January 8, 2026

Mr. Mark Bertram
Director Environmental Services
Big Rivers Electric Corporation
710 West 2nd Street
Owensboro, KY 42301

Re: Statistical Evaluation of September 2025 Assessment Monitoring Groundwater Data
D.B. Wilson Station Phase II CCR Landfill in Centertown, KY
Agency Interest ID#: 3319

Dear Mr. Bertram:

This letter presents the results of the statistical evaluation of analytical data from the September 2025 assessment monitoring event performed at the D.B. Wilson Station Phase II Coal Combustion Residual (CCR) Landfill in Centertown, Kentucky in accordance with the requirements of the U.S. Environmental Protection Agency's CCR Final Rule[1] (Title 40 Code of Federal Regulations [CFR] Part 257, Subpart D). This letter also presents a comparison of the September 2025 sampling results to groundwater protection standards (GWPSs). The GWPSs for the groundwater monitoring network were reviewed and updated as part of the statistical evaluation completed for the September 2025 sampling event and are presented in **Table 1**. These GWPSs will continue to be reviewed and updated as additional data are collected. A comparison of the September 2025 data to the updated GWPSs is presented in **Table 2**. The statistical evaluation presented herein was performed in accordance with the *Update to Certification of Statistical Method for Evaluating Groundwater in accordance with 40 CFR § 257.93 at D.B Wilson Station Phase II CC Landfill in Centertown, Kentucky*[2].

In September 2025, the Phase II CCR Landfill Groundwater Monitoring Well Network was sampled for Appendix III and Appendix IV parameters per the requirements of 40 CFR §257.95(d)(1). Interwell prediction limit statistical analyses were performed for these well/constituent pairs and are discussed subsequently. GWPSs were also developed in accordance with 40 CFR §257.95(h), which describes a GWPS as one of the following:

1. The higher value between a statistically calculated background concentration for an analyte;
2. The established maximum concentration limit (MCL); or
3. The GWPS criteria for select Appendix IV parameters without an MCL presented in 40 CFR §257.95(h)(2).

This letter presents the results of the statistical evaluation of the September 2025 assessment monitoring event for inclusion in the Phase II CCR Landfill Operating Record.

Statistical Evaluation of Compliance Monitoring Well Network

A review of the interwell prediction limit evaluation was performed to compare the September 2025 concentrations of Appendix III and Appendix IV parameters observed at CCR downgradient compliance Monitoring Wells MW-5, MW-6, MW-7, and MW-10 to calculated prediction limits (i.e., background limits) that were established using data collected from April of

[1] U.S. Environmental Protection Agency, 2015, *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities*; 40 CFR Parts 257 and 261, April 17th, revised 2025.
[2] Burns & McDonnell, 2022, *Update to Certification of Statistical Method of Evaluating Groundwater in accordance with 40 CFR 257.95(d)(1) at D.B Wilson Station Phase II CCR Landfill in Centertown, Kentucky*, May 25th.

2016 through September of 2025 from upgradient Monitoring Well MW-8. Note, any data qualified as rejected or considered an outlier (statistically or flagged using professional judgment) during the data review were excluded from the statistical analysis. Certain parameters were detected in September 2025 at concentrations above the calculated background limits (equivalent to the MW-8 prediction limits), and a summary is included in **Attachment 1**. This included the following well/constituent pairs for downgradient compliance monitoring wells with statistically significant increases (SSIs) above calculated background limits:

Appendix III Parameters:

- Boron (MW-5, MW-6, MW-7, and MW-10)
- Calcium (MW-5, MW-6, MW-7, and MW-10)
- Chloride (MW-5, MW-6, MW-7, and MW-10)
- Total dissolved solids (TDS) (MW-5, MW-6, MW-7, and MW-10)

Appendix IV Parameters:

- Cobalt (MW-10)
- Lithium (MW-5, MW-6, and MW-7)

Exceedances of background concentrations were consistent with the April 2025 statistical results, and the above-mentioned Appendix III and Appendix IV SSIs continued to occur at the downgradient compliance monitoring wells in the September 2025 statistical analysis.

The Appendix IV constituents with SSIs (cobalt and lithium) were further evaluated to determine whether they are present at statistically significant levels (SSLs) over the GWPSs by calculating the lower confidence limit (LCL) at 95% confidence for each well and constituent using the Baseline, Detection, and Assessment monitoring results collected to date from each monitoring well. For a constituent to be present at an SSL over the GWPS, its LCL must be greater than the GWPS. The comparison of the calculated LCLs with the GWPSs for cobalt and lithium at downgradient compliance Monitoring Wells MW-5, MW-6, MW-7, and MW-10 resulted in the following well/constituent pair(s) with a SSL above the GWPS:

- Cobalt (MW-10)

The LCLs for the remaining well/constituent pairs for cobalt and lithium were either equal to or less than the GWPS; thus, they are not considered SSLs. A summary of the calculated LCLs in comparison with the GWPSs is provided in **Attachment 1**. The cobalt SSL above the GWPS was consistent with the April 2025 SSI at Monitoring Well MW-10, as this SSL was present in groundwater the past five events.

Given that certain Appendix III and IV constituents were observed within the Phase II CCR Landfill groundwater monitoring network at concentrations above their respective calculated background limit and/or the LCL for a certain Appendix IV constituent was greater than the corresponding GWPS, these results do not warrant a transition to detection monitoring per the requirements of 40 CFR §257.95(f) and assessment monitoring will continue for the next first half semiannual monitoring event in 2026.

Sincerely,

Burns & McDonnell Engineering Company, Inc.

Chris Hoglund, PG
Project Manager

Attachments
Tables
Attachment 1 – Sanitas® Statistical Outputs

cc: Diana Merritt, BREC Wilson
Joe Foster, BREC Wilson

Tables

Table 1
Calculated Background and Groundwater Protection Standards for Groundwater
D.B. Wilson Station Phase II CCR Landfill in Centertown, Kentucky

Detection Monitoring Constituents (Appendix III)	Units	2nd Half 2025 Calculated Background[1]	MCL	40 CFR §257.95(h)(2) Criteria	Groundwater Protection Standard (GWPS)
Boron	mg/L	0.0518	--	--	--
Calcium	mg/L	349	--	--	--
pH	SU	4.67 - 6.84	--	--	--
Total Dissolved Solids	mg/L	1750	--	--	--
Chloride	mg/L	5.524	--	--	--
Fluoride	mg/L	1.21	4	--	4
Sulfate	mg/L	2180	--	--	--
Assessment Monitoring Constituents (Appendix IV)	**Units**	**2nd Half 2025 Calculated Background[1]**	**MCL**	**40 CFR §257.95(h)(2) Criteria**	**GWPS**
Antimony	mg/L	0.0025	0.006	--	0.006
Arsenic	mg/L	0.0144	0.01	--	0.0144
Barium	mg/L	0.070	2	--	2
Beryllium	mg/L	0.002	0.004	--	0.004
Cadmium	mg/L	0.0005	0.005	--	0.005
Chromium	mg/L	0.0224	0.1	--	0.1
Cobalt	mg/L	0.009	--	0.006	0.009
Fluoride	mg/L	1.21	4	--	4
Lead[2]	mg/L	0.012	0.01[2]	0.015	0.012
Lithium	mg/L	0.020	--	0.04	0.04
Mercury	mg/L	0.000005	0.002	--	0.002
Molybdenum	mg/L	0.0187	--	0.1	0.1
Combined Radium 226 and 228[3]	pCi/L	2.94	5	--	5
Selenium	mg/L	0.0015	0.05	--	0.05
Thallium	mg/L	0.001	0.002	--	0.002

Notes:

1. Background concentrations were determined utilizing interwell prediction limits (Attachment 1). Upgradient Monitoring Well MW-8 was used to calculate background concentrations. This included background data ranging from April 2016 through September 2025. For pH, background is between those values presented.

2. Lead GWPSs under 40 CFR §257.95 are currently set at 0.015 mg/L, consistent with the existing CCR Rule. However, EPA's *Lead and Copper Rule Improvements* (2024) have established a new enforceable MCL of 0.01 mg/), effective December 2024. Future CCR compliance determinations will be expected to reflect this updated standard and is presented as the MCL for lead in the above table.

3. Combined radium is reported with an uncertainty range. However, this range cannot be incorporated into statistical calculations as it varies per result and is not a standard value. Therefore, to maintain consistency in reporting these results, the reported laboratory concentration was used for the statistical analyses.

CCR - coal combustion residual
CFR - Code of Federal Regulations
EPA - Environmental Protection Agency
MCL - maximum contaminant level
mg/L - milligrams per Liter
pCi/L - picocuries per Liter
SU - standard units

Table 2
Summary of September 2025 Analytical Results
D.B. Wilson Station Phase II CCR Landfill in Centertown, Kentucky

Sample Location: / Sample Date: / Laboratory ID(s): / All analytes excl. Radium/Radium only / Note(s):			2nd Half 2025 Calculated Background[1]	GWPS[2]	MW-5 9/24/2025 5092520-11 Downgradient	MW-6 9/24/2025 5092520-13 Downgradient	MW-7 9/24/2025 5092520-15 Downgradient	MW-8 9/24/2025 5092520-17 Upgradient Well	MW-10 9/24/2025 5092520-19 Downgradient
Analytical Method	**Analyte**	**Unit**			**CCR Compliance Monitoring Well Network**				
Appendix III - Detection Monitoring									
6010B	Boron	mg/L	0.0518	--	**1.30 D1, M2**	**1.55 D1**	**3.28 D1**	0.10 U	**0.42**
6010B	Calcium	mg/L	349	--	**704 D1, M3**	**525 D1**	**429 D1**	255 D1	**481 D1**
In Situ	pH	SU	4.67 - 6.84	--	6.24	6.27	6.31	6.32	5.91
2540 C-2015	Total Dissolved Solids	mg/L	1750	--	**4670**	**2600**	**2720**	1540	**2950**
300.0 REV 2.1	Chloride	mg/L	5.524	--	**470 D**	**83.7**	**158 D**	3.5	**82.4**
300.0 REV 2.1	Fluoride	mg/L	1.21	4	0.20 U	0.20	0.24	0.26	0.20 U
300.0 REV 2.1	Sulfate	mg/L	2180	--	1930 D	1660 D	1190 D	812 D	2150 D
Appendix IV - Assessment Monitoring									
6020A	Antimony	mg/L	0.0025	0.006	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
6020A	Arsenic	mg/L	0.0144	0.0144	0.0030	0.0056	0.0037	0.0053	0.0043
6020A	Barium	mg/L	0.070	2	0.012	0.012	0.012	0.019	0.010
6020A	Beryllium	mg/L	0.002	0.004	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
6020A	Cadmium	mg/L	0.0005	0.005	0.0010 U	0.0001 J	0.0010 U	0.0010 U	0.0010 U
6020A	Chromium	mg/L	0.0224	0.1	0.0020 L1, U	0.0020 L1, U	0.0006 L1, J	0.0008 L1, J	0.0020 L1, U
6020A	Cobalt	mg/L	0.009	0.009	0.004 L1, U	0.008	0.004 L1, U	0.004 L1, U	**0.089**
300.0 REV 2.1	Fluoride	mg/L	1.21	4	0.20 U	0.20	0.24	0.26	0.20 U
6020A	Lead	mg/L	0.012	0.012	0.002 U	0.00090 J	0.002 U	0.002 U	0.002 U
6020A	Lithium	mg/L	0.020	0.04	**0.05**	0.04	**0.03**	0.01 J	0.007 J
245.7 REV 2	Mercury	mg/L	0.000005	0.002	0.000005 U	0.000005 U	0.000005 U	0.000005 U	0.000005 U
6020A	Molybdenum	mg/L	0.0187	0.1	0.004 L1, J	0.006 L1, J	0.004 L1, J	0.01	0.01 L1, U
903.1/904.0	Combined Radium 226 and 228[3]	pCi/L	2.94	5	1.35	1.32	1.80	2.38	1.33
6020A	Selenium	mg/L	0.0015	0.05	0.001 J	0.003 U	0.003 U	0.003 U	0.003 U
6020A	Thallium	mg/L	0.001	0.002	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U

Notes

1 - Background concentrations were determined utilizing interwell prediction limits. Upgradient Monitoring Well MW-8 was used to determine these background concentrations. This included data ranging from April 2016 through September 2025. For pH, background is between those values presented.

2 - GWPSs were developed in accordance with Title 40 Code of Federal Regulations §257.95(h).

3 - Combined radium is reported with an associated uncertainty range. However, this range cannot be incorporated into statistical calculations as it varies per result and is not a standard value. Therefore, to maintain consistency in reporting these results, the reported laboratory concentration was used for the statistical analyses.

Bold - Analyte detected above calculated background concentration.

Analyte was detected in downgradient compliance monitoring well at a statistically significant level above its GWPS (see Confidence Interval statistical output in Attachment 1).

CCR - coal combustion residual

D - Results reported from dilution.

D1 - Sample required dilution due to high concentration of target analyte.

GWPS - groundwater protection standard

J - estimated concentration

L1 = The associated blank spike recovery was above method acceptance limits.

M2 - Matrix spike recovery was low; the method control sample recovery was acceptable.

M3 - The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.

mg/L - milligram per Liter

pCi/L - picocurie per Liter

SU - standard unit

U - non-detect

Attachment 1 – Sanitas® Statistical Outputs

Prediction Limit

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile Printed 11/13/2025, 8:57 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	MW-5	0.0025	n/a	9/24/2025	0.0025ND	No	25	68	n/a	0.03643	NP Inter (NDs)
Antimony (mg/L)	MW-6	0.0025	n/a	9/24/2025	0.0025ND	No	25	68	n/a	0.03643	NP Inter (NDs)
Antimony (mg/L)	MW-7	0.0025	n/a	9/24/2025	0.0025ND	No	25	68	n/a	0.03643	NP Inter (NDs)
Antimony (mg/L)	MW-10	0.0025	n/a	9/24/2025	0.0025ND	No	25	68	n/a	0.03643	NP Inter (NDs)
Arsenic (ug/L)	MW-5	14.4	n/a	9/24/2025	3	No	25	0	n/a	0.03643	NP Inter (normality)
Arsenic (ug/L)	MW-6	14.4	n/a	9/24/2025	5.6	No	25	0	n/a	0.03643	NP Inter (normality)
Arsenic (ug/L)	MW-7	14.4	n/a	9/24/2025	3.7	No	25	0	n/a	0.03643	NP Inter (normality)
Arsenic (ug/L)	MW-10	14.4	n/a	9/24/2025	4.3	No	25	0	n/a	0.03643	NP Inter (normality)
Barium (ug/L)	MW-5	70	n/a	9/24/2025	12	No	24	0	n/a	0.0378	NP Inter (normality)
Barium (ug/L)	MW-6	70	n/a	9/24/2025	12	No	24	0	n/a	0.0378	NP Inter (normality)
Barium (ug/L)	MW-7	70	n/a	9/24/2025	12	No	24	0	n/a	0.0378	NP Inter (normality)
Barium (ug/L)	MW-10	70	n/a	9/24/2025	10	No	24	0	n/a	0.0378	NP Inter (normality)
Beryllium (ug/L)	MW-5	2	n/a	9/24/2025	1ND	No	24	100	n/a	0.0378	NP Inter (NDs)
Beryllium (ug/L)	MW-6	2	n/a	9/24/2025	1ND	No	24	100	n/a	0.0378	NP Inter (NDs)
Beryllium (ug/L)	MW-7	2	n/a	9/24/2025	1ND	No	24	100	n/a	0.0378	NP Inter (NDs)
Beryllium (ug/L)	MW-10	2	n/a	9/24/2025	1ND	No	24	100	n/a	0.0378	NP Inter (NDs)
Boron (ug/L)	**MW-5**	**51.8**	**n/a**	**9/24/2025**	**1300**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Boron (ug/L)	**MW-6**	**51.8**	**n/a**	**9/24/2025**	**1550**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Boron (ug/L)	**MW-7**	**51.8**	**n/a**	**9/24/2025**	**3280**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Boron (ug/L)	**MW-10**	**51.8**	**n/a**	**9/24/2025**	**420**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Cadmium (ug/L)	MW-5	0.5	n/a	9/24/2025	0.5ND	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Cadmium (ug/L)	MW-6	0.5	n/a	9/24/2025	0.1J	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Cadmium (ug/L)	MW-7	0.5	n/a	9/24/2025	0.5ND	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Cadmium (ug/L)	MW-10	0.5	n/a	9/24/2025	0.5ND	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Calcium (ug/L)	**MW-5**	**349000**	**n/a**	**9/24/2025**	**704000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Calcium (ug/L)	**MW-6**	**349000**	**n/a**	**9/24/2025**	**525000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Calcium (ug/L)	**MW-7**	**349000**	**n/a**	**9/24/2025**	**429000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Calcium (ug/L)	**MW-10**	**349000**	**n/a**	**9/24/2025**	**481000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Chloride (mg/L)	**MW-5**	**5.524**	**n/a**	**9/24/2025**	**470**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Chloride (mg/L)	**MW-6**	**5.524**	**n/a**	**9/24/2025**	**83.7**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Chloride (mg/L)	**MW-7**	**5.524**	**n/a**	**9/24/2025**	**158**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Chloride (mg/L)	**MW-10**	**5.524**	**n/a**	**9/24/2025**	**82.4**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Chromium (ug/L)	MW-5	22.4	n/a	9/24/2025	0.3ND	No	25	28	n/a	0.03643	NP Inter (normality)
Chromium (ug/L)	MW-6	22.4	n/a	9/24/2025	0.3ND	No	25	28	n/a	0.03643	NP Inter (normality)
Chromium (ug/L)	MW-7	22.4	n/a	9/24/2025	0.6J	No	25	28	n/a	0.03643	NP Inter (normality)
Chromium (ug/L)	MW-10	22.4	n/a	9/24/2025	0.3ND	No	25	28	n/a	0.03643	NP Inter (normality)
Cobalt (ug/L)	MW-5	9	n/a	9/24/2025	2ND	No	24	54.17	n/a	0.0378	NP Inter (NDs)
Cobalt (ug/L)	MW-6	9	n/a	9/24/2025	8	No	24	54.17	n/a	0.0378	NP Inter (NDs)
Cobalt (ug/L)	MW-7	9	n/a	9/24/2025	2ND	No	24	54.17	n/a	0.0378	NP Inter (NDs)
Cobalt (ug/L)	**MW-10**	**9**	**n/a**	**9/24/2025**	**89**	**Yes**	**24**	**54.17**	**n/a**	**0.0378**	**NP Inter (NDs)**
Fluoride (mg/L)	MW-5	1.21	n/a	9/24/2025	1ND	No	26	7.692	n/a	0.03514	NP Inter (normality)
Fluoride (mg/L)	MW-6	1.21	n/a	9/24/2025	0.2	No	26	7.692	n/a	0.03514	NP Inter (normality)
Fluoride (mg/L)	MW-7	1.21	n/a	9/24/2025	0.24	No	26	7.692	n/a	0.03514	NP Inter (normality)
Fluoride (mg/L)	MW-10	1.21	n/a	9/24/2025	1ND	No	26	7.692	n/a	0.03514	NP Inter (normality)
Lead (ug/L)	MW-5	12	n/a	9/24/2025	1ND	No	25	64	n/a	0.03643	NP Inter (NDs)
Lead (ug/L)	MW-6	12	n/a	9/24/2025	0.9J	No	25	64	n/a	0.03643	NP Inter (NDs)
Lead (ug/L)	MW-7	12	n/a	9/24/2025	1ND	No	25	64	n/a	0.03643	NP Inter (NDs)
Lead (ug/L)	MW-10	12	n/a	9/24/2025	1ND	No	25	64	n/a	0.03643	NP Inter (NDs)
Lithium (ug/L)	**MW-5**	**20**	**n/a**	**9/24/2025**	**50**	**Yes**	**25**	**16**	**n/a**	**0.03643**	**NP Inter (normality)**
Lithium (ug/L)	**MW-6**	**20**	**n/a**	**9/24/2025**	**40**	**Yes**	**25**	**16**	**n/a**	**0.03643**	**NP Inter (normality)**

Prediction Limit

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile Printed 11/13/2025, 8:57 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Lithium (ug/L)	**MW-7**	**20**	**n/a**	**9/24/2025**	**30**	**Yes**	**25**	**16**	**n/a**	**0.03643**	**NP Inter (normality)**
Lithium (ug/L)	MW-10	20	n/a	9/24/2025	7J	No	25	16	n/a	0.03643	NP Inter (normality)
Mercury (ug/L)	MW-5	0.005	n/a	9/24/2025	0.0025ND	No	23	100	n/a	0.03929	NP Inter (NDs)
Mercury (ug/L)	MW-6	0.005	n/a	9/24/2025	0.0025ND	No	23	100	n/a	0.03929	NP Inter (NDs)
Mercury (ug/L)	MW-7	0.005	n/a	9/24/2025	0.0025ND	No	23	100	n/a	0.03929	NP Inter (NDs)
Mercury (ug/L)	MW-10	0.005	n/a	9/24/2025	0.0025ND	No	23	100	n/a	0.03929	NP Inter (NDs)
Molybdenum (ug/L)	MW-5	18.7	n/a	9/24/2025	4J	No	25	0	n/a	0.03643	NP Inter (normality)
Molybdenum (ug/L)	MW-6	18.7	n/a	9/24/2025	6J	No	25	0	n/a	0.03643	NP Inter (normality)
Molybdenum (ug/L)	MW-7	18.7	n/a	9/24/2025	4J	No	25	0	n/a	0.03643	NP Inter (normality)
Molybdenum (ug/L)	MW-10	18.7	n/a	9/24/2025	5ND	No	25	0	n/a	0.03643	NP Inter (normality)
pH (SU)	MW-5	6.84	4.67	9/24/2025	6.24	No	25	0	n/a	0.07285	NP Inter (normality)
pH (SU)	MW-6	6.84	4.67	9/24/2025	6.27	No	25	0	n/a	0.07285	NP Inter (normality)
pH (SU)	MW-7	6.84	4.67	9/24/2025	6.31	No	25	0	n/a	0.07285	NP Inter (normality)
pH (SU)	MW-10	6.84	4.67	9/24/2025	5.91	No	25	0	n/a	0.07285	NP Inter (normality)
Radium 226 + 228 (pCi/L)	MW-5	2.94	n/a	9/24/2025	1.35	No	23	0	n/a	0.03929	NP Inter (normality)
Radium 226 + 228 (pCi/L)	MW-6	2.94	n/a	9/24/2025	1.32	No	23	0	n/a	0.03929	NP Inter (normality)
Radium 226 + 228 (pCi/L)	MW-7	2.94	n/a	9/24/2025	1.8	No	23	0	n/a	0.03929	NP Inter (normality)
Radium 226 + 228 (pCi/L)	MW-10	2.94	n/a	9/24/2025	1.33	No	23	0	n/a	0.03929	NP Inter (normality)
Selenium (ug/L)	MW-5	1.5	n/a	9/24/2025	1J	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Selenium (ug/L)	MW-6	1.5	n/a	9/24/2025	1.5ND	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Selenium (ug/L)	MW-7	1.5	n/a	9/24/2025	1.5ND	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Selenium (ug/L)	MW-10	1.5	n/a	9/24/2025	1.5ND	No	24	91.67	n/a	0.0378	NP Inter (NDs)
Sulfate (mg/L)	MW-5	2180	n/a	9/24/2025	1930	No	26	0	n/a	0.03514	NP Inter (normality)
Sulfate (mg/L)	MW-6	2180	n/a	9/24/2025	1660	No	26	0	n/a	0.03514	NP Inter (normality)
Sulfate (mg/L)	MW-7	2180	n/a	9/24/2025	1190	No	26	0	n/a	0.03514	NP Inter (normality)
Sulfate (mg/L)	MW-10	2180	n/a	9/24/2025	2150	No	26	0	n/a	0.03514	NP Inter (normality)
Thallium (ug/L)	MW-5	1	n/a	9/24/2025	1ND	No	25	88	n/a	0.03643	NP Inter (NDs)
Thallium (ug/L)	MW-6	1	n/a	9/24/2025	1ND	No	25	88	n/a	0.03643	NP Inter (NDs)
Thallium (ug/L)	MW-7	1	n/a	9/24/2025	1ND	No	25	88	n/a	0.03643	NP Inter (NDs)
Thallium (ug/L)	MW-10	1	n/a	9/24/2025	1ND	No	25	88	n/a	0.03643	NP Inter (NDs)
Total Dissolved Solids (mg/L)	**MW-5**	**1750**	**n/a**	**9/24/2025**	**4670**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Total Dissolved Solids (mg/L)	**MW-6**	**1750**	**n/a**	**9/24/2025**	**2600**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Total Dissolved Solids (mg/L)	**MW-7**	**1750**	**n/a**	**9/24/2025**	**2720**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Total Dissolved Solids (mg/L)	**MW-10**	**1750**	**n/a**	**9/24/2025**	**2950**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**

Prediction Limit

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile Printed 11/13/2025, 8:57 AM

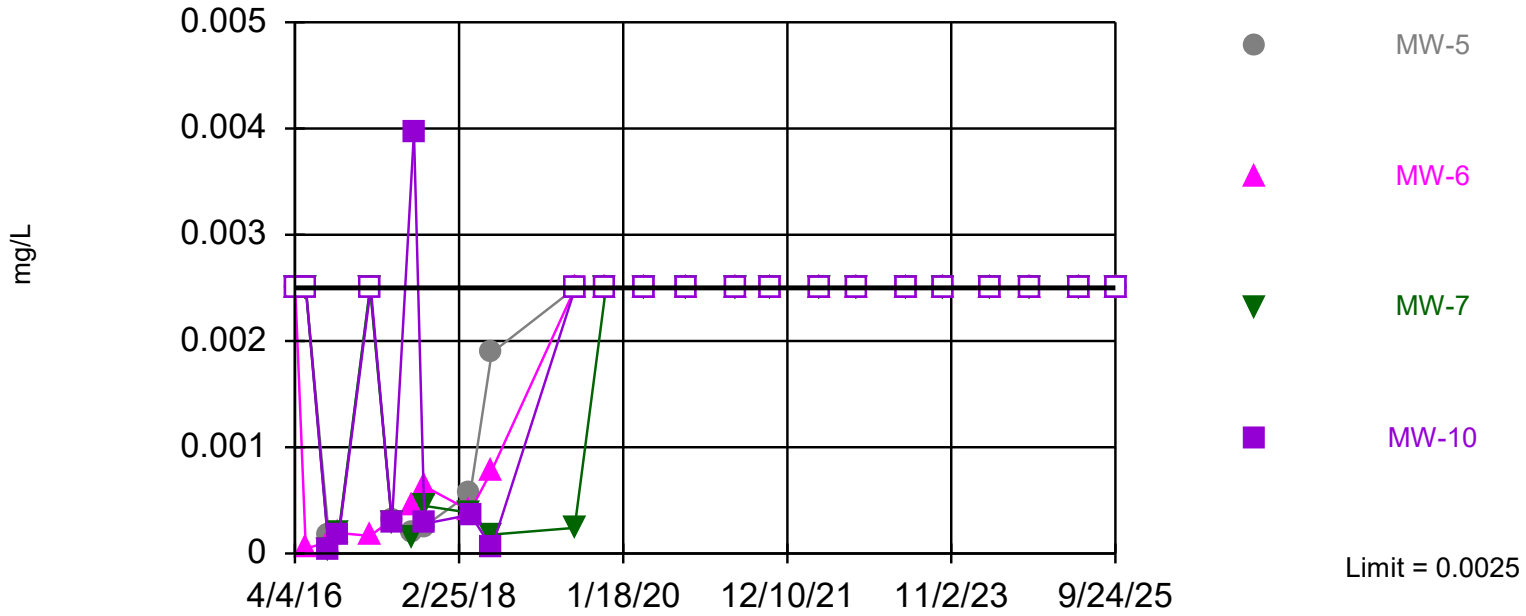
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (ug/L)	**MW-5**	**51.8**	**n/a**	**9/24/2025**	**1300**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Boron (ug/L)	**MW-6**	**51.8**	**n/a**	**9/24/2025**	**1550**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Boron (ug/L)	**MW-7**	**51.8**	**n/a**	**9/24/2025**	**3280**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Boron (ug/L)	**MW-10**	**51.8**	**n/a**	**9/24/2025**	**420**	**Yes**	**26**	**57.69**	**n/a**	**0.03514**	**NP Inter (NDs)**
Calcium (ug/L)	**MW-5**	**349000**	**n/a**	**9/24/2025**	**704000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Calcium (ug/L)	**MW-6**	**349000**	**n/a**	**9/24/2025**	**525000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Calcium (ug/L)	**MW-7**	**349000**	**n/a**	**9/24/2025**	**429000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Calcium (ug/L)	**MW-10**	**349000**	**n/a**	**9/24/2025**	**481000**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Chloride (mg/L)	**MW-5**	**5.524**	**n/a**	**9/24/2025**	**470**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Chloride (mg/L)	**MW-6**	**5.524**	**n/a**	**9/24/2025**	**83.7**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Chloride (mg/L)	**MW-7**	**5.524**	**n/a**	**9/24/2025**	**158**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Chloride (mg/L)	**MW-10**	**5.524**	**n/a**	**9/24/2025**	**82.4**	**Yes**	**26**	**0**	**No**	**0.01**	**Param Inter**
Cobalt (ug/L)	**MW-10**	**9**	**n/a**	**9/24/2025**	**89**	**Yes**	**24**	**54.17**	**n/a**	**0.0378**	**NP Inter (NDs)**
Lithium (ug/L)	**MW-5**	**20**	**n/a**	**9/24/2025**	**50**	**Yes**	**25**	**16**	**n/a**	**0.03643**	**NP Inter (normality)**
Lithium (ug/L)	**MW-6**	**20**	**n/a**	**9/24/2025**	**40**	**Yes**	**25**	**16**	**n/a**	**0.03643**	**NP Inter (normality)**
Lithium (ug/L)	**MW-7**	**20**	**n/a**	**9/24/2025**	**30**	**Yes**	**25**	**16**	**n/a**	**0.03643**	**NP Inter (normality)**
Total Dissolved Solids (mg/L)	**MW-5**	**1750**	**n/a**	**9/24/2025**	**4670**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Total Dissolved Solids (mg/L)	**MW-6**	**1750**	**n/a**	**9/24/2025**	**2600**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Total Dissolved Solids (mg/L)	**MW-7**	**1750**	**n/a**	**9/24/2025**	**2720**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**
Total Dissolved Solids (mg/L)	**MW-10**	**1750**	**n/a**	**9/24/2025**	**2950**	**Yes**	**26**	**0**	**n/a**	**0.03514**	**NP Inter (normality)**

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 68% NDs. Report alpha = 0.1379. Individual comparison alpha = 0.03643. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Antimony Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

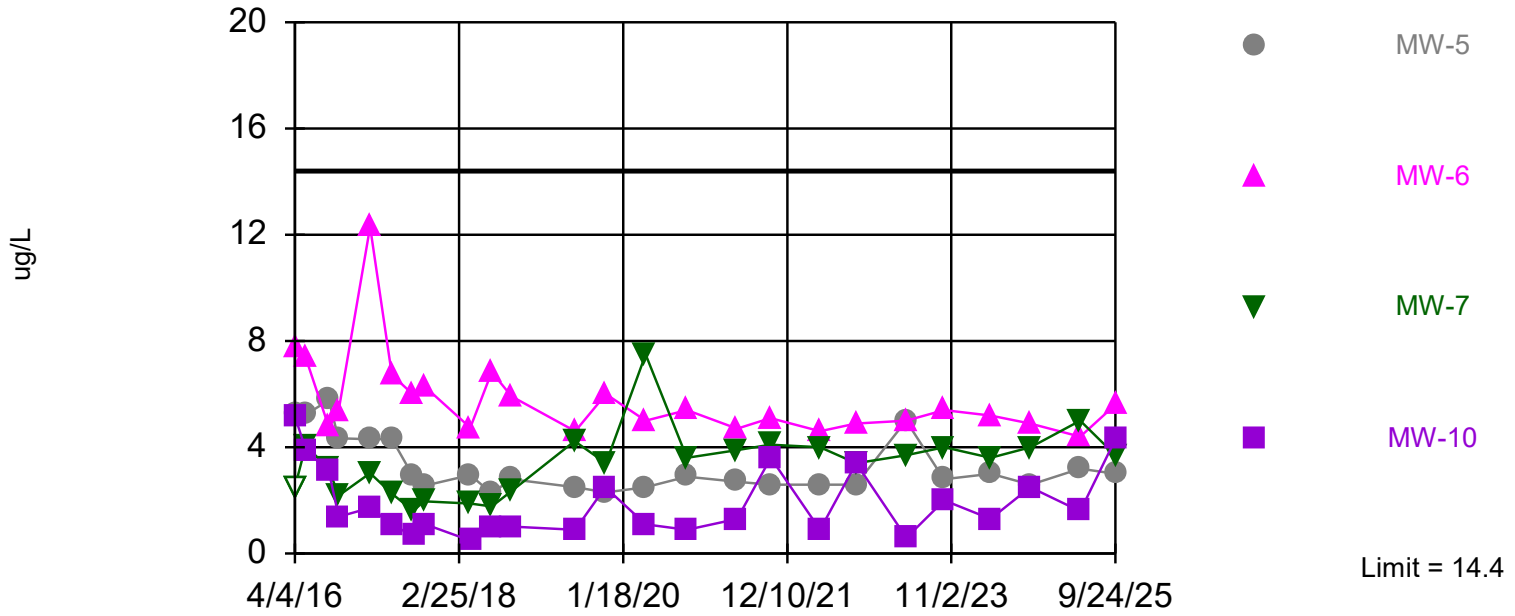
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

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 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.1379. Individual comparison alpha = 0.03643. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

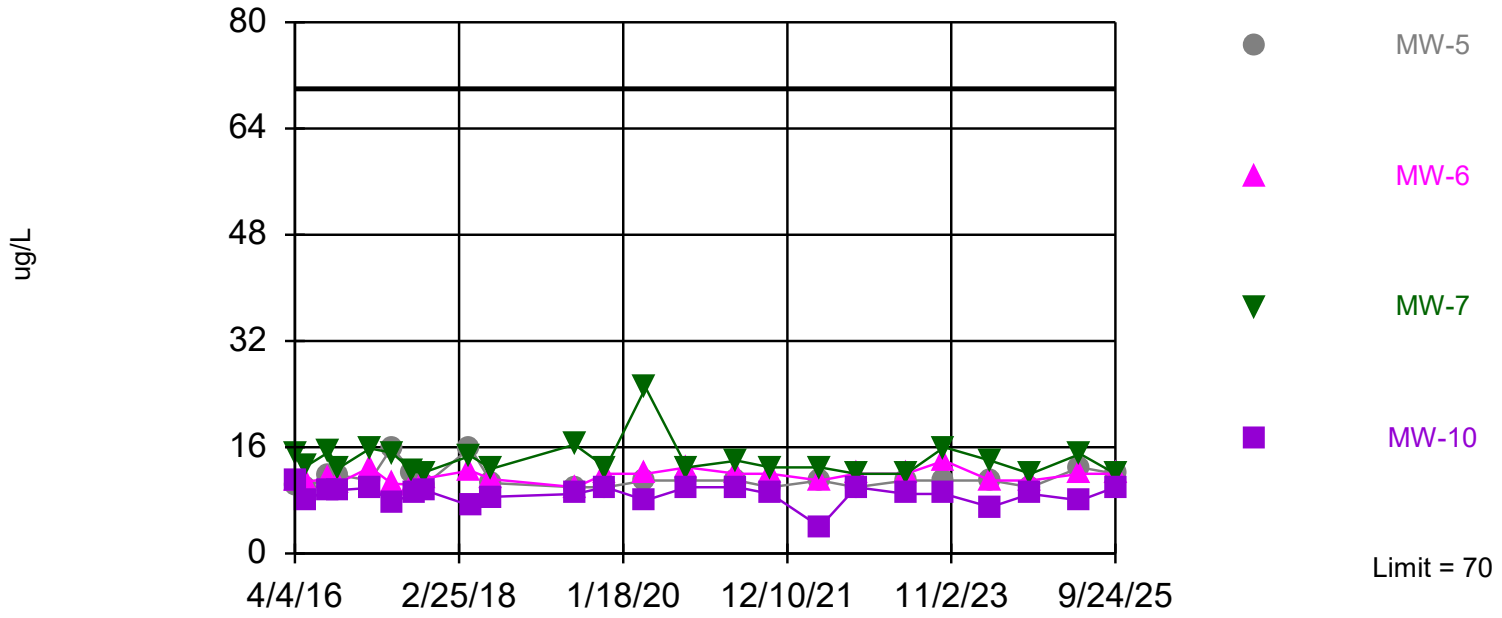
Constituent: Arsenic Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

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 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.1429. Individual comparison alpha = 0.0378. Most recent point for each compliance well compared to limit. After outlier removal distribution was non-normal, so outlier results were invalidated. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Barium Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

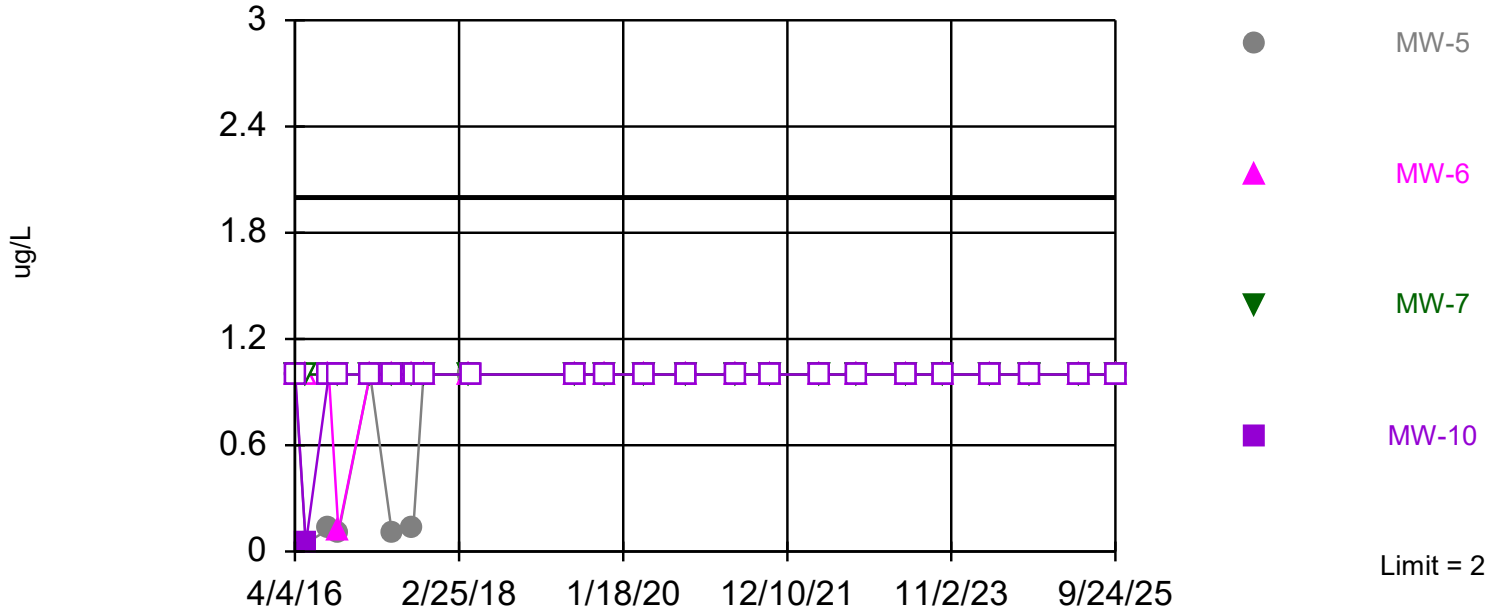
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 24) were censored; limit is most recent reporting limit. Report alpha = 0.1429. Individual comparison alpha = 0.0378. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Beryllium Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

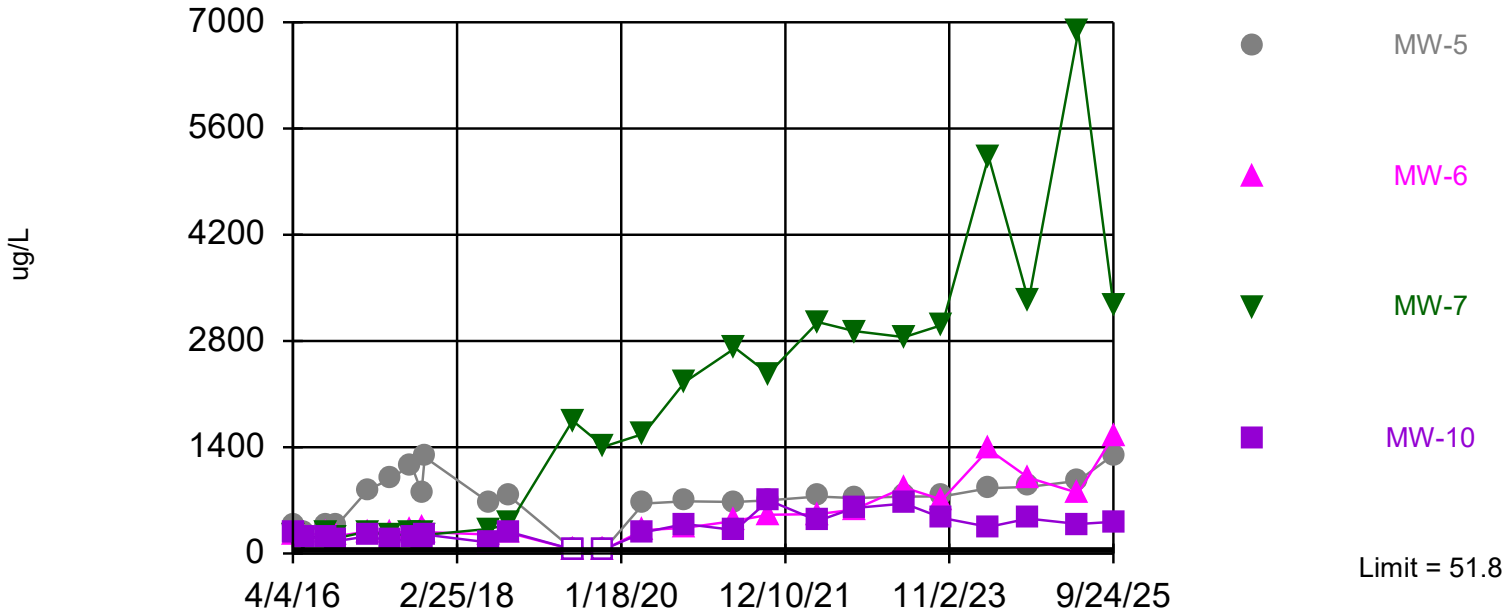
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Exceeds Limit: MW-5, MW-6, MW-7, MW-10

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 57.69% NDs. Report alpha = 0.1333. Individual comparison alpha = 0.03514. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Boron Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

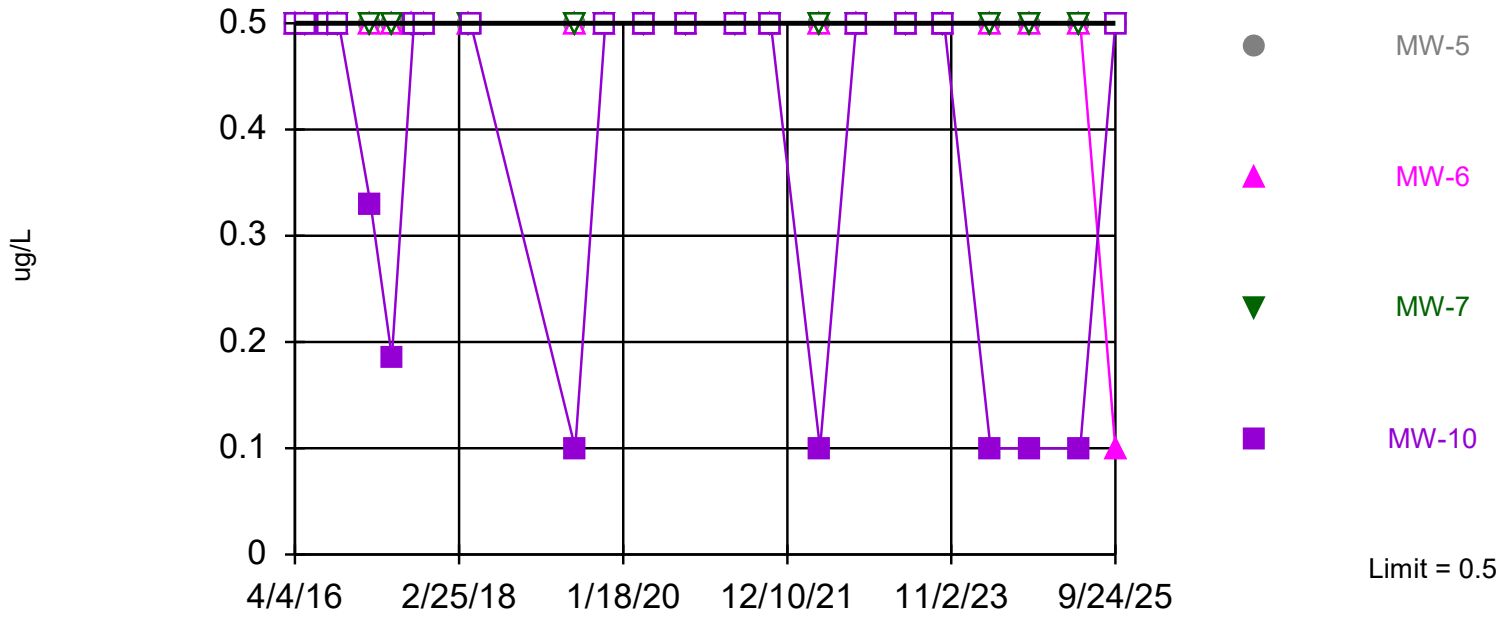
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 91.67% NDs. Report alpha = 0.1429. Individual comparison alpha = 0.0378. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

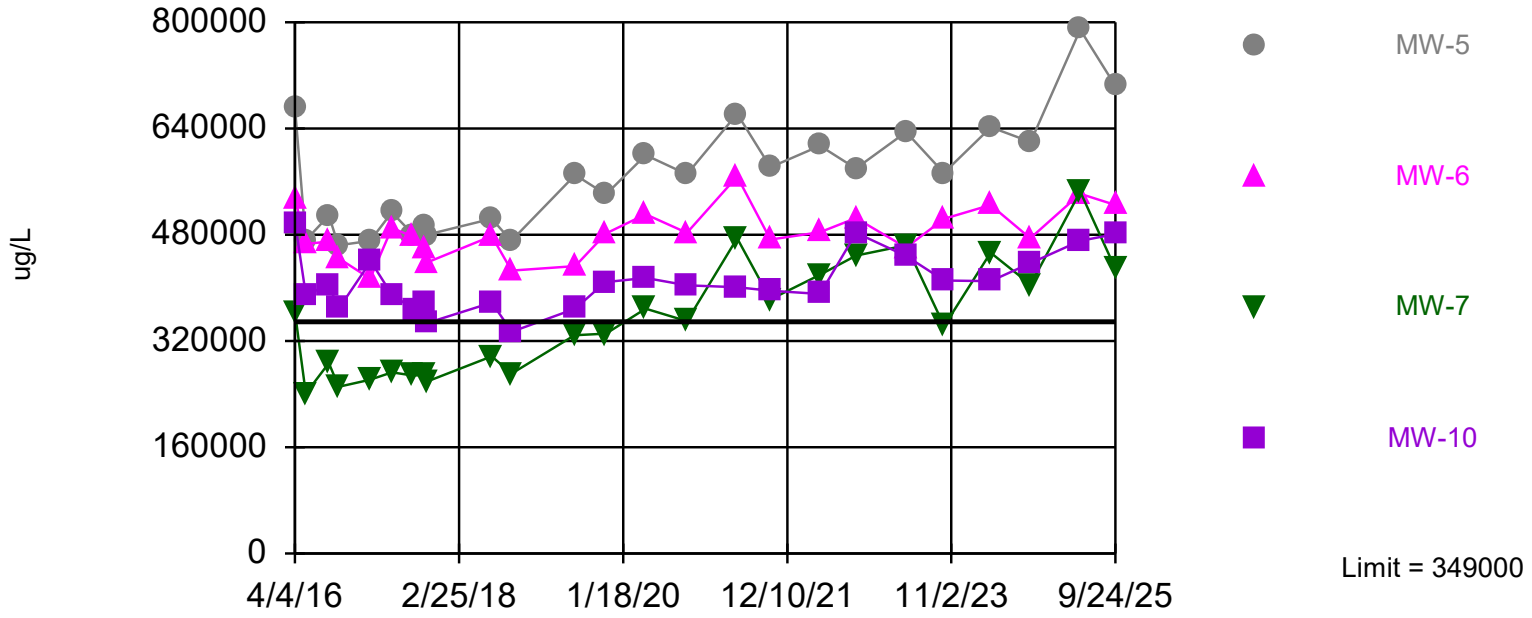
Constituent: Cadmium Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Exceeds Limit: MW-5, MW-6, MW-7, MW-10

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 0.05 alpha level. Limit is highest of 26 background values. Report alpha = 0.1333. Individual comparison alpha = 0.03514. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

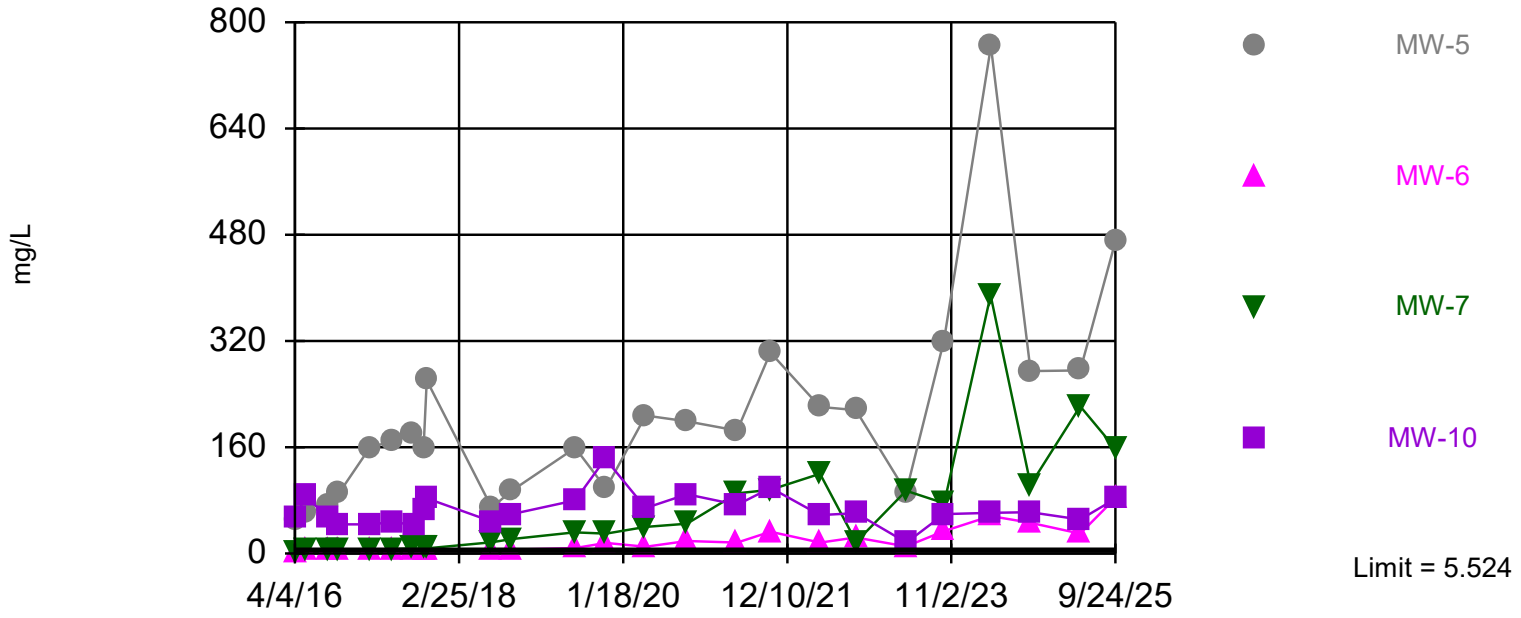
Constituent: Calcium Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Exceeds Limit: MW-5, MW-6, MW-7, MW-10

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=4.203, Std. Dev.=0.5215, n=26. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9292, critical = 0.92. Report alpha = 0.0394. Individual comparison alpha = 0.01. Most recent point for each compliance well compared to limit. EPA 1989 outlier screening was performed on the background data. No background outliers were found.

Constituent: Chloride Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

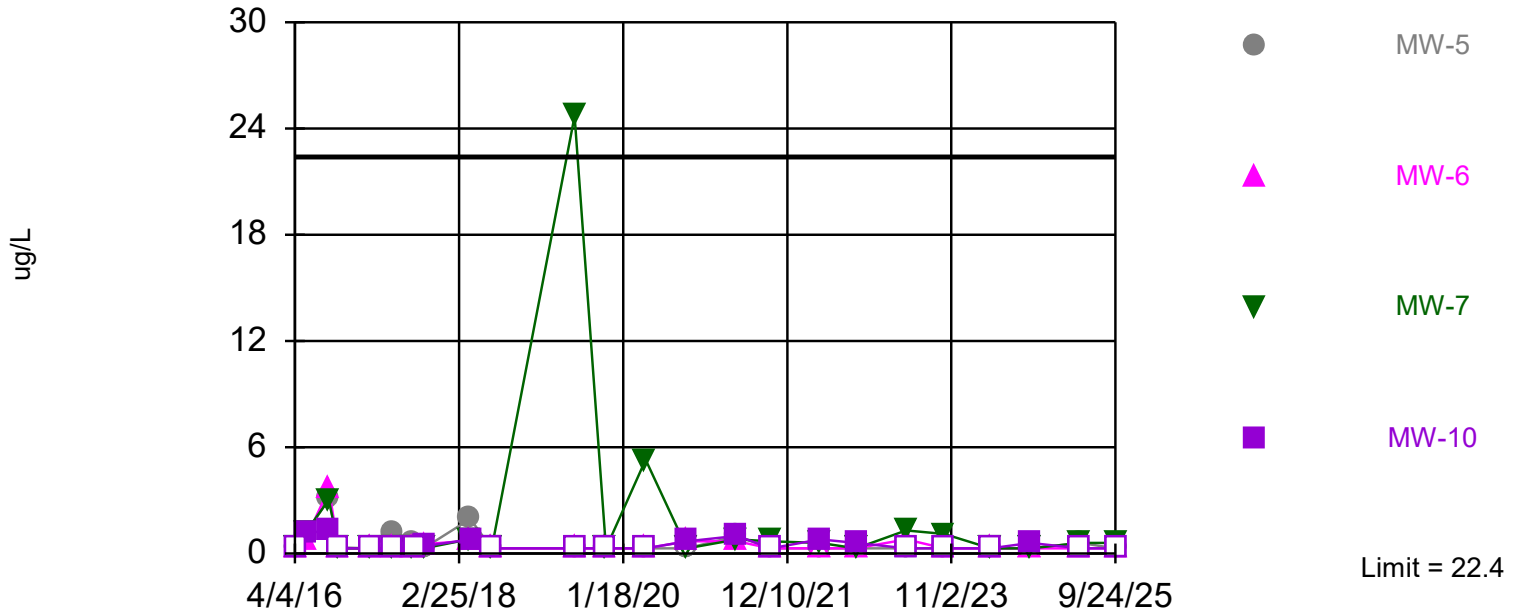
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

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 0.05 alpha level. Limit is highest of 25 background values. 28% NDs. Report alpha = 0.1379. Individual comparison alpha = 0.03643. Most recent point for each compliance well compared to limit. After outlier removal distribution was non-normal, so outlier results were invalidated. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Chromium Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

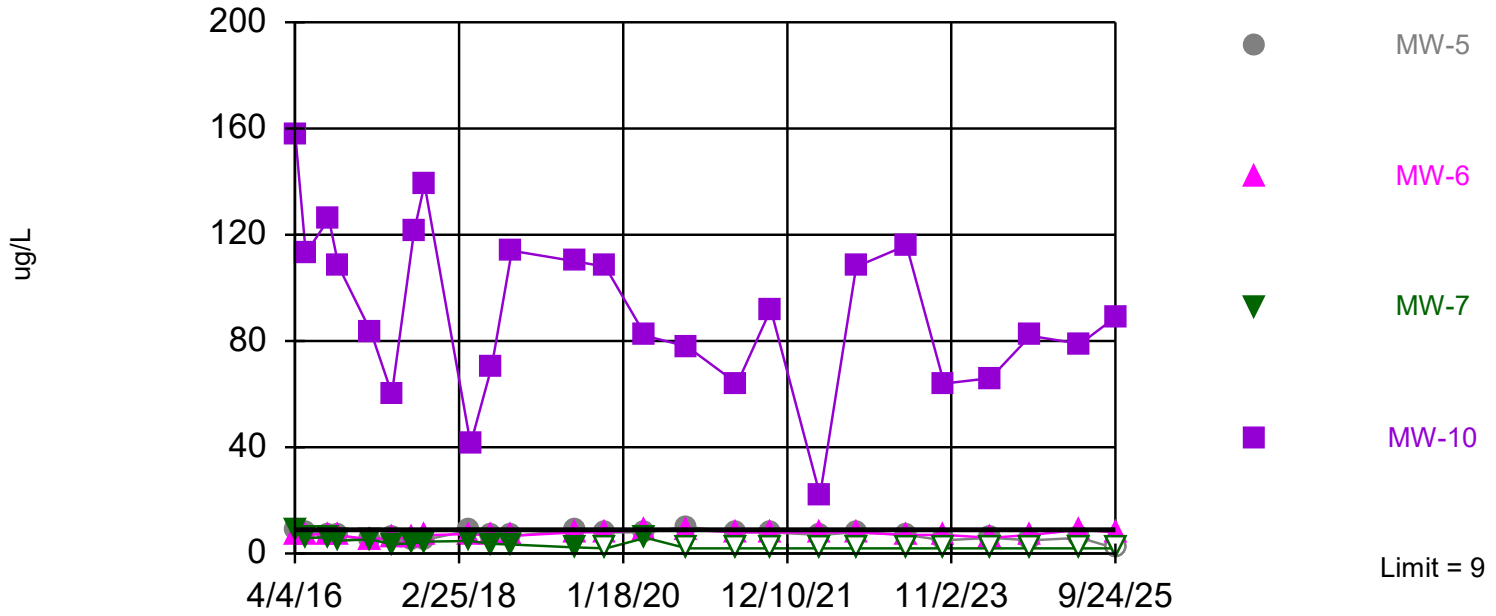
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Exceeds Limit: MW-10

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 54.17% NDs. Report alpha = 0.1429. Individual comparison alpha = 0.0378. Most recent point for each compliance well compared to limit. After outlier removal distribution was non-normal, so outlier results were invalidated. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Cobalt Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

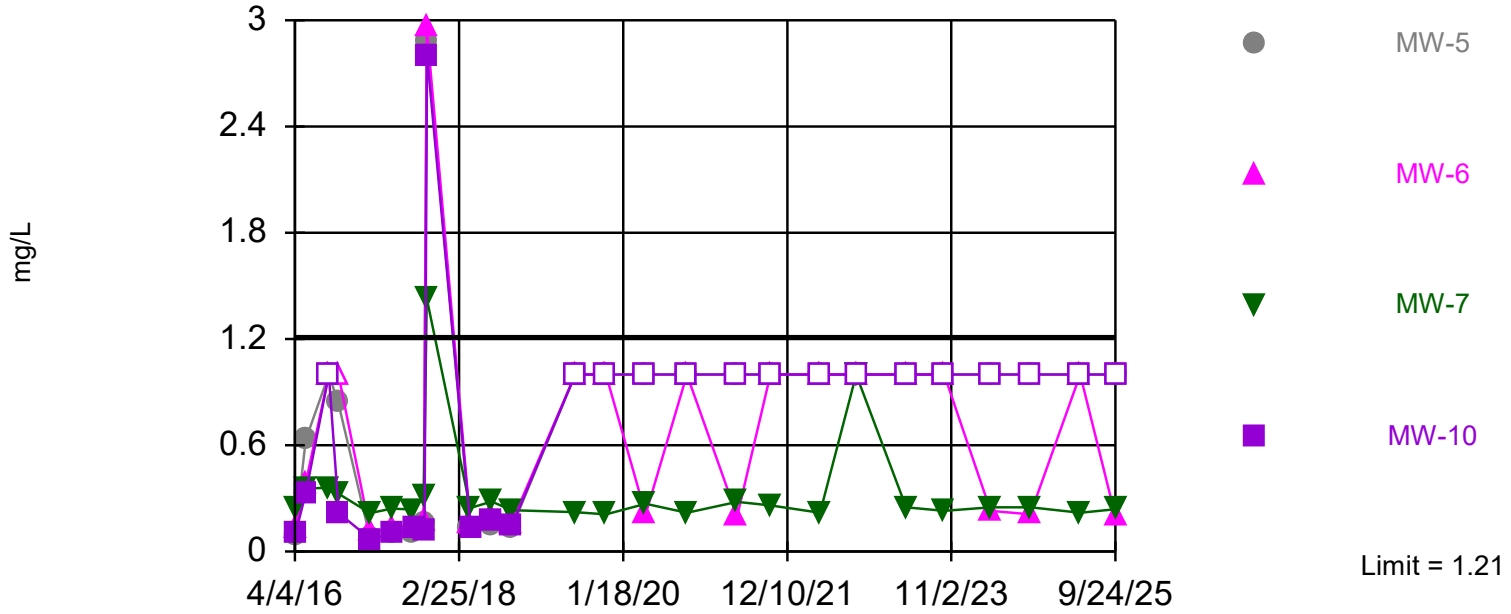
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

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 0.05 alpha level. Limit is highest of 26 background values. 7.692% NDs. Report alpha = 0.1333. Individual comparison alpha = 0.03514. Most recent point for each compliance well compared to limit. After outlier removal distribution was non-normal, so outlier results were invalidated. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Fluoride Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

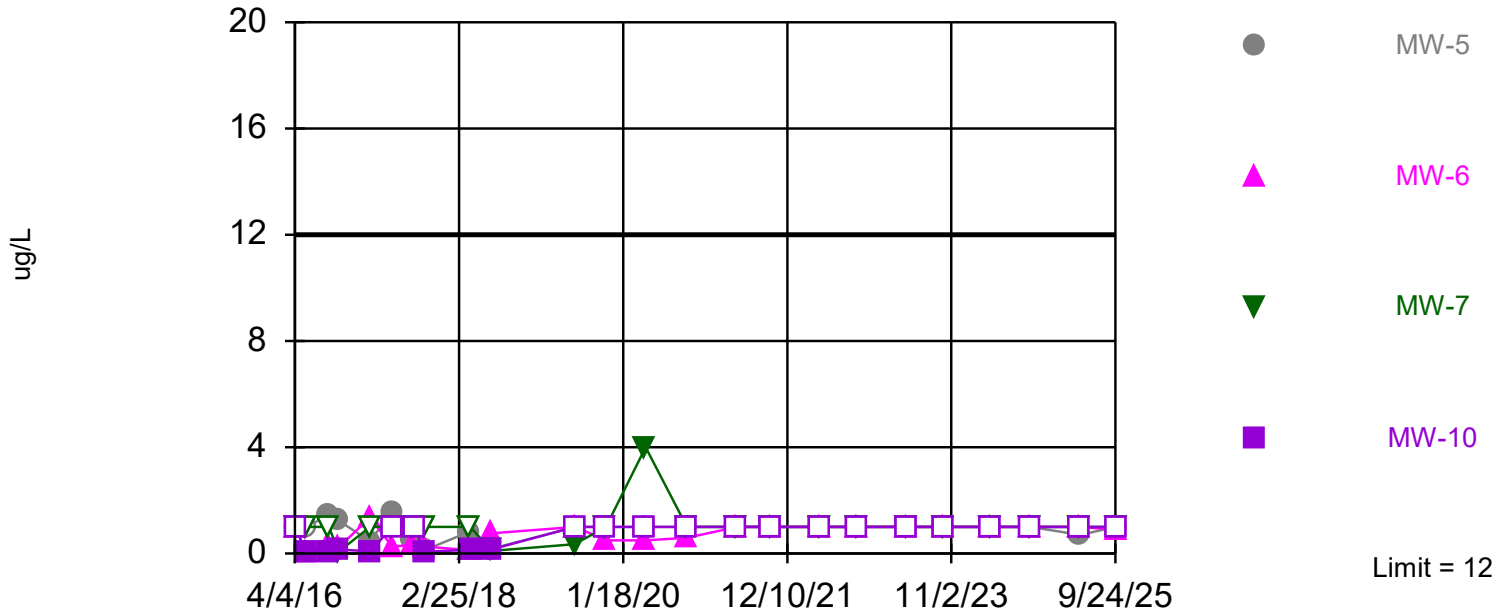
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 64% NDs. Report alpha = 0.1379. Individual comparison alpha = 0.03643. Most recent point for each compliance well compared to limit. After outlier removal distribution was non-normal, so outlier results were invalidated. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Lead Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

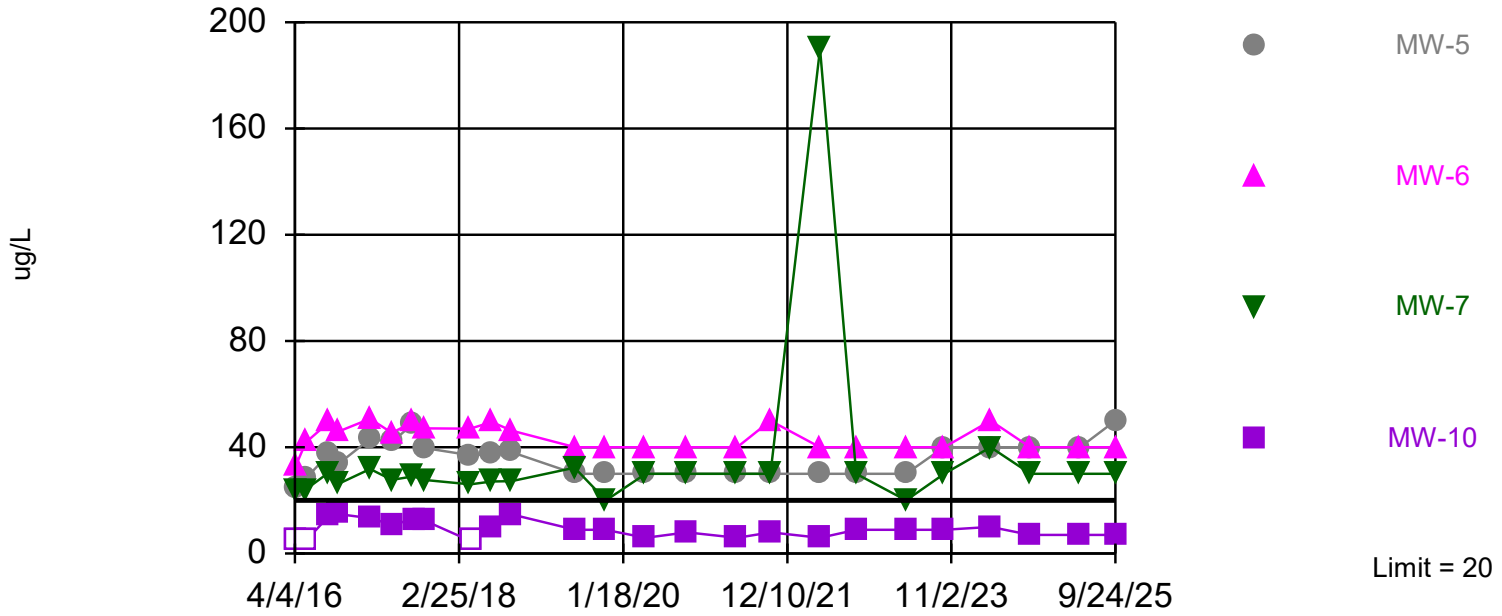
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Exceeds Limit: MW-5, MW-6, MW-7

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 0.05 alpha level. Limit is highest of 25 background values. 16% NDs. Report alpha = 0.1379. Individual comparison alpha = 0.03643. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Lithium Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

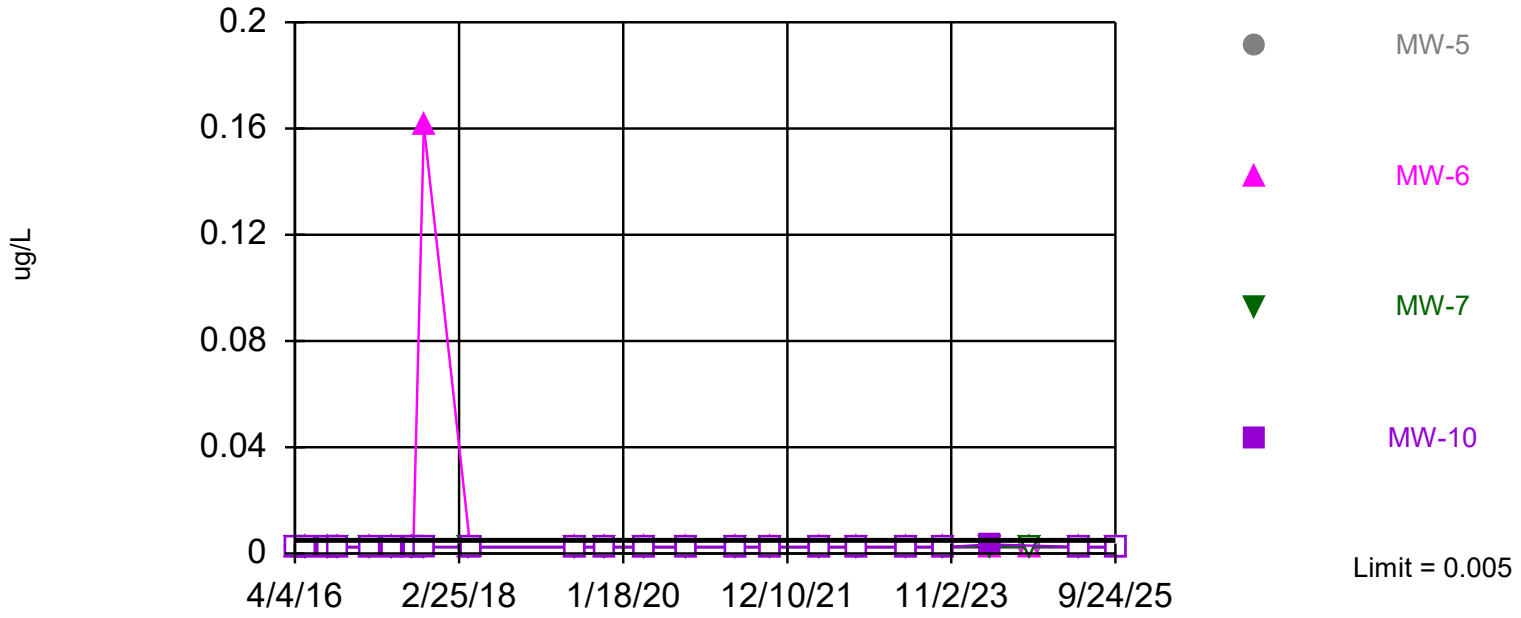
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 23) were censored; limit is most recent reporting limit. Report alpha = 0.1481. Individual comparison alpha = 0.03929. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Mercury Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

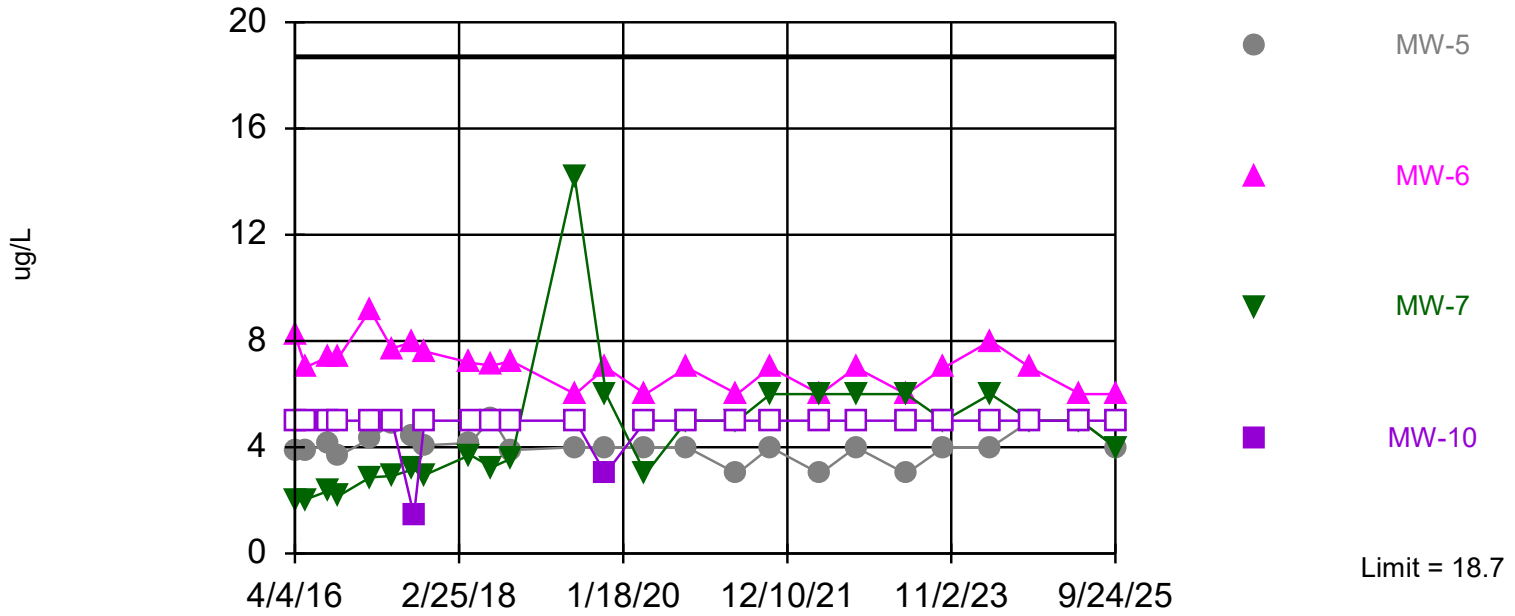
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

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 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.1379. Individual comparison alpha = 0.03643. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

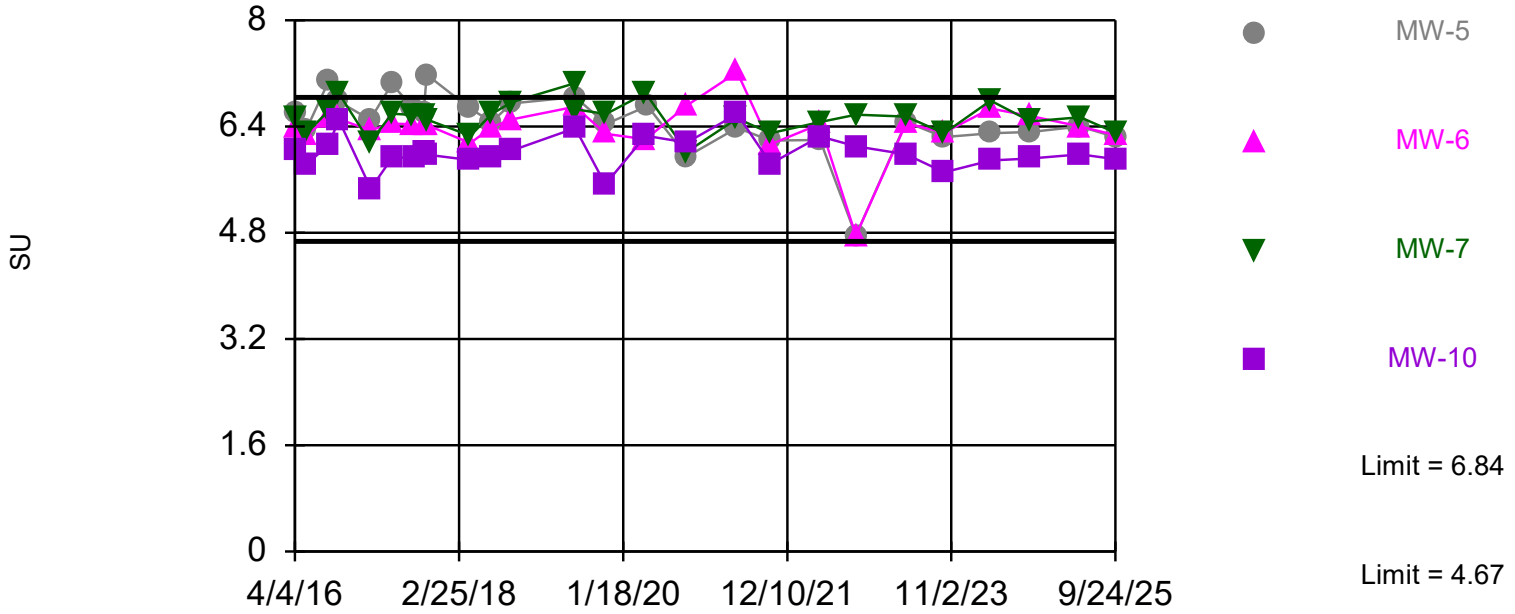
Constituent: Molybdenum Analysis Run 11/13/2025 8:55 AM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Within Limits

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 0.05 alpha level. Limits are highest and lowest of 25 background values. Report alpha = 0.2759. Individual comparison alpha = 0.07285. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: pH Analysis Run 11/13/2025 8:56 AM View: 2H2025_CCR

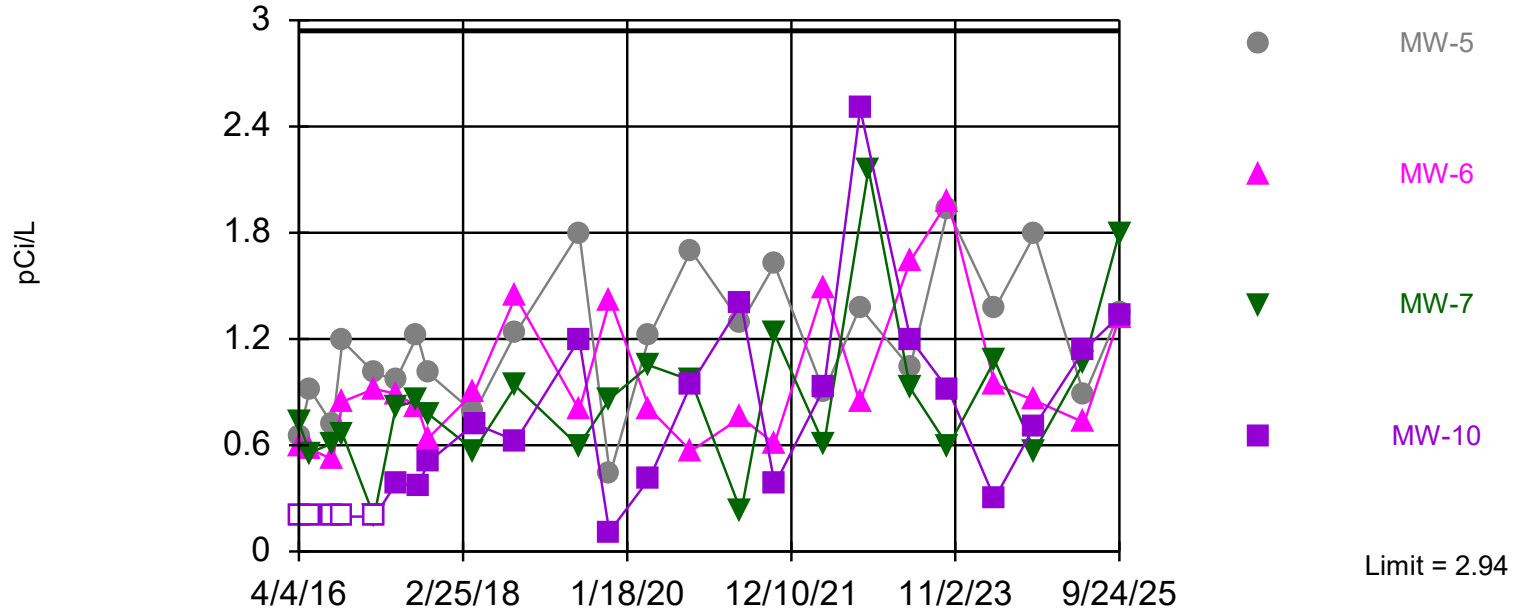
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

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 0.05 alpha level. Limit is highest of 23 background values. Report alpha = 0.1481. Individual comparison alpha = 0.03929. Most recent point for each compliance well compared to limit. EPA 1989 outlier screening was performed on the background data. One background outlier was removed: 0.3 (9/30/2024). Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Radium 226 + 228 Analysis Run 11/13/2025 8:56 AM View: 2H2025_CCR

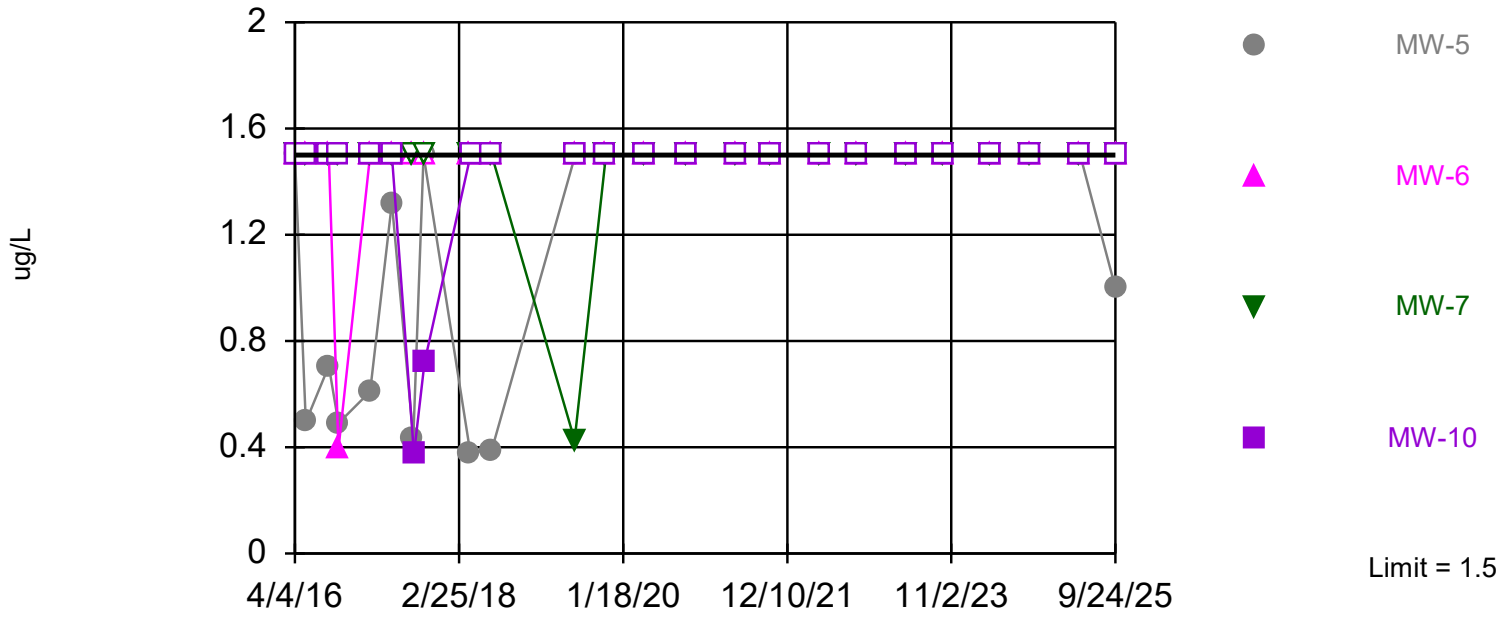
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 91.67% NDs. Report alpha = 0.1429. Individual comparison alpha = 0.0378. Most recent point for each compliance well compared to limit. After outlier removal distribution was non-normal, so outlier results were invalidated. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Selenium Analysis Run 11/13/2025 8:56 AM View: 2H2025_CCR

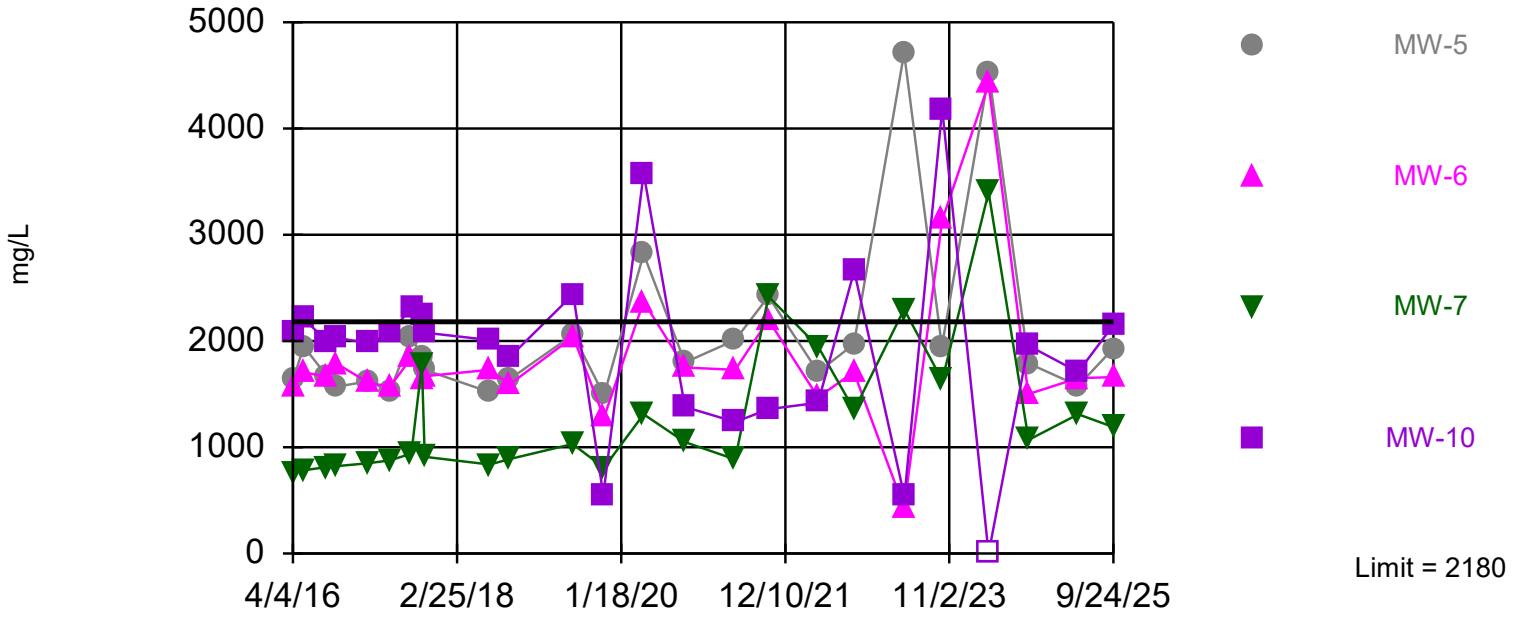
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

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 0.05 alpha level. Limit is highest of 26 background values. Report alpha = 0.1333. Individual comparison alpha = 0.03514. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Sulfate Analysis Run 11/13/2025 8:56 AM View: 2H2025_CCR

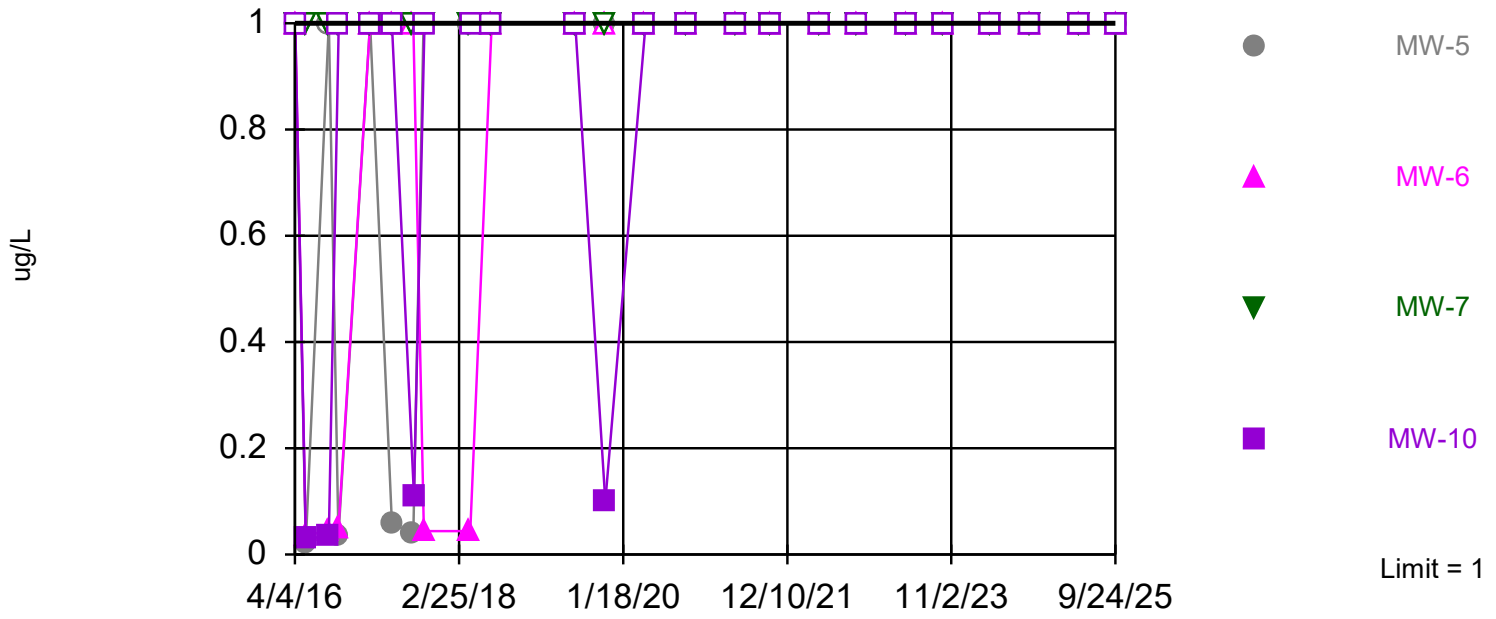
Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 88% NDs. Report alpha = 0.1379. Individual comparison alpha = 0.03643. Most recent point for each compliance well compared to limit. After outlier removal distribution was non-normal, so outlier results were invalidated. Insufficient data to test for seasonality; data will not be deseasonalized.

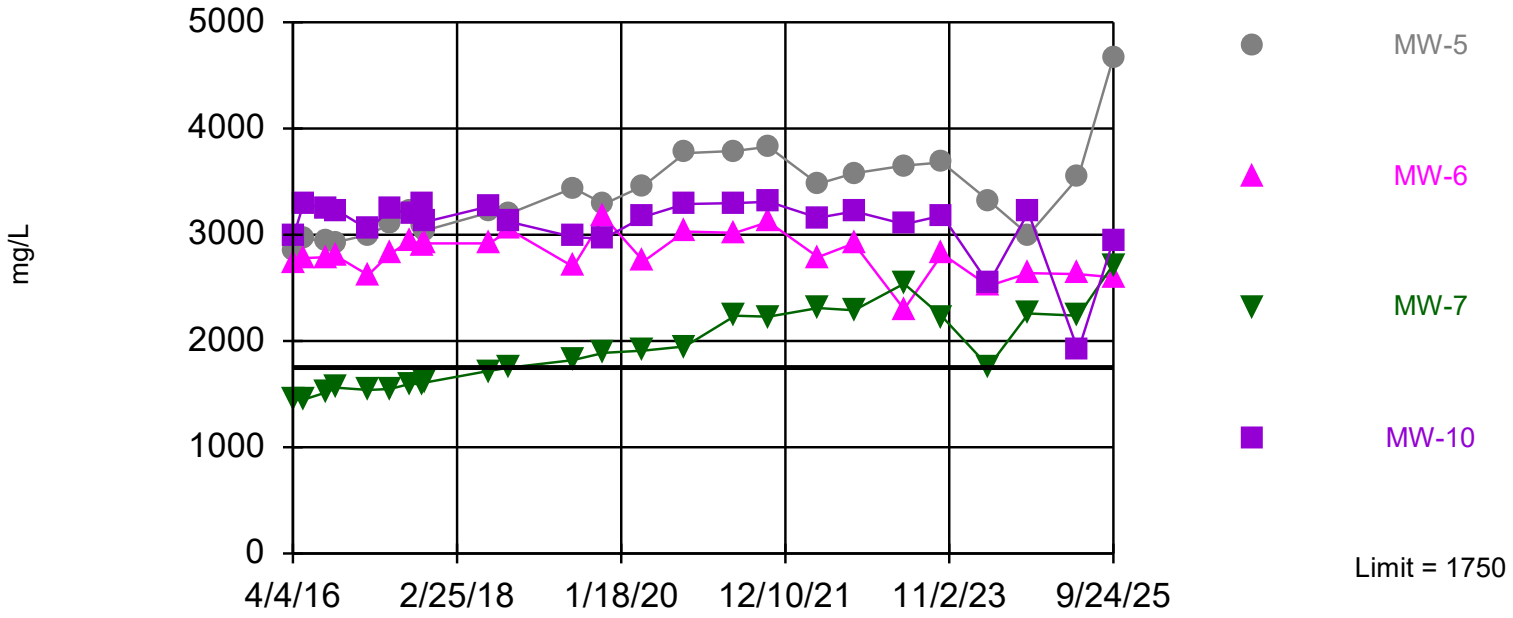
Constituent: Thallium Analysis Run 11/13/2025 8:56 AM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Exceeds Limit: MW-5, MW-6, MW-7, MW-10

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 0.05 alpha level. Limit is highest of 26 background values. Report alpha = 0.1333. Individual comparison alpha = 0.03514. Most recent point for each compliance well compared to limit. Distribution was found to be non-normal after removal of suspect values, so outliers could not be identified. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Total Dissolved Solids Analysis Run 11/13/2025 8:56 AM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile

Confidence Interval

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile[IN USE BY B737721] Printed 12/8/2025, 10:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cobalt (ug/L)	MW-5	7.439	6.362	9	No	25	4	No	0.05	Param.
Cobalt (ug/L)	MW-6	7.673	7.002	9	No	25	0	No	0.05	Param.
Cobalt (ug/L)	MW-7	4.54	4	9	No	25	48	No	0.05	NP (normality)
Cobalt (ug/L)	MW-8 (bg)	4	1.18	9	No	24	54.17	No	0.05	NP (NDs)
Cobalt (ug/L)	**MW-10**	**102.4**	**81.18**	**9**	**Yes**	**25**	**0**	**No**	**0.05**	**Param.**
Lithium (ug/L)	MW-5	37.89	33.34	40	No	25	0	No	0.05	Param.
Lithium (ug/L)	MW-6	47	40	40	No	25	0	No	0.05	NP (normality)
Lithium (ug/L)	MW-7	30	27.3	40	No	25	0	No	0.05	NP (normality)
Lithium (ug/L)	MW-8 (bg)	11.6	9.59	40	No	25	16	No	0.05	NP (normality)
Lithium (ug/L)	MW-10	10.61	8.763	40	No	25	12	No	0.05	Param.

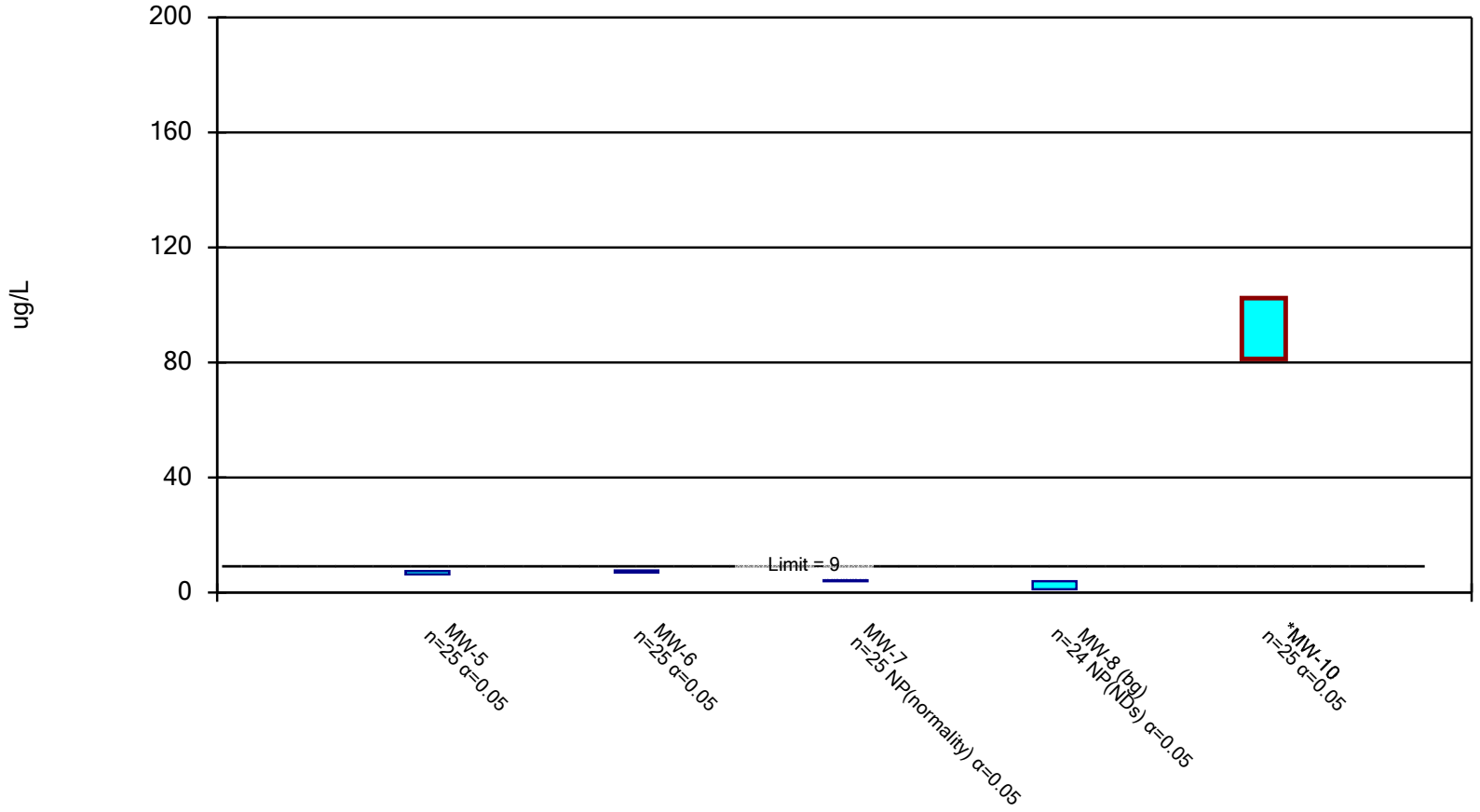
Confidence Interval

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile[IN USE BY B737721] Printed 12/8/2025, 10:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cobalt (ug/L)	**MW-10**	**102.4**	**81.18**	**9**	**Yes**	**25**	**0**	**No**	**0.05**	**Param.**

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Normality Test: Shapiro Wilk, alpha based on n.

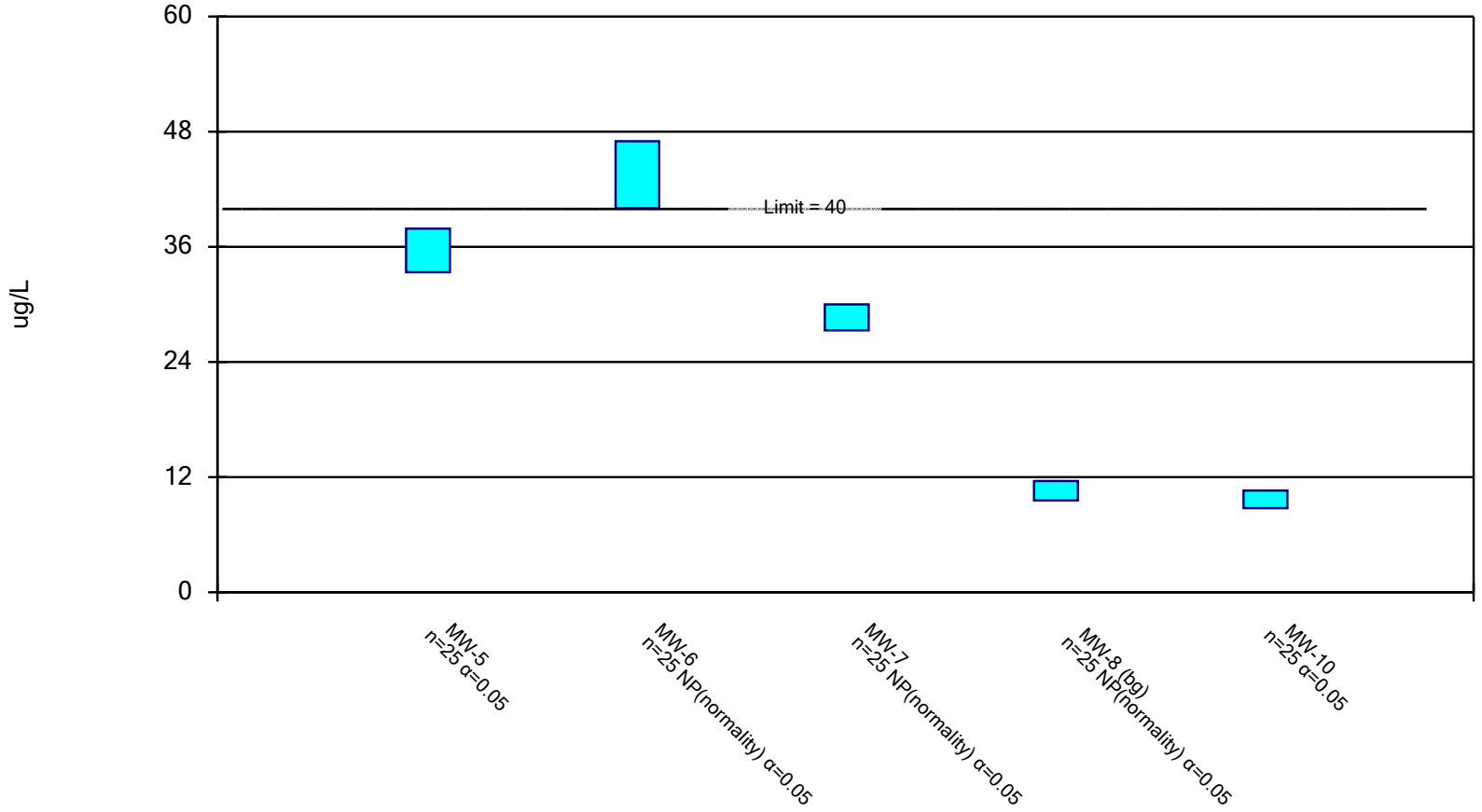


Constituent: Cobalt Analysis Run 12/8/2025 10:31 PM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile[IN USE BY B737721]

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/8/2025 10:31 PM View: 2H2025_CCR

Big Rivers Electric Corp. Client: Burns & McDonnell Data: BREC Wilson_Datafile[IN USE BY B737721]