

September 2025 (Fourteenth Assessment) Semi-Annual Sampling Analytical Results
RPL Whitewater Valley Station
Richmond, Indiana

Chemical Name	Location ID:	UPGRADIENT				DOWNGRADIENT											
		MW-AS	MW-AS DUP	MW-FS	MW-GSR	MW-BS	MW-CS	MW-DS	MW-ES ¹	MW-HS	MW-IS	MW-JS	MW-KS ^{1,2}	MW-LS ²	MW-MS ²	MW-NS ^{1,2}	MW-OS ²
		Sample Date:	9/10/2025	9/10/2025	9/11/2025	9/11/2025	9/10/2025	9/10/2025	9/11/2025	9/10/2025	9/10/2025	9/11/2025	9/10/2025	9/10/2025	9/10/2025	9/10/2025	9/10/2025
Unit																	
Antimony, Total ³	mg/L	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	NT	ND	ND	NT	ND
Arsenic, Total ³	mg/L	ND	ND	ND	ND	ND	0.0027	ND	NT	0.0107	ND	0.0011	NT	0.0027	0.0077	NT	0.0102
Barium, Total ³	mg/L	0.0962	0.0950	0.0205	0.0164	0.0188	0.0260	0.0323	NT	0.0445	0.0314	0.0941	NT	0.0424	0.0944	NT	0.0982
Beryllium, Total ³	mg/L	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	NT	ND	0.00031	NT	ND
Boron, Total	mg/L	0.181	0.181	9.68	1.48	4.17	2.75	5.49	NT	1.7	1.2	1.27	NT	4.56	2.91	NT	2.63
Cadmium, Total ³	mg/L	ND	ND	ND	0.00021	ND	ND	ND	NT	ND	ND	0.00026	NT	ND	0.00023	NT	ND
Calcium, Total	mg/L	91	91	268	531	270	249	343	NT	257	261	275	NT	341	305	NT	253
Chloride	mg/L	129	127.0	31.5	46.7	142	45.0	169	NT	80	570	419	NT	121	97.4	NT	70.6
Chromium, Total ³	mg/L	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	NT	0.0038	0.0114	NT	0.0058
Cobalt, Total ³	mg/L	ND	ND	ND	0.0143	0.0012	0.0010	ND	NT	0.0050	0.0107	0.0048	NT	0.0024	0.0081	NT	0.0054
Fluoride ³	mg/L	0.12	0.12	ND	0.12	0.27	0.34	0.11	NT	0.40	0.89	0.30	NT	0.110	0.14	NT	0.15
Lead, Total ³	mg/L	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	NT	0.0029	0.0114	NT	0.0071
Lithium, Total ³	mg/L	ND	ND	0.192	0.12	0.0711	0.0772	0.0556	NT	0.0537	0.0312	0.0455	NT	0.0734	0.0485	NT	0.0268
Mercury, Total ³	mg/L	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	NT	ND	ND	NT	ND
Molybdenum, Total ³	mg/L	0.0053	0.0052	0.0648	ND	0.112	0.0714	0.0079	NT	0.0397	0.0318	0.0379	NT	0.0107	0.0066	NT	0.0122
pH, Lab	s.u.	7.4	7.4	7.4	6.9	7.5	7.2	7.2	NT	7.1	7.6	7.1	NT	7.1	7.2	NT	7.3
Radium-226 ³	pCi/L	0.0572	1.07	0.181	0.0597	0.0540	0.294	0.280	NT	0.510	0.122	0.320	NT	0.445	0.335	NT	0.273
Radium-228 ³	pCi/L	0.484	0.845	0.529	0.706	0.787	1.36	0.297	NT	0.734	0.178	1.00	NT	1.16	1.32	NT	1.45
Total Radium ³	pCi/L	0.541	1.92	0.710	0.766	0.841	1.65	0.577	NT	1.24	0.300	1.32	NT	1.61	1.66	NT	1.72
Selenium, Total ³	mg/L	ND	ND	ND	ND	ND	0.0266	ND	NT	0.0022	ND	0.0017	NT	0.0011	0.0022	NT	0.0015
Sulfate	mg/L	85.4	85.3	674	2220	875	546	918	NT	624	1100	914	NT	744	584	NT	587
Thallium, Total ³	mg/L	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	NT	ND	ND	NT	ND
Total Dissolved Solids, Lab	mg/L	623	618	1330	3800	1800	1350	2060	NT	1580	2700	2380	NT	1760	1470	NT	1310
Field Parameters⁴																	
Temperature	°C	16.68	16.68	14.42	17.73	15.28	15.15	17.28	NT	16.98	18.87	21.26	NT	15.57	16.42	NT	17.37
Conductivity	mS/cm	1.19	1.19	1.81	4.15	2.46	1.96	2.73	NT	2.29	3.76	3.34	NT	2.36	2.06	NT	1.71
pH	s.u.	7.21	7.21	7.18	6.64	7.32	6.93	6.97	~6	7.00	7.20	7.04	~6	7.19	6.96	~7	7.34
Turbidity	NTU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NT	0.0	0.0	118	NT	434	150	NT	276
Total Dissolved Solids	g/L	0.761	0.761	1.16	2.66	1.57	1.26	1.75	NT	1.47	2.40	2.140	NT	1.49	1.32	NT	1.09
Dissolved Oxygen	mg/L	2.54	2.54	2.89	8.93	9.1	0.84	1.95	NT	9	3.38	8.67	NT	16.83	13.03	NT	2.24
Oxygen-Reduction Potential	mV	-5	-5	115	195	83	136	2	NT	21.00	61	138	NT	113	126	NT	170

Notes:

- MW-ES, MW-KS, and MW-NS were not sampled due to slow well recharge. Field parameters could not be analyzed, therefore pH was measured via test strip.
- MW-KS, MW-LS, MW-MS, MW-NS, and MW-OS were installed in July 2020.
- Shading of the chemical name indicates that the parameter is included in "Appendix IV to Part 257-Consituents for Assessment Monitoring" of the CCR Rule.
- Field measurements recorded when the readings stabilized during purging.

mg/L - milligrams per liter

CaCO₃ - calcium carbonate

s.u. - Standard Units

pCi/L - Picocuries per liter

°C - degrees Celsius

NTU - Nephelometric Turbidity Unit

g/L - grams per liter

mV - millivolts