	0.005	No	10	0	sqrt(x)	0.01	Param.
Cadmium, total (mg/L)	BAP-MW-5	0.00001	0.000006	0.005	No	10	0	No	0.011	NP (normality)
Chromium, total (mg/L)	BAP-MW-1	0.0005457	0.0001008	0.1	No	10	0	ln(x)	0.01	Param.
Chromium, total (mg/L)	BAP-MW-1604	0.001389	0.0006417	0.1	No	10	0	No	0.01	Param.
Chromium, total (mg/L)	BAP-MW-1605	0.000454	0.000167	0.1	No	10	0	No	0.01	Param.
Chromium, total (mg/L)	BAP-MW-1606	0.001352	0.0003704	0.1	No	10	0	No	0.01	Param.
Chromium, total (mg/L)	BAP-MW-4	0.0005991	0.0001856	0.1	No	10	0	x^(1/3)	0.01	Param.
Chromium, total (mg/L)	BAP-MW-5	0.000841	0.000122	0.1	No	10	0	No	0.011	NP (normality)
Cobalt, total (mg/L)	BAP-MW-1	0.01545	0.01071	0.031	No	10	0	No	0.01	Param.
Cobalt, total (mg/L)	BAP-MW-1604	0.00106	0.000494	0.031	No	10	0	No	0.011	NP (normality)
Cobalt, total (mg/L)	BAP-MW-1605	0.0245	0.00877	0.031	No	10	0	No	0.011	NP (normality)
Cobalt, total (mg/L)	BAP-MW-1606	0.01563	0.01341	0.031	No	10	0	No	0.01	Param.
Cobalt, total (mg/L)	BAP-MW-4	0.0388	0.009215	0.031	No	10	0	x^(1/3)	0.01	Param.
Cobalt, total (mg/L)	BAP-MW-5	0.00114	0.000949	0.031	No	10	0	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAP-MW-1	0.725	0.136	5.2	No	10	0	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAP-MW-1604	1.889	0.5899	5.2	No	11	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAP-MW-1605	1.722	0.586	5.2	No	11	0	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	BAP-MW-1606	1.467	0.3698	5.2	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAP-MW-4	1.452	0.4849	5.2	No	11	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BAP-MW-5	1.356	0.6261	5.2	No	11	0	No	0.01	Param.
Fluoride, total (mg/L)	BAP-MW-1	0.03	0.02	4	No	10	50	No	0.011	NP (normality)
Fluoride, total (mg/L)	BAP-MW-1604	0.1049	0.05691	4	No	11	0	No	0.01	Param.
Fluoride, total (mg/L)	BAP-MW-1605	0.08	0.03	4	No	11	36.36	No	0.006	NP (normality)
Fluoride, total (mg/L)	BAP-MW-1606	0.03	0.03	4	No	10	80	No	0.011	NP (NDs)
Fluoride, total (mg/L)	BAP-MW-4	0.05831	0.03442	4	No	11	9.091	No	0.01	Param.
Fluoride, total (mg/L)	BAP-MW-5	0.05	0.03	4	No	11	9.091	No	0.006	NP (normality)
Lead, total (mg/L)	BAP-MW-1	0.000134	0.000062	0.015	No	10	0	No	0.011	NP (normality)

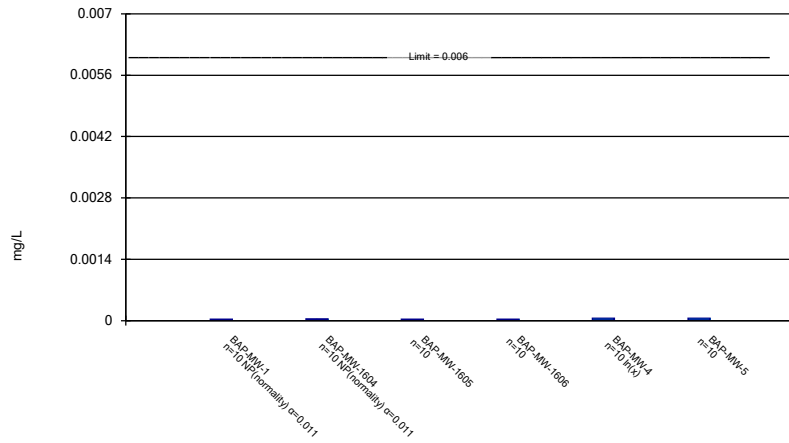
# Confidence Interval - All Results (No Significant Results)

Amos BAP Client: Geosyntec Data: Amos BAP Printed 10/29/2018, 2:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Lead, total (mg/L)	BAP-MW-1604	0.001052	0.0003123	0.015	No	10	0	No	0.01	Param.
Lead, total (mg/L)	BAP-MW-1605	0.0001913	0.00004187	0.015	No	10	0	No	0.01	Param.
Lead, total (mg/L)	BAP-MW-1606	0.001083	0.0002952	0.015	No	10	0	No	0.01	Param.
Lead, total (mg/L)	BAP-MW-4	0.0003676	0.0001516	0.015	No	10	0	No	0.01	Param.
Lead, total (mg/L)	BAP-MW-5	0.0003333	0.00005414	0.015	No	10	0	sqrt(x)	0.01	Param.
Lithium, total (mg/L)	BAP-MW-1	0.007208	0.001837	0.04	No	10	0	sqrt(x)	0.01	Param.
Lithium, total (mg/L)	BAP-MW-1604	0.004321	0.0004802	0.04	No	10	20	No	0.01	Param.
Lithium, total (mg/L)	BAP-MW-1605	0.007278	0.00327	0.04	No	10	0	sqrt(x)	0.01	Param.
Lithium, total (mg/L)	BAP-MW-1606	0.007232	0.002268	0.04	No	10	10	No	0.01	Param.
Lithium, total (mg/L)	BAP-MW-4	0.006619	0.0008654	0.04	No	10	0	sqrt(x)	0.01	Param.
Lithium, total (mg/L)	BAP-MW-5	0.006293	0.0009319	0.04	No	10	0	sqrt(x)	0.01	Param.
Mercury, total (mg/L)	BAP-MW-1	0.0000025	0.000002	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury, total (mg/L)	BAP-MW-1604	0.0000025	0.000002	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury, total (mg/L)	BAP-MW-1605	0.0000025	0.0000025	0.002	No	9	100	No	0.002	NP (NDs)
Mercury, total (mg/L)	BAP-MW-1606	0.0000025	0.000002	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury, total (mg/L)	BAP-MW-4	0.0000025	0.0000025	0.002	No	9	100	No	0.002	NP (NDs)
Mercury, total (mg/L)	BAP-MW-5	0.0000025	0.0000025	0.002	No	9	100	No	0.002	NP (NDs)
Molybdenum, total (mg/L)	BAP-MW-1	0.001646	0.0004363	0.1	No	10	0	No	0.01	Param.
Molybdenum, total (mg/L)	BAP-MW-1604	0.00064	0.0002	0.1	No	10	0	No	0.011	NP (normality)
Molybdenum, total (mg/L)	BAP-MW-1605	0.0004174	0.00009656	0.1	No	10	0	No	0.01	Param.
Molybdenum, total (mg/L)	BAP-MW-1606	0.000213	0.00007499	0.1	No	10	0	No	0.01	Param.
Molybdenum, total (mg/L)	BAP-MW-4	0.0111	0.00028	0.1	No	10	0	No	0.011	NP (normality)
Molybdenum, total (mg/L)	BAP-MW-5	0.001773	0.0002631	0.1	No	10	0	sqrt(x)	0.01	Param.
Selenium, total (mg/L)	BAP-MW-1	0.0002	0.00009	0.05	No	9	0	No	0.002	NP (normality)
Selenium, total (mg/L)	BAP-MW-1604	0.0002	0.0002	0.05	No	10	0	No	0.011	NP (normality)
Selenium, total (mg/L)	BAP-MW-1605	0.00009182	0.00004618	0.05	No	10	0	No	0.01	Param.
Selenium, total (mg/L)	BAP-MW-1606	0.0001843	0.0000772	0.05	No	10	0	ln(x)	0.01	Param.
Selenium, total (mg/L)	BAP-MW-4	0.00009323	0.00006477	0.05	No	10	0	No	0.01	Param.
Selenium, total (mg/L)	BAP-MW-5	0.00005	0.00003	0.05	No	10	50	No	0.011	NP (normality)
Thallium, total (mg/L)	BAP-MW-1	0.00005297	0.00003532	0.002	No	10	0	sqrt(x)	0.01	Param.
Thallium, total (mg/L)	BAP-MW-1604	0.000025	0.00001	0.002	No	10	30	No	0.011	NP (Cohens/xfm)
Thallium, total (mg/L)	BAP-MW-1605	0.00004	0.00001	0.002	No	10	50	No	0.011	NP (Cohens/xfm)
Thallium, total (mg/L)	BAP-MW-1606	0.00003315	0.00001043	0.002	No	10	0	sqrt(x)	0.01	Param.
Thallium, total (mg/L)	BAP-MW-4	0.0001131	0.00003452	0.002	No	10	0	No	0.01	Param.
Thallium, total (mg/L)	BAP-MW-5	0.00005358	0.00001078	0.002	No	10	30	No	0.01	Param.

### Parametric and Non-Parametric (NP) Confidence Interval

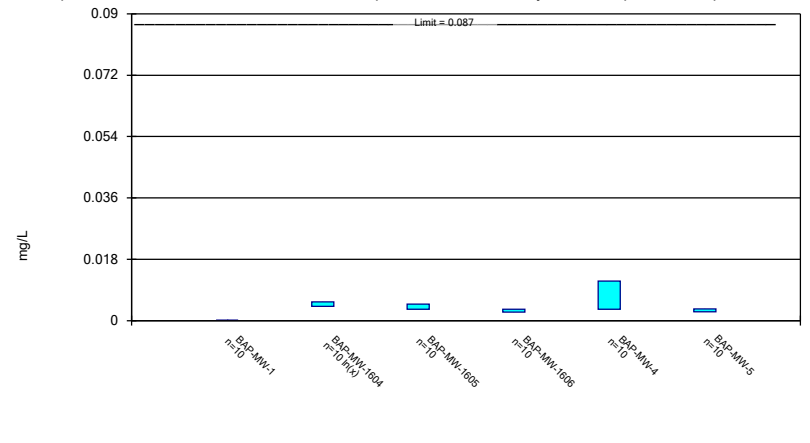
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Antimony, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric Confidence Interval

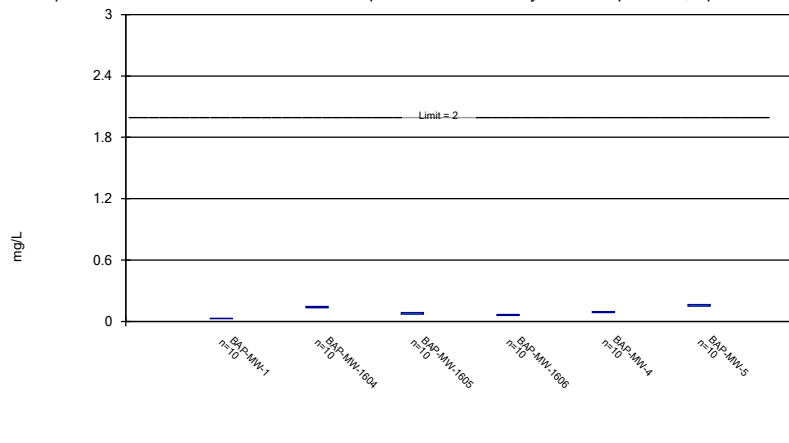
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric Confidence Interval

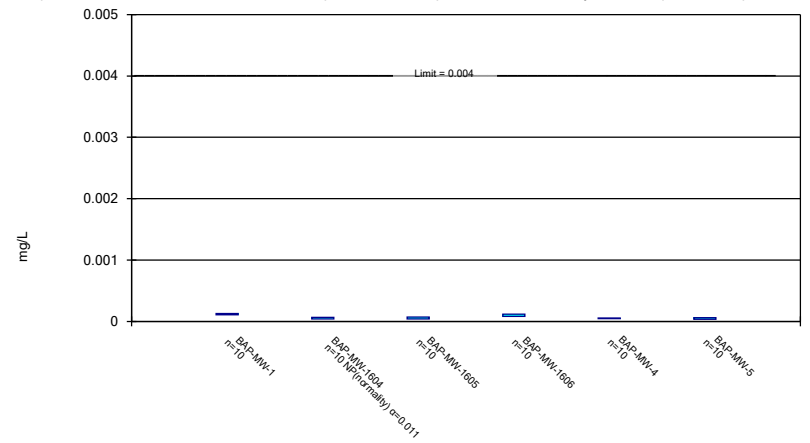
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Constituent: Barium, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric and Non-Parametric (NP) Confidence Interval

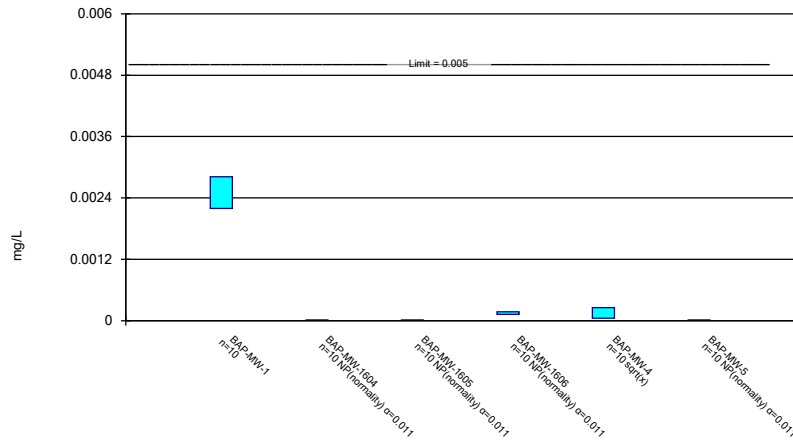
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Constituent: Beryllium, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric and Non-Parametric (NP) Confidence Interval

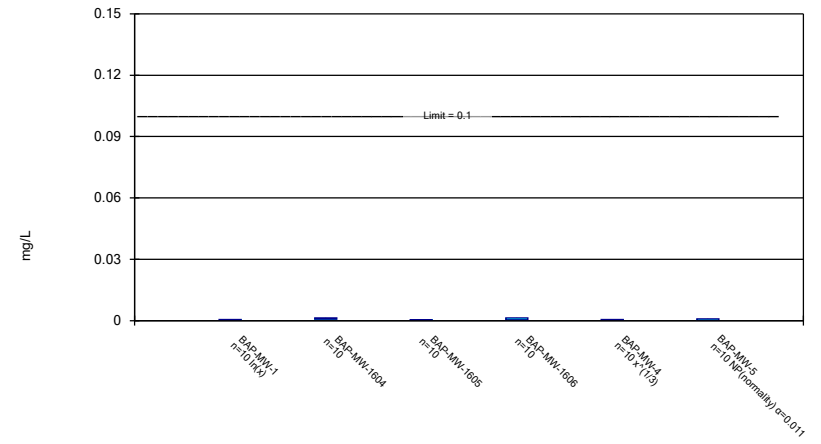
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric and Non-Parametric (NP) Confidence Interval

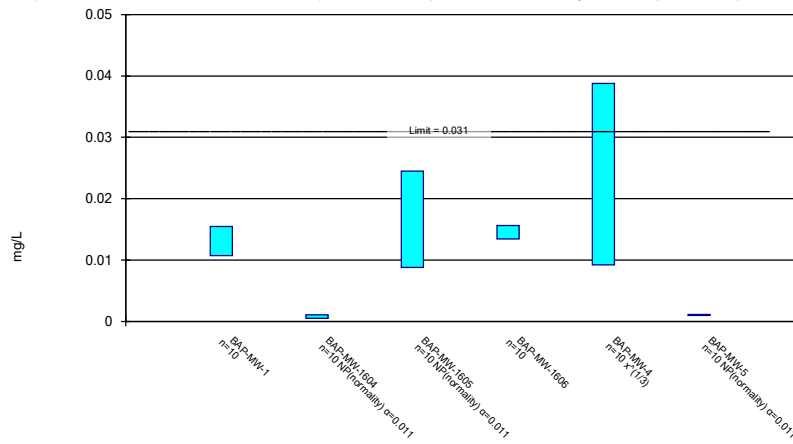
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric and Non-Parametric (NP) Confidence Interval

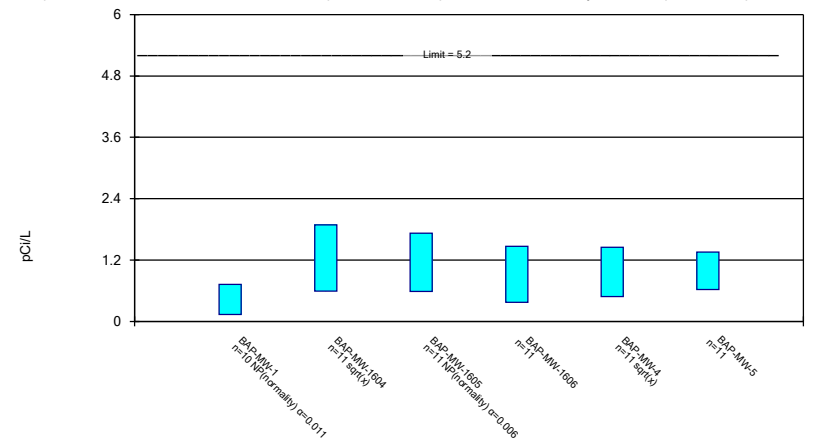
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### 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.

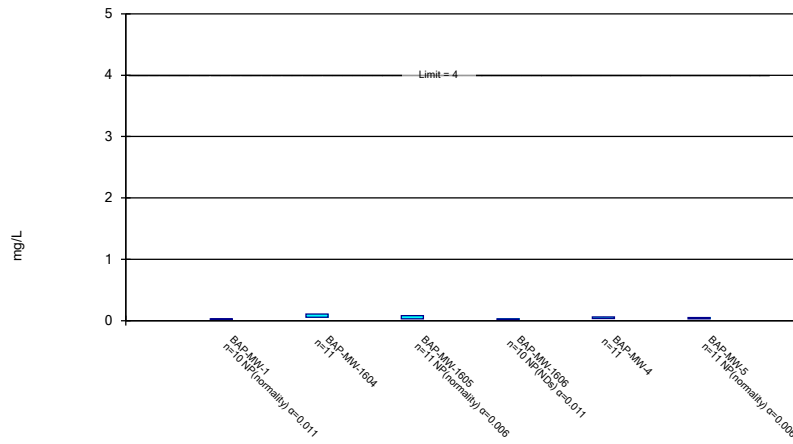


Constituent: Combined Radium 226 + 228 Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP



### Parametric and Non-Parametric (NP) Confidence Interval

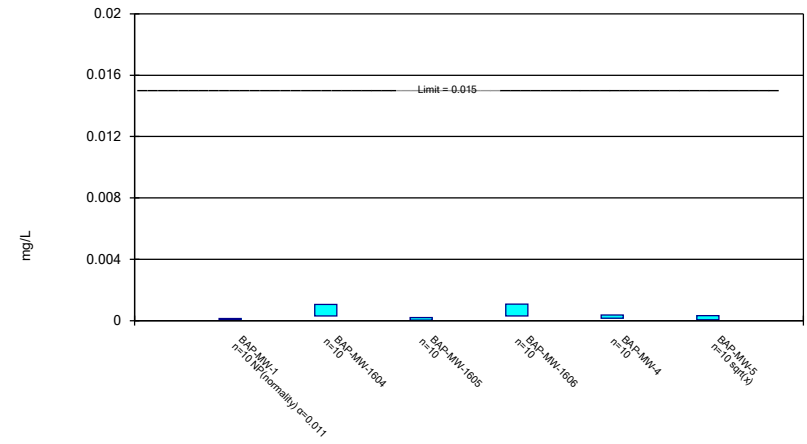
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric and Non-Parametric (NP) Confidence Interval

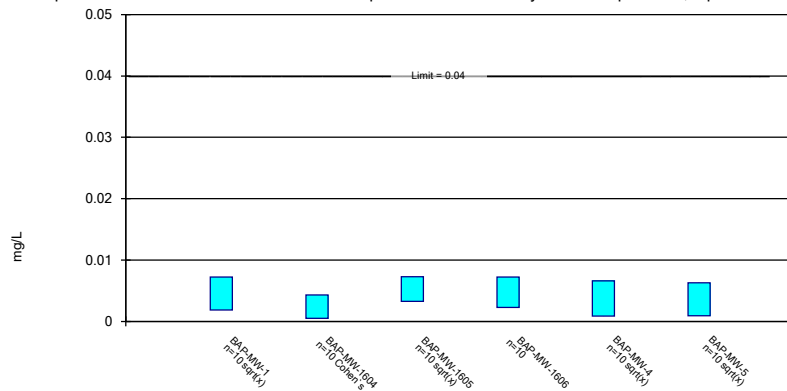
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric Confidence Interval

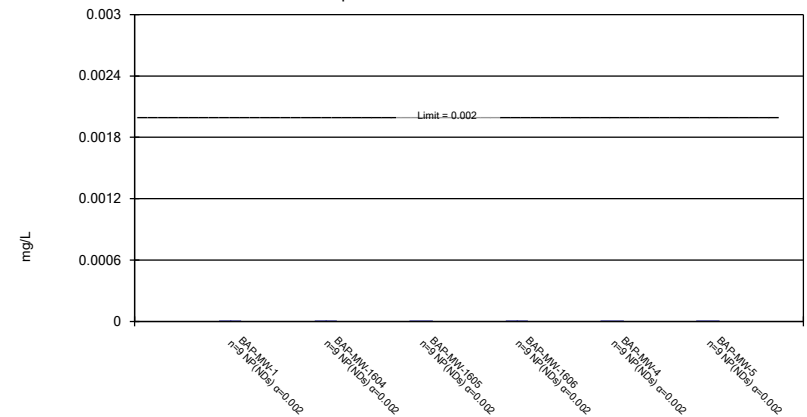
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Non-Parametric Confidence Interval

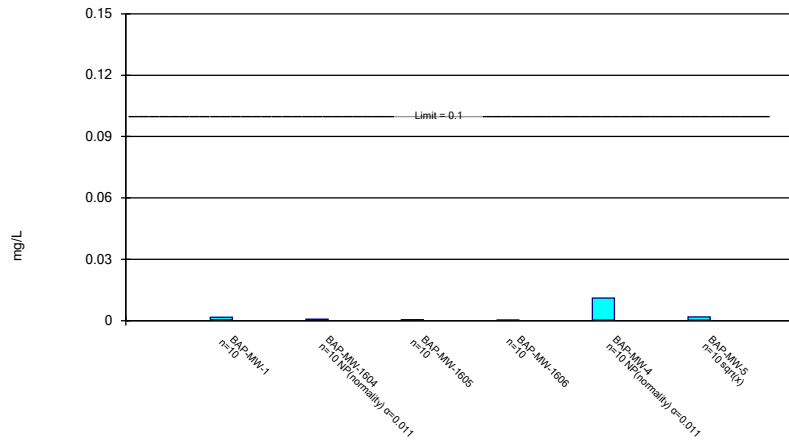
Compliance Limit is not exceeded.



Constituent: Mercury, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric and Non-Parametric (NP) Confidence Interval

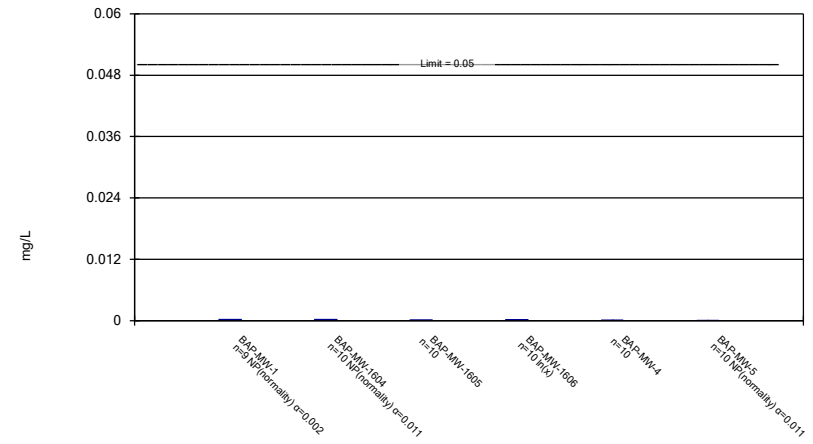
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
 Amos BAP Client: Geosyntec Data: Amos BAP

### Parametric and Non-Parametric (NP) Confidence Interval

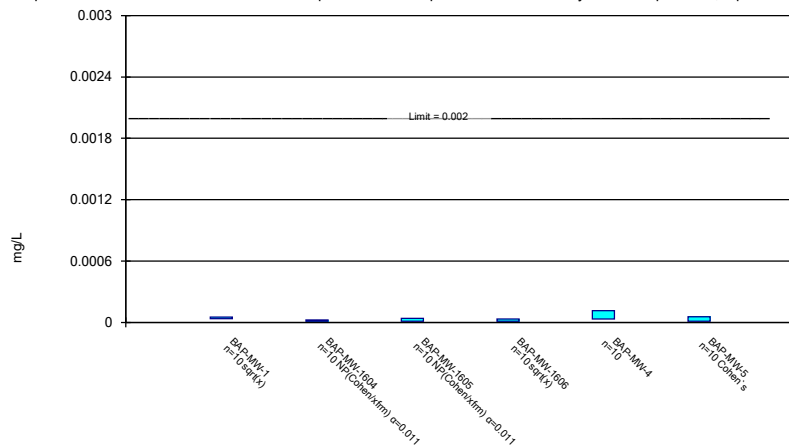
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium, total Analysis Run 10/29/2018 2:08 PM View: UTL's - App IV  
 Amos BAP Client: Geosyntec Data: Amos BAP

### 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: Thallium, total Analysis Run 10/29/2018 2:09 PM View: UTL's - App IV  
 Amos BAP Client: Geosyntec Data: Amos BAP