TRI-STATE

November 15, 2023

Mr. Clayton Wein
Environmental Protection Specialist
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

RE: Annual Hydrology Report
New Horizon North Mine
Permit No. C-2010-089

Dear Mr. Wein,

Enclosed please find the Annual Hydrology Report for the 2022-2023 Water Year (October 2022 – September 2023) for Elk Ridge Mining and Reclamation, LLC (Elk Ridge) New Horizon North Mine. Tri-State Generation and Transmission Association, Inc. (Tri-State) is the parent to Elk Ridge, and in accordance with Rule 4.05.13(4)(c) is submitting the Annual Hydrology Report on behalf of the New Horizon North Mine.

If you have any questions about the enclosed report, please contact Tony Tennyson at (970) 326-3560 or ttennyson@tristategt.org.

Sincerely,

DocuSigned by:
Chris Gilbreath
D250C711D0BF450...

Chris Gilbreath
Senior Manager,
Remediation and Reclamation

CG:TT:der

Enclosures

cc: Tony Tennyson (via email)
File: G474-11.3(21)b-5

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2023 Annual Hydrology Report

Water Year October 1, 2022 to September 30, 2023

Elk Ridge Mining and Reclamation, LLC

New Horizon North Mine

Permit No. C-2010-089

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Rule 4.05.13(4)(c) Annual Hydrology Report Requirements

(i) Water quantity monitoring data for the water year is presented Appendices 1 and 3 of this report.

(ii) Water quality monitoring data for the water year is presented in Appendices 1 and 3 of this report. Discharge monitoring reports (DMR) are submitted to the Colorado Department of Public Health and Environment. Copies of each DMR are provided monthly to the Division during the report year and are included in this report by reference only.

(iii) A written interpretation of the data has been requested by the Division in accordance with Rule 4.05.13(4)(c)(iii) and is included within this annual hydrology report.

The monitoring timeframe for this annual hydrology report is from October 1, 2022 through September 30, 2023.

A description of the surface and ground water monitoring plan including the monitoring frequency is located in Appendix 2.05.6(3)-3. All monitoring locations are shown on Map 2.04-7-1. This information can be located in Permit No. C-2010-089.

Surface Water

Surface water monitoring sites are comprised of several sites, which comprise the current, upstream, and downstream condition and are briefly described below. Please see Map 2.04.7-1 for monitoring locations.

- SW-N202 is located on Meehan Draw and represents the downstream condition below mining.
- SW-N207 is located on Meehan Draw and represents and up gradient condition.
- SW-N213 is located on Nygren Draw and represents the up gradient condition.
- SW-N214 is located on Nygren Draw and represents the down gradient condition.

New Horizon North currently samples each surface water site for a variety of quality parameters. Of all the parameters that are analyzed for, several key indicator parameters have been identified and are addressed annually for the hydrology report. These parameters are laboratory pH, laboratory conductivity, TDS, sulfate, calcium, iron, magnesium, and sodium. Surface water monitoring data for the water year can be found in Appendix 1, and surface water summary graphs of the indicator parameters for all monitoring locations are provided in Appendix 2.

SW-N202 and SW-N207 – Meehan Draw

Data for surface water sites on Meehan Draw, SW-N202 (down gradient) and SW-N207 (up gradient), have been complied and are shown on the summary tables below and graphically. Summary tables for indicator parameters are provide below for each site and include data from 2008 to the end of September of 2023 if available.

SW-N202							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.9	0.4	1.8	8.4	6.6	6/5/19	3/27/23
Lab Cond. (umhos/cm)	1,191	428	1,862	2,050	188	2/24/21	2/18/20
TDS (mg/l)	975	431	1,483	1,920	437	2/24/21	5/22/14
Sulfate (mg/l)	562	357	1,170	1,320	150	2/24/21	7/31/23
Calcium (mg/l)	193	75	245	351	106	3/20/12	5/16/17
Iron (tot rec ug/l)	1,976	2,956	19,750	20,000	250	5/4/23	5/23/16
Magnesium (mg/l)	53	23	83	108	26	3/3/10	5/22/14
Sodium (mg/l)	18	6	21	31	10	2/24/21	7/31/23

SW-N207							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	8.3	0.1	0.6	8.6	8.0	6/16/09	2/11/14
Lab Cond. (umhos/cm)	796	162	618	1,140	522	3/27/23	8/11/12
TDS (mg/l)	539	138	524	840	316	3/27/23	8/23/12
Sulfate (mg/l)	182	74	322	393	71	3/29/21	7/31/23
Calcium (mg/l)	109	22	97	149	53	11/27/12	2/11/14
Iron (tot rec ug/l)	328	310	1,353	1,410	57	6/7/10	3/27/23
Magnesium (mg/l)	37	13	51	65	14	10/23/08	8/14/12
Sodium (mg/l)	14	4	17	23	7	11/27/12	8/14/12

A review of the water year data indicates one maximum for iron and several minimum values for pH, sulfate, and sodium occurred at SW-N202. The maximum value for iron appears to be an outliner in the overall data set for SW-N202. Two maximum values for laboratory conductivity and TDS occurred at SW-N207 and two minimum values for sulfate and iron also occurred during the water year.

SW-N213 and SW-N214 - Nygren Draw

Data for sites SW-N213 (up gradient) and SW-N214 (down gradient) have been complied and are shown on the summary tables below and graphically. Summary tables for indicator parameters are provide below for each site and include data from 2008 to the end of September of 2023 if available.

SW-N213							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	8.4	0.1	0.8	8.7	7.9	5/24/21	8/11/21
Lab Cond. (umhos/cm)	978	258	1,096	1,540	444	3/27/23	5/4/23
TDS (mg/l)	691	227	890	1,200	310	3/27/23	5/4/23
Sulfate (mg/l)	268	112	472	560	88	3/27/23	5/4/23
Calcium (mg/l)	128	32	131	186	55	8/11/21	5/4/23
Iron (tot rec ug/l)	127	110	390	400	10	8/21/12	11/26/13
Magnesium (mg/l)	46.2	17.6	80	98.0	18.0	3/27/23	5/4/23
Sodium (mg/l)	23.6	9.1	38.1	47.0	8.9	3/27/23	5/4/23

SW-N214							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	8.4	0.1	0.3	8.6	8.3	10/5/22	5/22/14
Lab Cond. (umhos/cm)	954	237	934	1,380	446	11/18/15	5/4/23
TDS (mg/l)	670	205	730	1,040	310	8/25/20	5/4/23
Sulfate (mg/l)	255	96	379	466	87	8/11/21	5/4/23
Calcium (mg/l)	127	32	134	188	54	8/11/21	5/4/23
Iron (tot rec ug/l)	179	157	660	670	10	5/31/13	11/26/13
Magnesium (mg/l)	43.5	14.9	69.3	87.3	18.0	11/18/15	5/4/23
Sodium (mg/l)	22.7	8.1	33.7	42.5	8.8	11/18/15	5/4/23

A review of the water year data for SW-N213 provided a second quarter sampling with several maximum values including laboratory conductivity, TDS, sulfate, magnesium, and sodium. Then the third quarter sample provided minimum values for the same indicator parameters also including calcium.

A review of the water year data for SW-N214 indicates multiple minimum values were recorded during the May 4, 2023 sampling event including laboratory conductivity, TDS, sulfate, calcium, magnesium, and sodium. The remaining indicator parameters tracked within historical trends.

Surface Water Data Interpretation

Meehan Draw

As shown on the graphs in Appendix 2 for the indicator parameters, when comparing the up gradient and down gradient locations, SW-N202 tends to historically trend higher for all the

indicator parameters. Both the up gradient and down gradient locations show stable conditions in Meehan Draw with seasonal influences from irrigation. As mentioned previously iron results from the second quarter sample at SW-N202 appears to be on outliner in the historical data obtained from SW-N202.

Nygren Draw
As shown in Appendix 2 for the indicator parameters, when comparing the up gradient and down gradient locations on Nygren Draw (SW-N213 and SW-N214), they both trend almost identically. This indicates normal natural conditions are occurring in Nygren Draw with seasonal influences from irrigation.

Ground Water

Ground water monitoring sites are comprised of several sites which comprise the aquifers upstream and downstream of mining and reclamation activities and are briefly described below. Please see Map 2.04.7-1 for monitoring locations.

- GW-N50 monitors the underburden aquifer and represents the up gradient condition.
- GW-N51 monitors the Dakota coal aquifer and represents the up gradient condition.
- GW-N52 monitors the overburden aquifer and represents the up gradient condition.
- GW-N53 monitors the underburden aquifer and represents the down gradient condition.
- GW-N54 monitors the Dakota coal aquifer which represents the down gradient condition.
- GW-N55 monitors the overburden aquifer which represents the down gradient condition.
- GW-N56 monitors the underburden aquifer down-dip of the mining area.
- GW-N57 monitors the Dakota coal aquifer down-dip of the mining area.
- GW-N58 monitors the overburden aquifer down-dip of the mining area.

New Horizon currently samples each groundwater site for a variety of quality parameters. Of all the parameters that are analyzed for, several key indicator parameters are identified and are addressed annually for the hydrology report. These are laboratory pH, laboratory conductivity, TDS, sulfate, calcium, iron, magnesium, sodium and elevation. Ground water monitoring data for the water year can be found in Appendix 3, and ground water summary graphs of the indicator parameters for all monitoring locations are provided in Appendix 4.

Wells GW-N50, GW-N51, and GW-N52

GW-N50 monitors the underburden aquifer, GW-N51 monitors the Dakota coal aquifer, and GW-N52 monitors the overburden aquifer. This cluster of wells provides groundwater data representative of the up-gradient condition above where mining and reclamation has occurred.

Summary of the indicator parameters for each well are provided as follows:

GW-N50							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.8	0.2	0.8	8.1	7.3	6/3/10	8/25/09
Lab Cond. (umhos/cm)	2,510	426	2,337	3,330	993	6/8/20	12/10/20
TDS (mg/l)	2,201	378	1,810	3,200	1,390	2/8/23	9/23/19
Sulfate (mg/l)	1,305	1,082	8,525	9,180	655	9/23/19	3/15/21
Calcium (mg/l)	320	52	198	413	215	3/1/11	11/30/09
Iron (mg/l)	0.2256	0.1580	0.5468	0.5700	0.0232	11/30/21	5/27/21
Manganese (mg/l)	0.85	0.34	1.34	1.55	.021	3/3/10	4/12/23
Sodium (mg/l)	114.0	30.0	106.3	163.0	56.7	3/10/20	9/23/19
Magnesium (mg/l)	166	51	245	246	1	6/8/20	6/21/22

GW-N51							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	6.7	0.6	2.3	7.9	5.6	2/20/13	11/15/17
Lab Cond. (umhos/cm)	1,008	128	705	1,410	705	5/22/09	12/8/20
TDS (mg/l)	748	106	562	1,100	538	5/28/09	3/15/21
Sulfate (mg/l)	449	105	469	700	231	5/26/09	5/21/14
Calcium (mg/l)	108	22	100	167	67	8/25/11	3/15/21
Iron (mg/l)	7.9	3.6	11.3	12.9	1.6	12/8/20	3/15/21
Manganese (mg/l)	0.94	0.38	1.45	1.96	0.52	8/25/11	3/15/21
Sodium (mg/l)	26.2	6.5	35.7	50.3	14.6	5/20/09	2/10/16
Magnesium (mg/l)	48.6	9.8	55.9	85.7	29.8	5/20/09	3/15/21

GW-N52							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.7	0.3	1.3	8.3	7.0	8/26/11	11/15/17
Lab Cond. (umhos/cm)	875	138	604	1,250	646	11/23/11	12/7/20
TDS (mg/l)	627	115	600	1,030	430	12/2/11	5/21/12
Sulfate (mg/l)	273	78	412	580	168	12/1/11	5/15/12
Calcium (mg/l)	161	30	162	279	117	11/22/11	8/23/17
Iron (mg/l)	0.0867	0.1214	0.3726	0.3800	0.0074	1/26/22	5/27/21
Manganese (mg/l)	0.14	0.39	1.43	1.43	0.01	3/15/21	5/28/11
Sodium (mg/l)	8.1	2.2	9.4	15.1	5.7	3/10/20	8/23/17
Magnesium (mg/l)	19.8	6.7	30.0	42.0	12.0	2/8/23	8/23/17

A review of the water year for this series of wells indicates a maximum value for TDS and a minimum value for occurred at GW-N50. One maximum value for magnesium occurred at GW-N52. All other analytical results for all the wells in this series trending within previous data sets.

Wells GW-N53, GW-N54, and GW-N55

GW-N53 monitors the underburden aquifer, GW-N54 monitors the Dakota coal aquifer, and GW-N55 monitors the overburden aquifer. This cluster of wells provides data representative of the down gradient condition below where mining occurred.

Summary of the indicator parameters for each well are provided as follows:

GW-N53							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.9	0.1	0.7	8.2	7.5	10/18/08	8/11/22
Lab Cond. (umhos/cm)	3,317	256	1,770	3,640	1,870	9/15/21	12/8/20
TDS (mg/l)	2,931	253	830	3,370	2,570	2/8/23	5/28/09
Sulfate (mg/l)	1,619	128	600	1,980	1,400	2/8/23	5/26/09
Calcium (mg/l)	311	21	95	360	265	4/6/23	12/1/10
Iron (mg/l)	0.0337	0.0250	.00760	0.0900	0.0140	11/30/22	5/27/21
Manganese (mg/l)	0.057	0.041	0.135	0.140	0.005	11/19/16	12/1/09
Sodium (mg/l)	196	21	73	238	165	8/25/11	11/28/17
Magnesium (mg/l)	252	17	82	290	208	4/6/23	12/1/10

GW-N54							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.8	0.2	0.7	8.1	7.4	10/18/08	8/11/22
Lab Cond. (umhos/cm)	4,650	926	4,230	6,100	1,870	8/20/14	12/8/20
TDS (mg/l)	4,723	1,008	5,280	6,940	1,660	2/25/15	12/8/10
Sulfate (mg/l)	2,982	830	4,518	5,030	512	2/25/15	9/16/20
Calcium (mg/l)	441	74	333	534	201	11/17/15	9/1/10
Iron (mg/l)	0.1201	0.1021	0.2560	.2900	0.0340	8/11/22	2/8/23
Manganese (mg/l)	0.425	0.226	0.740	0.870	0.130	11/13/13	6/2/10
Sodium (mg/l)	170	31	146	213	67	8/24/09	8/31/10
Magnesium (mg/l)	557	139	654	880	226	11/17/15	12/1/10

GW-N55							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.8	0.2	0.7	8.1	7.4	2/27/10	7/12/23
Lab Cond. (umhos/cm)	9,499	2,600	10,450	13,000	2,550	9/16/20	12/8/20
TDS (mg/l)	12,206	3,586	10,800	16,500	5,700	9/16/20	8/26/15
Sulfate (mg/l)	8.063	2,807	10,780	12,600	1,820	3/4/20	5/27/21
Calcium (mg/l)	443	25	96	496	400	3/3/10	11/9/22
Iron (mg/l)	0.2341	0.1673	0.5870	0.6200	0.0330	8/9/22	12/8/20
Manganese (mg/l)	0.58	0.43	1.39	1.40	0.02	4/6/23	8/25/11
Sodium (mg/l)	324	43	174	444	270	8/25/11	8/9/22
Magnesium (mg/l)	1,938	703	2,200	2,840	650	9/16/20	2/18/14

A review of the water year data indicates four maximum values for TDS iron, calcium, and magnesium occurred at GW-N53. GW-N54 exhibited one minimum value for iron, and GW-N55 exhibited one maximum value for manganese and two minimum values for pH and calcium.

Wells GW-N56, GW-N57, and GW-N58

GW-N56 monitors the underburden aquifer, GW-N57 monitors the Dakota coal, and GW-N58 monitors the overburden aquifer. This cluster of wells provides groundwater data representative of the up gradient condition above where mining occurred.

Summary of the indicator parameters for each well are provided as follows:

GW-N56							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.8	0.2	0.7	8.0	7.3	8/14/13	27/23
Lab Cond. (umhos/cm)	4,136	454	2,110	5,040	2,930	6/22/22	12/2/20
TDS (mg/l)	4,010	569	2,040	5,160	3,120	6/22/22	8/29/12
Sulfate (mg/l)	2,424	388	1,360	3,260	1,900	5/21/21	5/26/15
Calcium (mg/l)	481	70	288	606	318	5/17/16	8/29/12
Iron (mg/l)	0.1131	.0696	0.1850	0.2200	0.0350	6/22/22	3/9/21
Manganese (mg/l)	0.38	0.26	1.19	1.20	0.01	5/9/18	5/21/14
Sodium (mg/l)	173	41	254	395	141	11/27/12	5/17/16
Magnesium (mg/l)	239	211	551	570	19	11/10/21	8/29/12

GW-N57							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.7	0.2	0.8	8.0	7.2	12/11/19	8/11/22
Lab Cond. (umhos/cm)	4,741	381	1,980	5,240	3,260	9/14/21	11/30/20
TDS (mg/l)	4,894	404	1,960	5,800	3,840	7/12/23	5/26/15
Sulfate (mg/l)	3,142	273	1,210	3,700	2,490	2/7/23	5/26/15
Calcium (mg/l)	507	73	495	550	55	7/24/18	12/11/19
Iron (mg/l)	0.2906	0.2061	0.5551	.5900	0.0349	6/22/22	9/14/21
Manganese (mg/l)	0.69	0.17	0.73	0.99	0.26	8/9/17	8/20/14
Sodium (mg/l)	149	18	73	174	101	2/17/14	5/26/15
Magnesium (mg/l)	533	49	240	630	390	4/11/23	5/26/15

GW-N58							
Parameter	**Mean**	**Std dev**	**Range**	**Max.**	**Min.**	**Max at**	**Min at**
Lab pH	7.5	0.3	1.1	7.9	6.8	5/28/18	5/28/13
Lab Cond. (umhos/cm)	7,515	2,982	12,540	16,000	3,460	5/28/13	11/30/20
TDS (mg/l)	8,820	4,070	15,150	20,000	4,850	5/28/13	2/14/18
Sulfate (mg/l)	5,996	3,319	11,940	15,000	3,060	5/28/13	2/14/18
Calcium (mg/l)	470	24	102	532	430	11/27/12	5/21/14
Iron (mg/l)	0.852	0.397	1.150	1.61	0.460	11/30/20	6/22/22
Manganese (mg/l)	1.72	1.80	5.99	6.15	0.16	11/27/12	5/9/18
Sodium (mg/l)	251	226	1,308	1,460	152	5/28/13	8/29/12
Magnesium (mg/l)	1,315	802	2,636	3,150	514	11/13/13	2/14/18

A review of the water year data indicates three maximum values occurred for TDS, sulfate, and magnesium at GW-N57. All the remaining analytical results for the water year track within previous maximums and minimum values.

Groundwater Data Interpretation

The graphs in Appendix 4 provides the indicator parameters in comparison with the up gradient and down gradient locations with the overburden, coal, and underburden aquifer shown together accordingly.

Underburden Aquifer

When comparing the up gradient (GW-N50) and down gradient wells (GW-N53 and GW-N56) for the overburden aquifer, GW-N50 tends to historically trend lower for most of the indicator parameters with the exception of iron and manganese versus the two down gradient wells. The overall up-gradient conditions for the overburden aquifer trend in a consistent manner with seasonal influences from local irrigation apparent in the data. The exception to this is manganese and pH as both are slightly trending down overtime.

The down gradient well GW-N53 demonstrates less variably in the data and provides a consistent water quality in the pre-mining and post mining timeframes. Data for down gradient well GW-N56 indicates less stability in the overall water quality in the overburden aquifer with some of the indicator parameters increasing including calcium, magnesium, manganese, sulfate, and TDS.

Coal Aquifer

When comparing the up gradient (GW-N51) and down gradient wells (GW-N54 and GW-N57) for the coal aquifer, GW-N51 historically trends much lower for most of the indicator parameters versus the two down gradient wells. Similar to the overburden aquifer iron historically trends higher at the up-gradient location GW-N51 as well as manganese. Manganese is trending downward up-gradient of the mining and reclamation areas. The overall up-gradient conditions for the coal aquifer trend in a consistent manner with seasonal influences from local irrigation. The exception to this is manganese and pH as both are slightly trending down overtime.

Historically, both GW-N54 and GW-N57 both trended higher for most the indicator parameters. In general, the data acquired indicates very poor water quality was present prior to the commencement of mining at New Horizon North Mine, and the water quality post mining continues to be of low quality. Both wells exhibit relatively stable trends overtime for all the indicator parameters. Although, magnesium and manganese are increasing in the coal aquifer down gradient of mining at GW-N57.

Overburden Aquifer

When comparing the up gradient (GW-N52) and down gradient wells (GW-N55 and GW-N58) for the underburden aquifer, GW-N52 historically trends lower for the indicator parameters versus the two down gradient wells. GW-N52 demonstrates for all the indicator parameters trend in a consistent manner with stable water quality up-gradient of mining and reclamation activities.

Like the coal aquifer, the two down gradient wells, GW-N55 and GW-N58 both trend higher for most the indicator parameters. The data acquired from both down gradient wells indicates very poor water quality was present prior to the commencement of mining at the New Horizon North Mine, and the water quality post mining continues to be of low quality. TDS levels down-gradient prior to mining at GW-N55 were above 6,000 mg/l, and at GW-N58 TDS levels were above 16,500 mg/l. Further, sulfate at GW-N55 prior to mining was nearly 4,000 mg/l, and at GW-N58 was well above 10,000 mg/l. Electrical conductivity for both down gradient wells was also high at nearly 6,000 umhos/cm (GW-N55) and around 8,000 umhos/cm prior to mining.

Postmining (post 2017) electrical conductivity, magnesium, sulfate, and TDS have been decreasing and stabilizing at well GW-N58, while the same parameters have been increasing at GW-N55.

Appendix 1
Surface Water Monitoring Data

New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2021 to 09/30/2022
Site: SW-N202

	10/5/2022	3/27/2023	5/4/2023	7/31/2023
Al, tot rec, ug/L	702	217	4480	327
As, tot rec, ug/L	1.5	0.4	6.2	2.1
Ca, diss, mg/L	140	210	220	110
Cd, tot rec, ug/L	0.14	0.29	0.57	0.072
Cl, diss, mg/L	7.8	8.7	9.1	4.6
Cu, diss, mg/L	<0.00080	<0.0016	<0.00080	0.0057
Fe, tot rec, ug/L	1300	1300	20000	910
HCO3, mg/L	230	89	92	250
Hg, tot, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
Mg, diss, mg/L	41	63	64	26
Mn, diss, mg/L	0.068	0.8	0.69	0.073
Na, diss, mg/L	17	25	25	10
NH3 as N, tot, mg/L	<0.050	0.077	0.11	<0.10
NO2, diss, mg/l	<0.010	<0.010	<0.010	<0.010
NO3, diss, mg/l	0.054	0.078	0.14	0.029
Pb, tot rec	2.8	0.21	20	1.6
pH (field), pH	7.6	6.6	6.8	7.8
pH (lab), pH	7.7	6.6	7.5	8.1
PO4, tot	0.015	0.044	0.024	0.041
SAR, ratio	0.32	0.39	0.38	0.23
Se, diss	0.00018	0.00011	0.00057	0.00026
SO4, diss, mg/L	320	800	830	150
Spec. Cond. (lab), umhos/cm	972	1375	1442	718
Spec. Cond. (field), umhos/cm	963	1460	1450	673
TDS, mg/L	750	1200	1300	500
Temp (Celcius), degrees C	10.5	6.7	11	20.4
TSS, mg/L	22	8	120	15
Zn, tot rec	<0.020	0.066	0.11	<0.020

New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Site: SW-N207

	10/5/2022	3/27/2023	5/4/2023	7/31/2023
Al, tot rec, mg/L	0.516	<0.05	0.242	0.327
As, tot rec, ug/L	1.3	0.79	1.1	2.8
Ca, diss, mg/L	110	140	95	90
Cd, tot rec, ug/L	<0.050	<0.050	<0.050	<0.050
Cl, diss, mg/L	6.6	14	6.9	5
Cu, diss, mg/L	<0.00080	0.00081	0.00093	0.0016
Fe, tot rec, ug/L	330	57	170	360
HCO3, mg/L	260	330	230	270
Hg, tot, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
Mg, diss, mg/L	36	59	33	24
Mn, diss, mg/L	0.022	0.027	0.013	0.096
Na, diss, mg/L	13	22	13	8.8
NH3 as N, diss, mg/L	<0.050	<0.050	<0.050	<0.10
NO2, diss, mg/L	<0.010	<0.010	<0.010	<0.010
NO3, diss, mg/L	0.028	0.077	0.07	0.022
Pb, tot rec, ug/L	0.19	<0.10	0.33	0.12
pH (field), pH	8	8.2	7.9	7.9
pH (lab), pH	8.1	8	8.2	8.1
PO4, diss	0.035	0.022	0.029	0.077
SAR, ratio	0.28	0.39	0.29	0.22
Se, diss, mg/L	0.00028	0.0023	0.0013	0.00034
SO4, diss, mg/L	170	340	130	71
Spec. Cond. (field), umhos/cm	794	1096	750	619
Spec. Cond. (lab), umhos/cm	772	1140	735	582
TDS, mg/L	550	840	530	420
Temp (Celcius), degrees C	10	3.7	13.1	20.2
TSS, mg/L	9	<5.0	6	<5.0
Zn, tot rec, mg/l	<0.020	<0.020	<0.020	<0.020

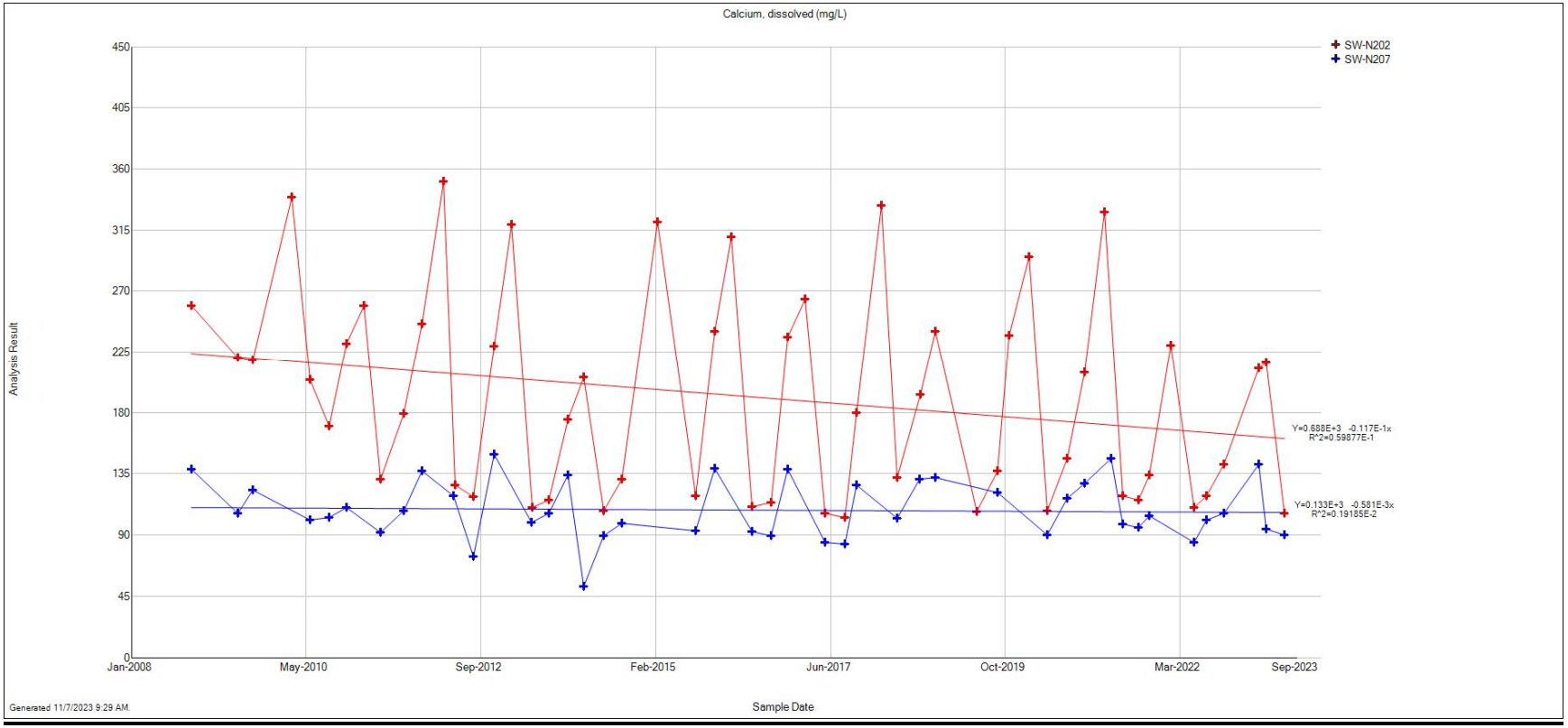
New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Site: SW-N213

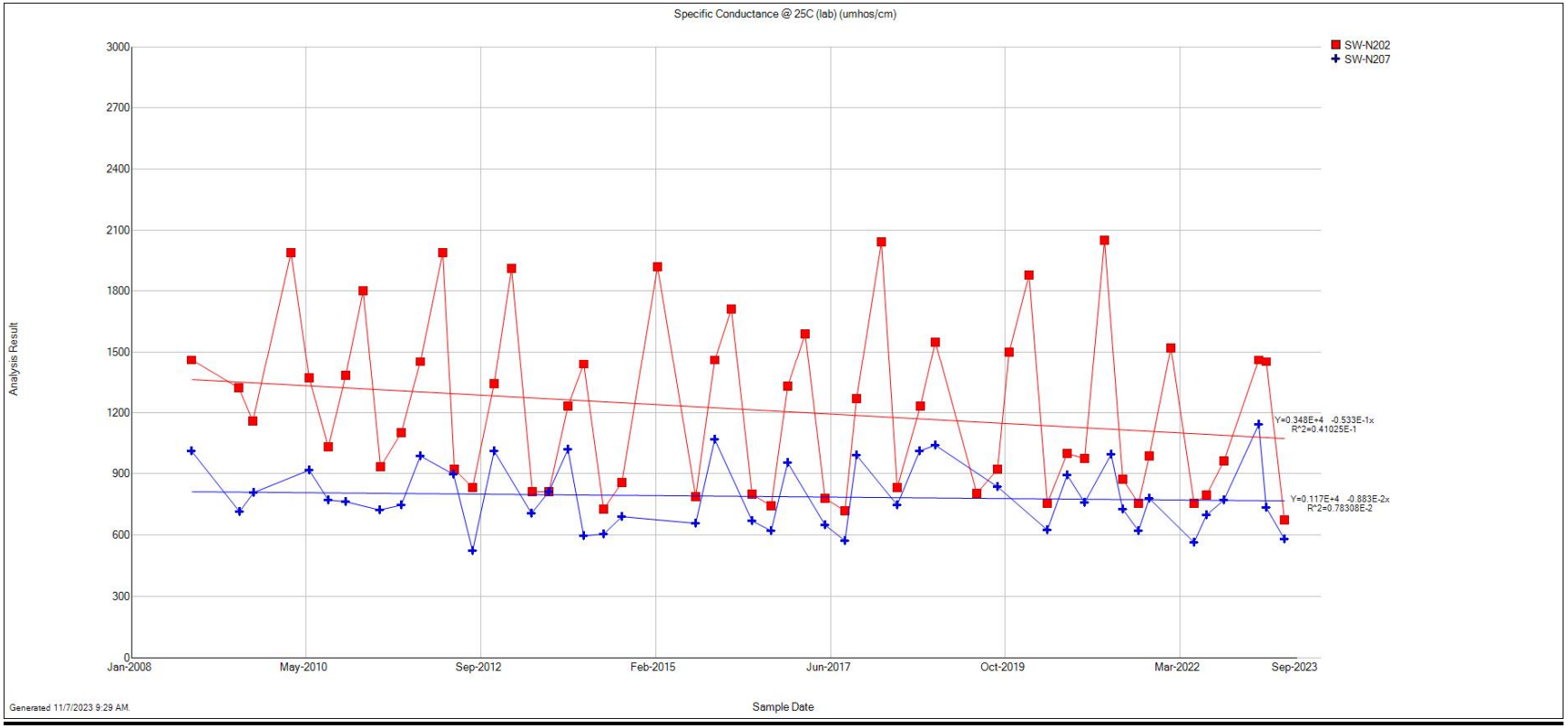
	10/5/2022	3/27/2023	5/4/2023	7/31/2023
Al, tot rec, ug/L	116	<5	879	<5
As, tot rec, ug/L	1	1	0.86	1.5
Ca, diss, mg/L	150	170	55	120
Cd, tot rec, ug/L	<0.050	<0.050	<0.050	<0.050
Cl, diss, mg/L	12	20	3.5	4.7
Cu, diss, mg/L	<0.00080	<0.00080	0.001	0.0011
Fe, tot rec, ug/L	120	12	360	54
HCO3, mg/L	350	440	150	260
Hg, tot, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
Mg, diss, mg/L	53	98	18	29
Mn, diss, mg/L	0.079	<0.010	<0.010	0.023
Na, diss, mg/L	28	47	8.9	17
NH3 as N, diss, mg/L	<0.050	<0.050	<0.050	<0.10
NO2, diss, mg/L	<0.010	<0.010	<0.010	<0.010
NO3, diss, mg/L	0.029	<0.020	0.024	0.042
Pb, tot rec, ug/L	0.11	<0.10	0.69	<0.10
pH (field), pH	8.2	8.3	8.1	8.2
pH (lab), pH	8.2	8.2	8.3	8.2
PO4, tot	0.065	0.044	0.041	0.088
SAR, ratio	0.51	0.72	0.27	0.37
Se, diss, mg/L	0.00026	0.00044	0.00055	0.00029
SO4, diss, mg/L	320	560	88	170
Spec. Cond. (field), umhos/cm	1133	1508	450	785
Spec. Cond. (lab), umhos/cm	1090	1540	444	750
TDS, mg/L	830	1200	310	560
Temp (Celcius), degrees C	9.1	1.1	11.1	18.9
TSS, mg/L	<5.0	<5.0	6	<5.0
Zn, tot rec, mg/l	<0.020	<0.020	<0.020	<0.020

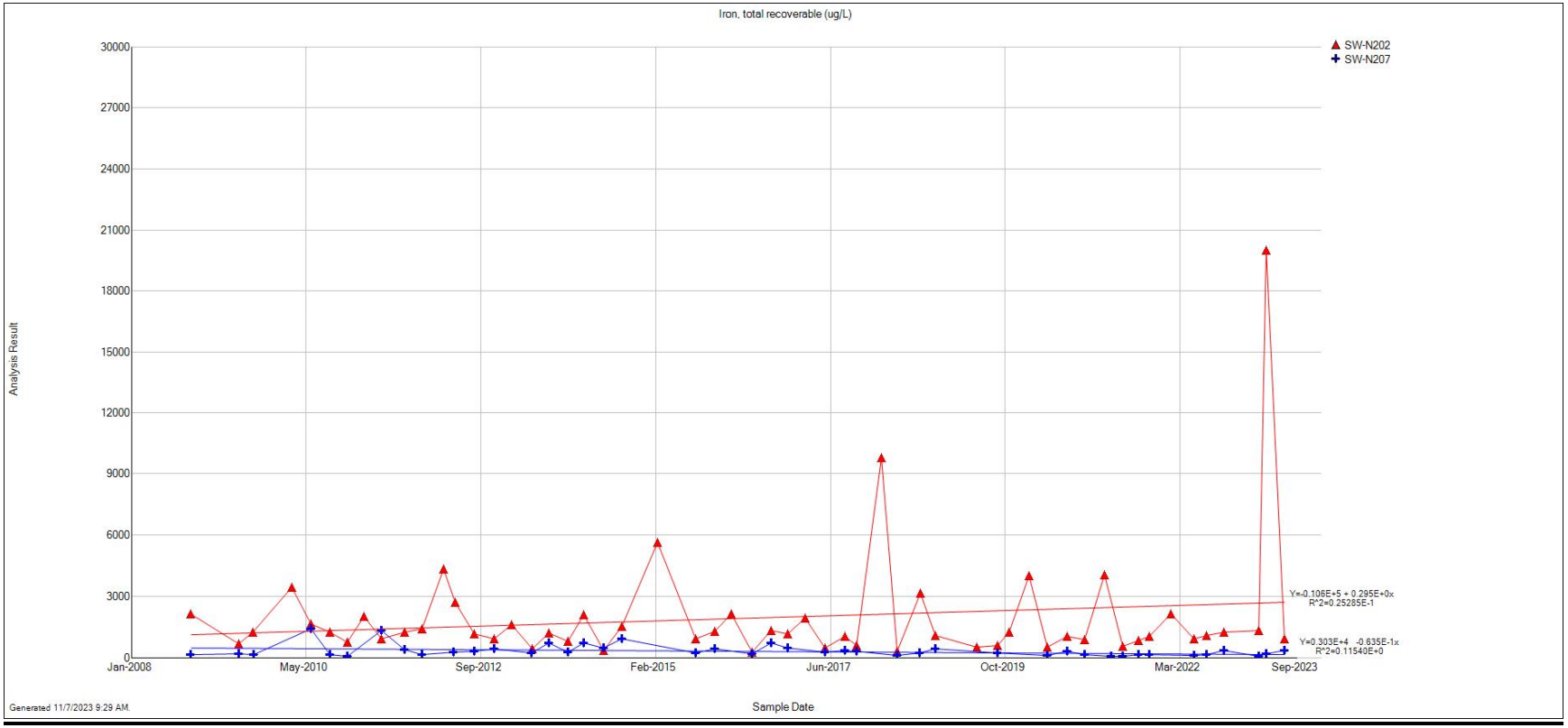
New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Site: SW-N214

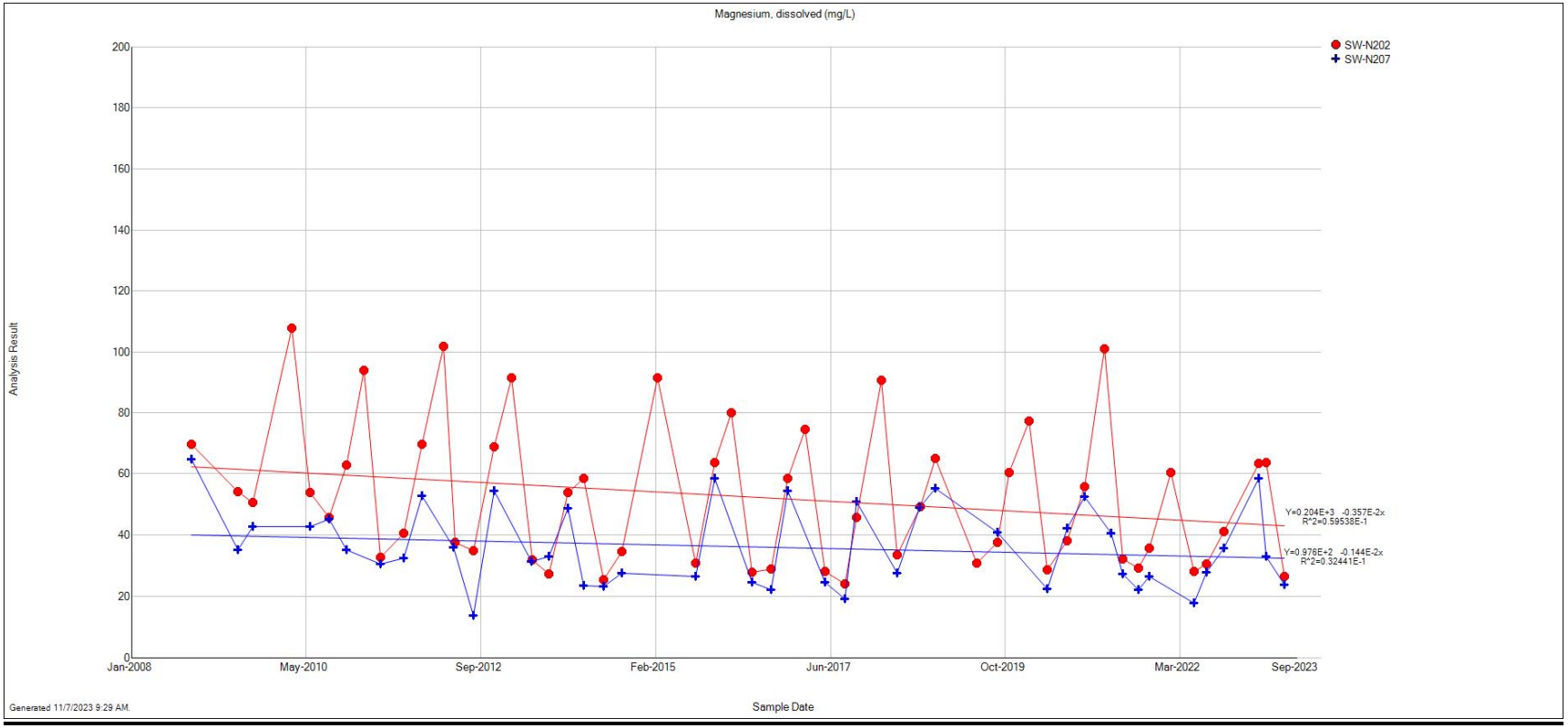
	10/5/2022	3/27/2023	5/4/2023	7/31/2023
Al, tot rec, ug/L	176	Dry	862	<50
As, tot rec, ug/L	1.1		0.87	1.5
Ca, diss, mg/L	160		54	120
Cd, tot rec, ug/L	<0.050		<0.050	<0.050
Cl, diss, mg/L	13		3.8	4.6
Cu, diss, mg/L	<0.00080		0.0011	<0.00080
Fe, tot rec, ug/L	130		350	91
HCO3, mg/L	320		150	260
Hg, tot, mg/L	<0.00020		<0.00020	<0.00020
Mg, diss, mg/L	54		18	30
Mn, diss, mg/L	0.055		<0.010	0.011
Na, diss, mg/L	29		8.8	18
NH3 as N, diss, mg/L	<0.050		<0.050	<0.10
NO2, diss, mg/L	<0.010		<0.010	<0.010
NO3, diss, mg/L	0.025		<0.020	0.047
Pb, tot rec, ug/L	0.14		0.67	0.16
pH (field), pH	8.3		8.2	6.2
pH (lab), pH	8.3		8.3	8.3
PO4, tot	0.068		0.051	0.087
SAR, ratio	0.51		0.27	0.38
Se, diss, mg/L	0.00028		0.00059	0.00039
SO4, diss, mg/L	320		87	180
Spec. Cond. (field), umhos/cm	1126		450	796
Spec. Cond. (lab), umhos/cm	1090		446	747
TDS, mg/L	840		310	570
Temp (Celcius), degrees C	9.3		11.3	18.1
TSS, mg/L	<5.0		5	<5.0
Zn, tot rec, mg/l	<0.020		<0.020	<0.020

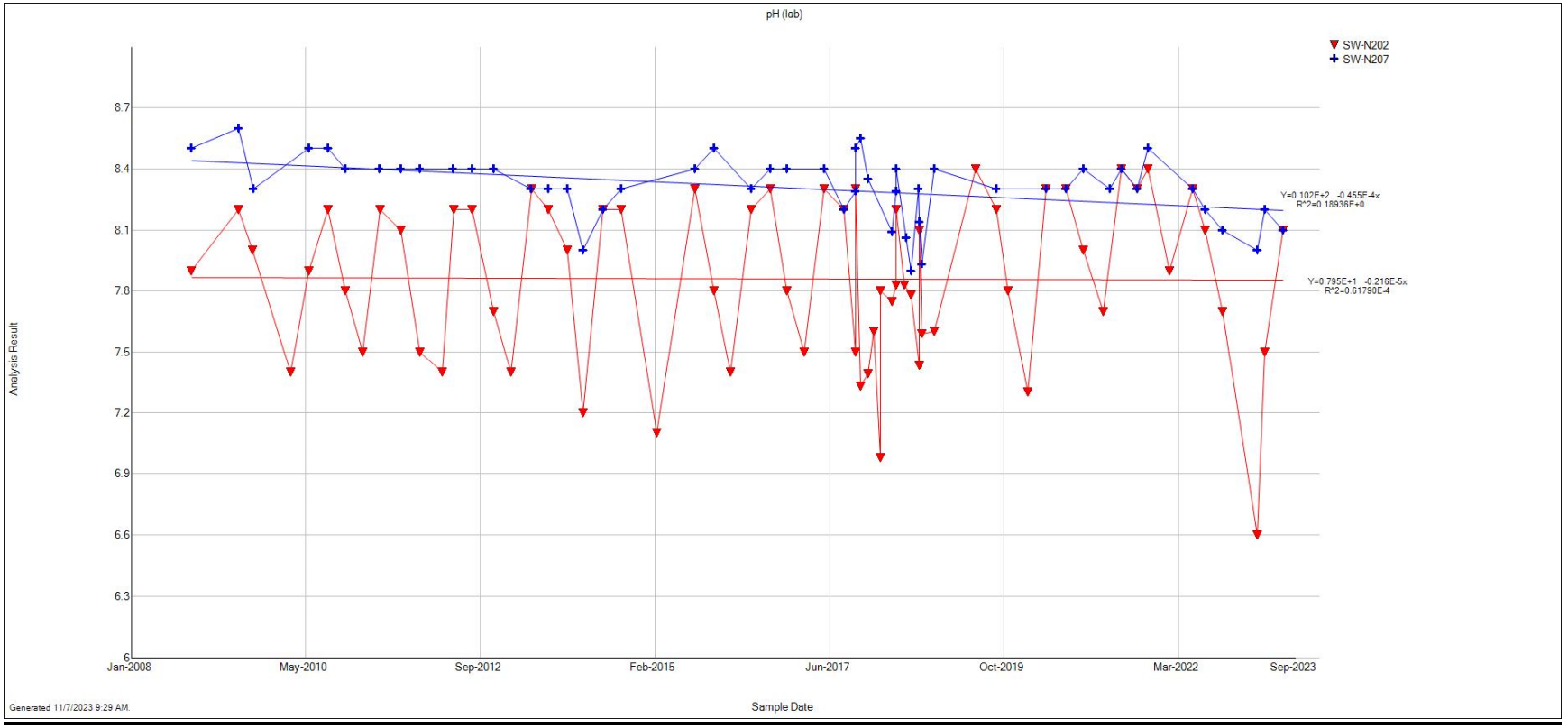
Appendix 2
Surface Water Monitoring Graphs

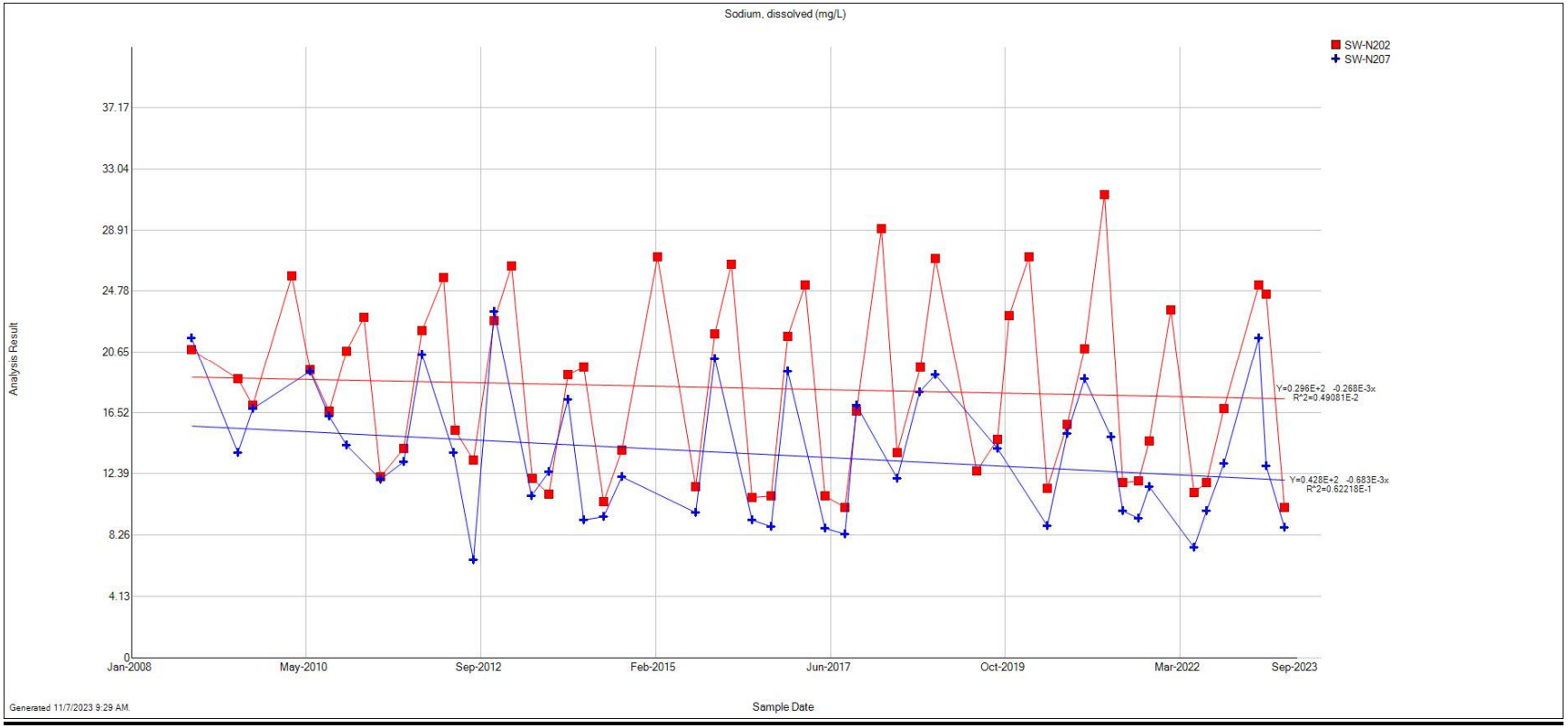

Calcium, dissolved (mg/L)
SW-N202
SW-N207
Analysis Result
450
405
360
315
270
225
180
135
90
45
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=0.688E+3 -0.117E-1x
R^2=0.59877E-1
Y=0.133E+3 -0.581E-3x
R^2=0.19185E-2
Generated 11/7/2023 9:29 AM.
Sample Date

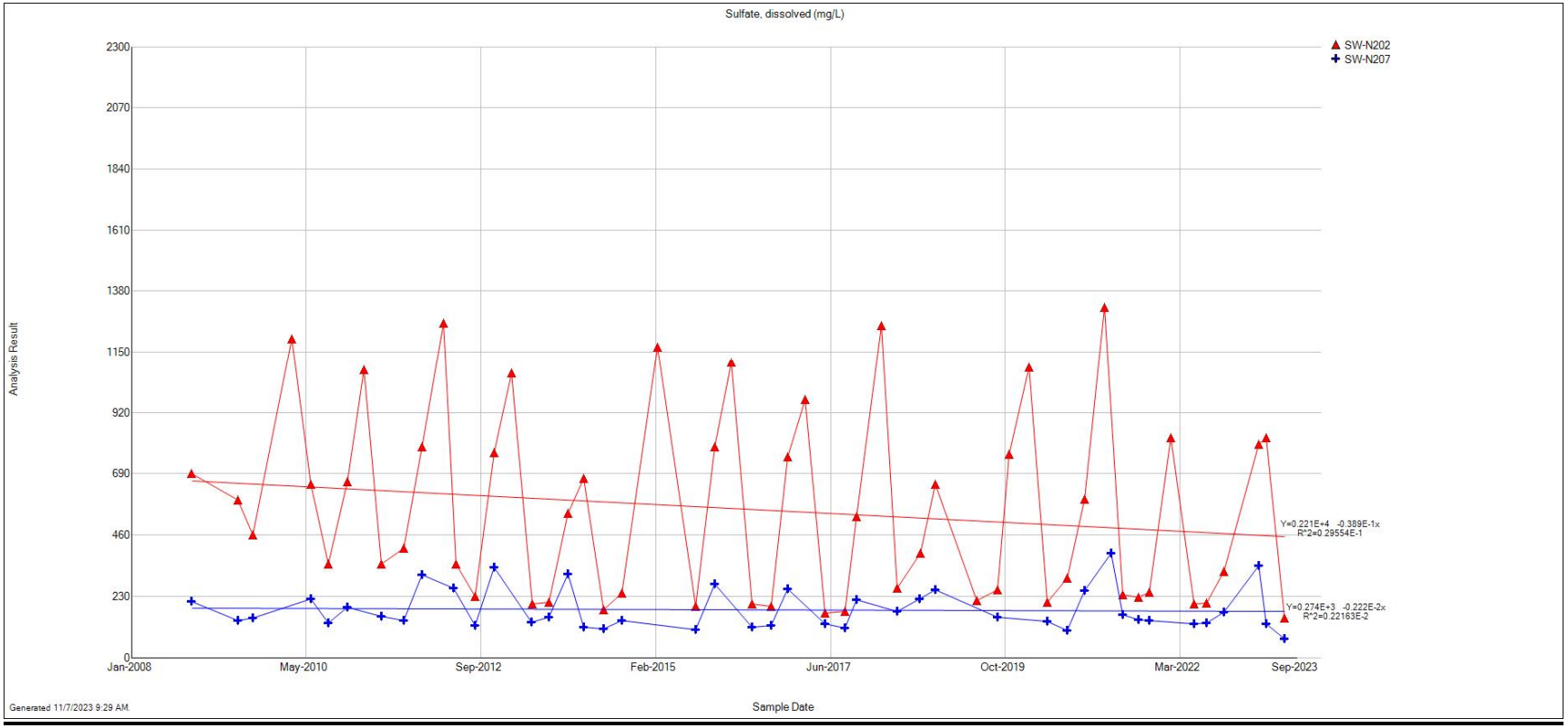

Specific Conductance @ 25C (lab) (umhos/cm)
SW-N202
SW-N207
Y=0.348E+4 -0.533E-1x
R^2=0.41025E-1
Y=0.117E+4 -0.883E-2x
R^2=0.78308E-2
Analysis Result
3000
2700
2400
2100
1800
1500
1200
900
600
300
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/7/2023 9:29 AM.
Sample Date

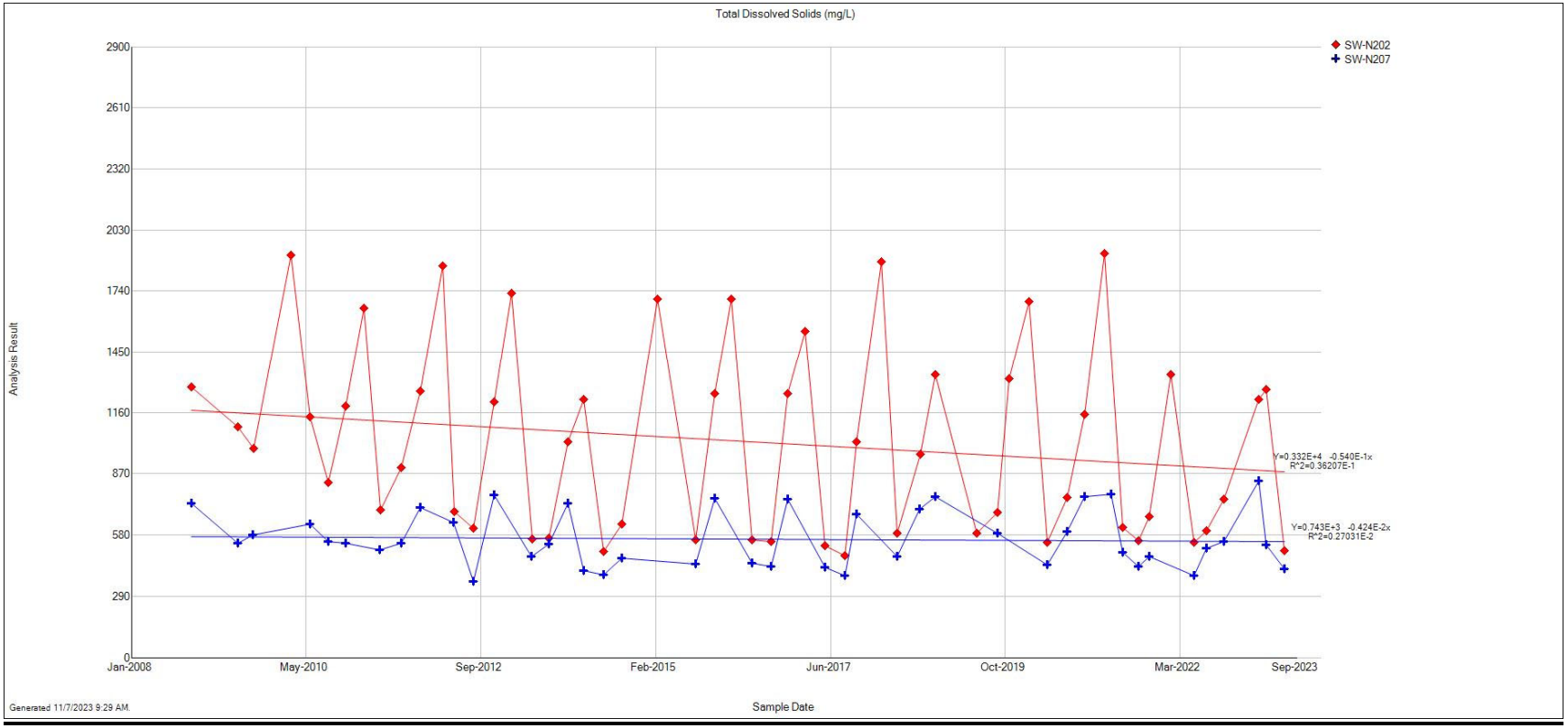

Iron, total recoverable (ug/L)
SW-N202
SW-N207
Analysis Result
30000
27000
24000
21000
18000
15000
12000
9000
6000
3000
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.106E+5 + 0.295E+0x
R^2=0.25285E-1
Y=0.303E+4 -0.635E-1x
R^2=0.11540E+0
Generated 11/7/2023 9:29 AM.
Sample Date

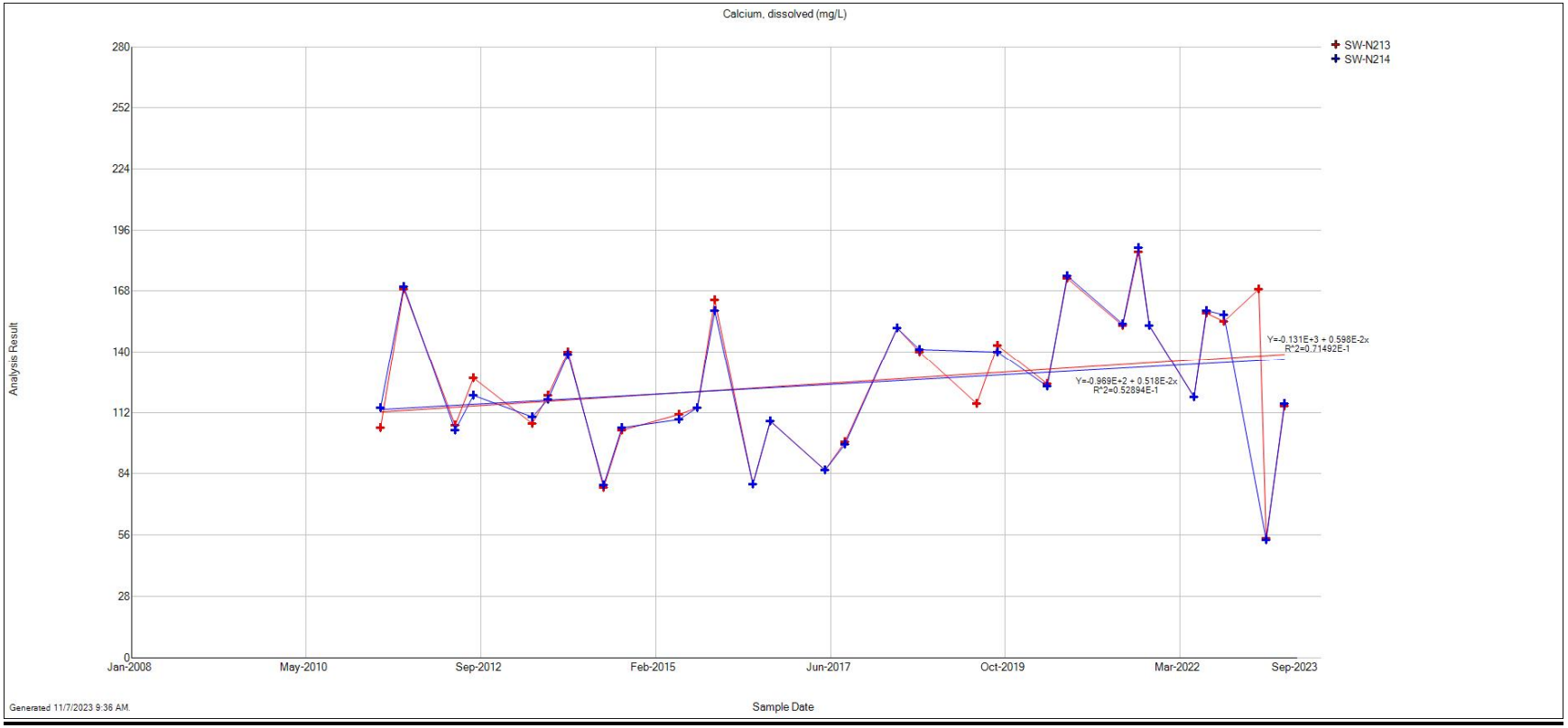

Magnesium, dissolved (mg/L)
SW-N202
SW-N207
Analysis Result
200
180
160
140
120
100
80
60
40
20
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=0.204E+3 -0.357E-2x
R^2=0.59538E-1
Y=0.976E+2 -0.144E-2x
R^2=0.32441E-1
Generated 11/7/2023 9:29 AM.
Sample Date

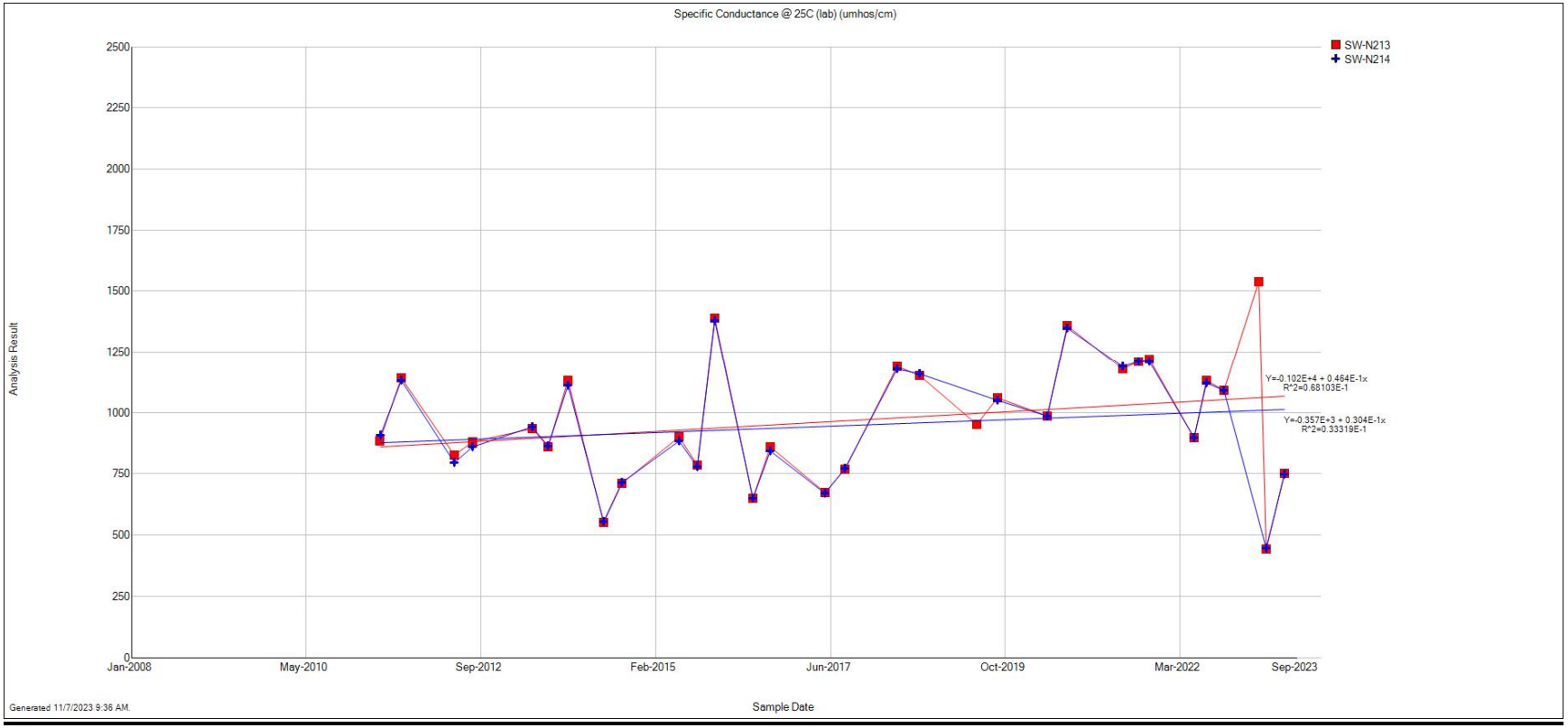

pH (lab)
SW-N202
SW-N207
Y=0.102E+2 -0.455E-4x
R^2=0.18936E+0
Y=0.795E+1 -0.216E-5x
R^2=0.61790E-4
Analysis Result
8.7
8.4
8.1
7.8
7.5
7.2
6.9
6.6
6.3
6
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/7/2023 9:29 AM.
Sample Date

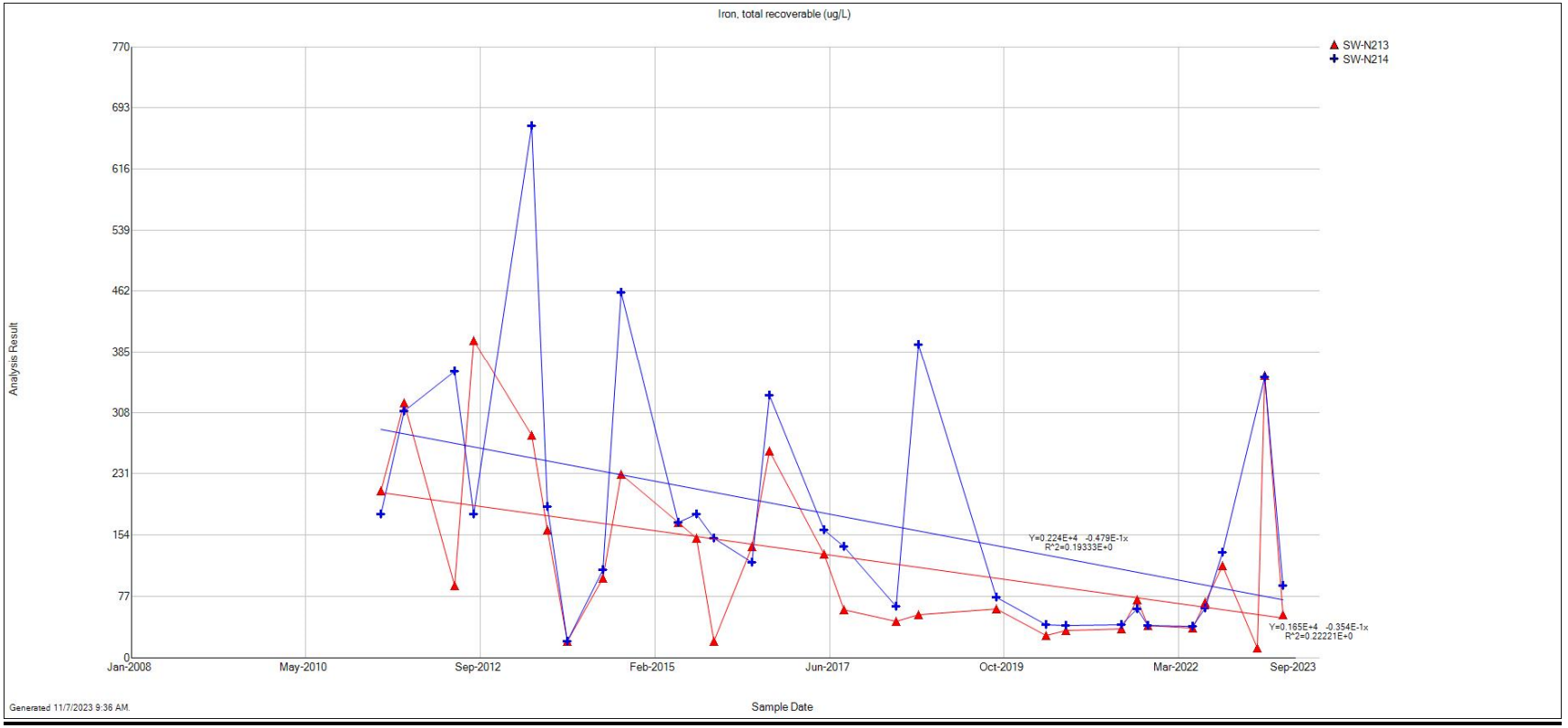

Sodium, dissolved (mg/L)
SW-N202
SW-N207
Analysis Result
37.17
33.04
28.91
24.78
20.65
16.52
12.39
8.26
4.13
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=0.296E+2 -0.268E-3x
R^2=0.49081E-2
Y=0.428E+2 -0.683E-3x
R^2=0.62218E-1
Generated 11/7/2023 9:29 AM.
Sample Date

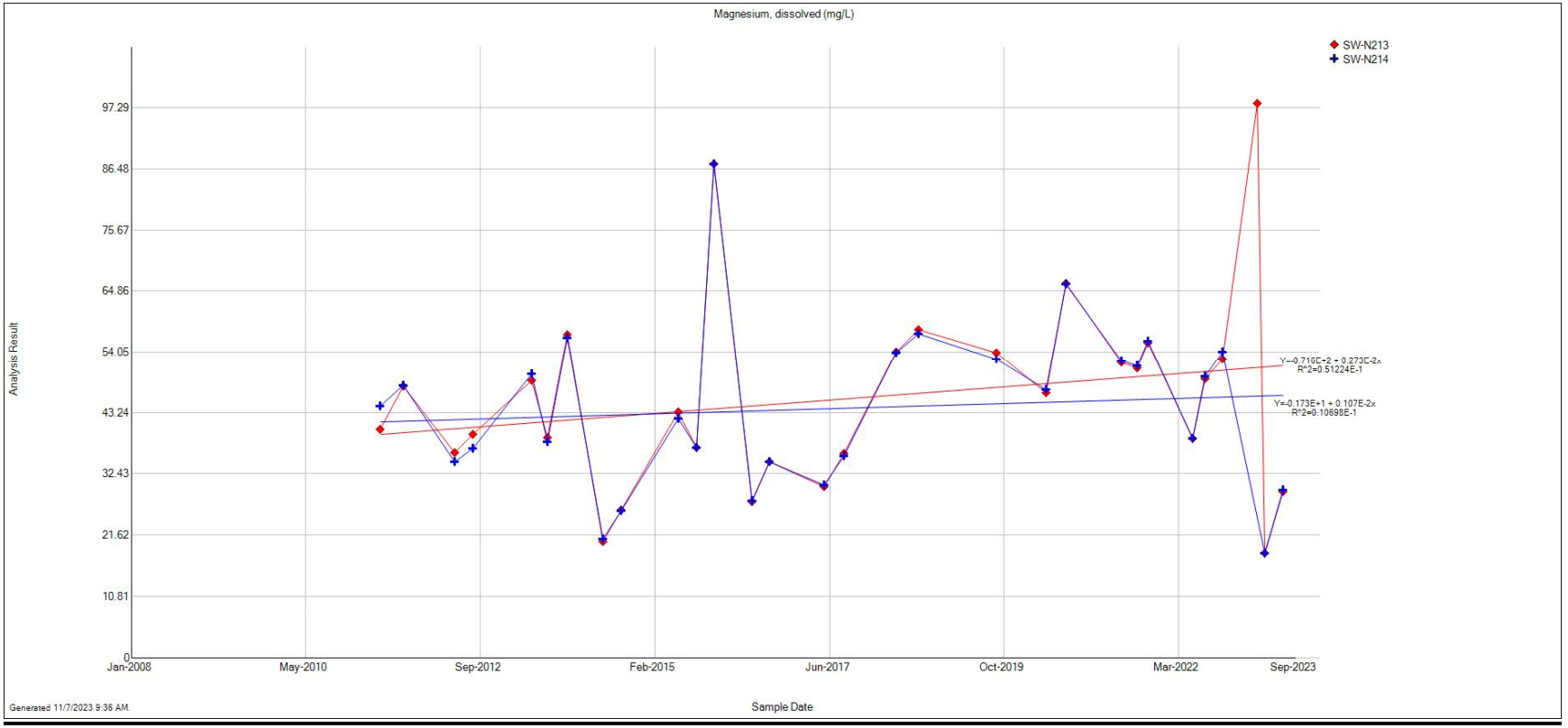

Sulfate, dissolved (mg/L)
SW-N202
SW-N207
Analysis Result
2300
2070
1840
1610
1380
1150
920
690
460
230
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=0.221E+4 -0.389E-1x
R^2=0.29554E-1
Y=0.274E+3 -0.222E-2x
R^2=0.22163E-2
Generated 11/7/2023 9:29 AM.
Sample Date

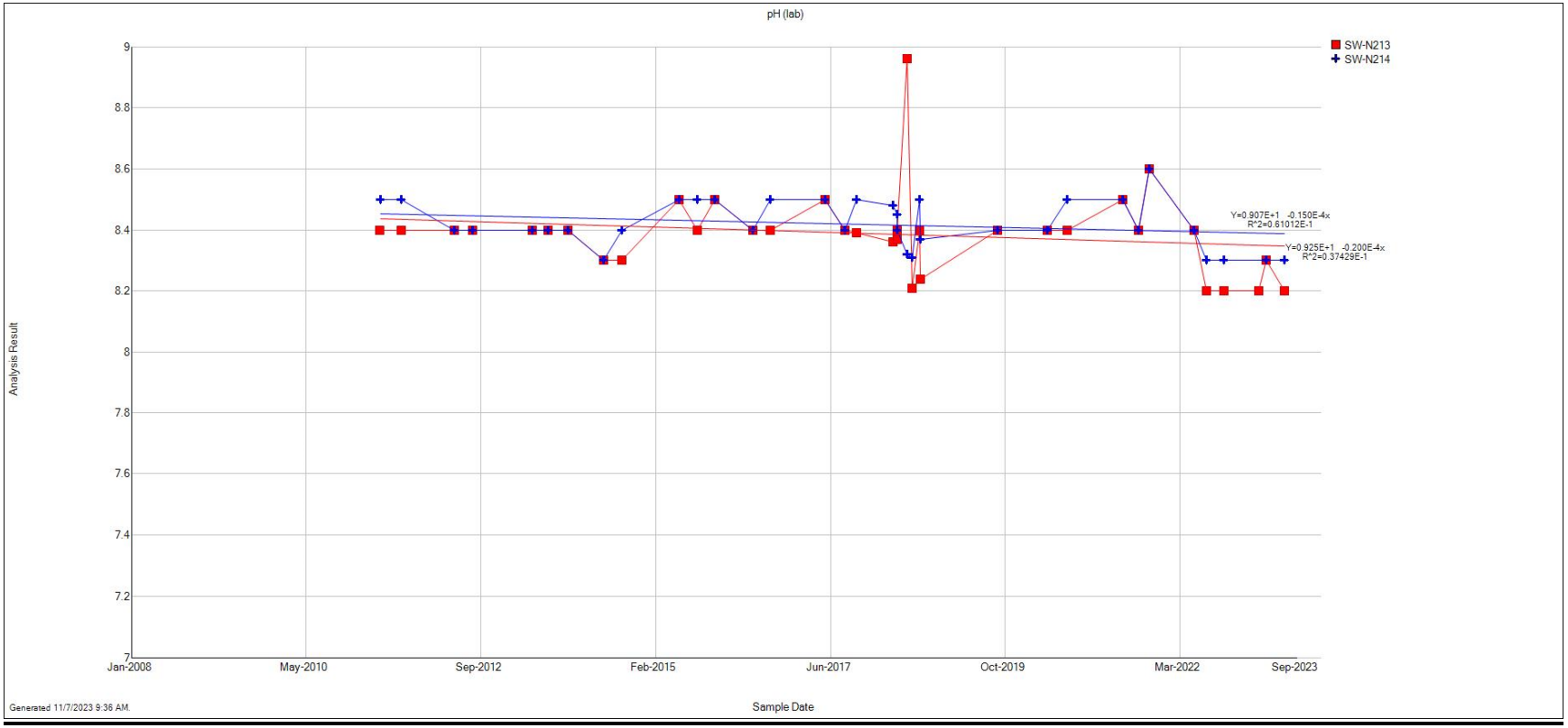

Total Dissolved Solids (mg/L)
SW-N202
SW-N207
Y=0.332E+4 -0.540E-1x
R^2=0.36207E-1
Y=0.743E+3 -0.424E-2x
R^2=0.27031E-2
Analysis Result
2900
2610
2320
2030
1740
1450
1160
870
580
290
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/7/2023 9:29 AM.
Sample Date

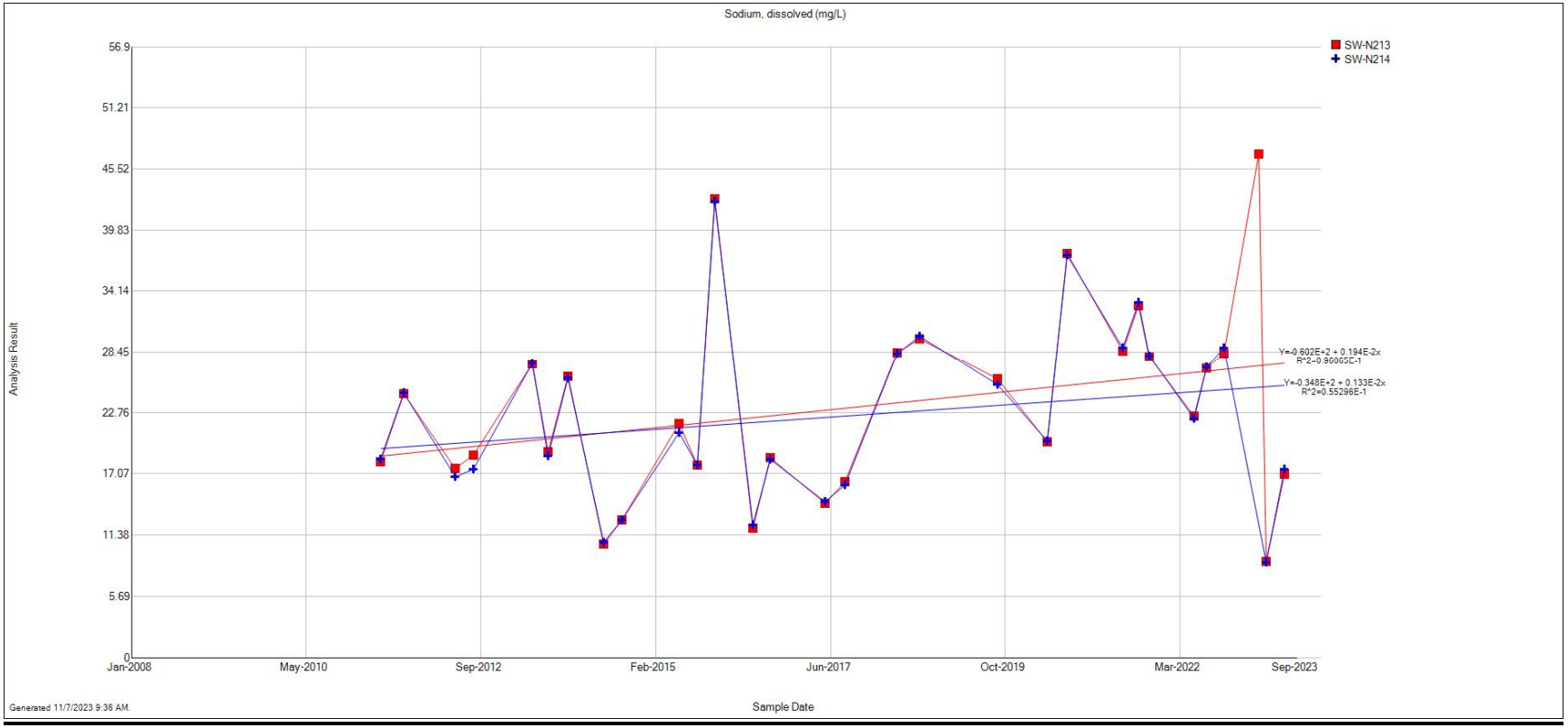

Calcium, dissolved (mg/L)
SW-N213
SW-N214
Analysis Result
280
252
224
196
168
140
112
84
56
28
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.131E+3 + 0.598E-2x
R^2=0.71492E-1
Y=-0.969E+2 + 0.518E-2x
R^2=0.52894E-1
Generated 11/7/2023 9:36 AM.
Sample Date

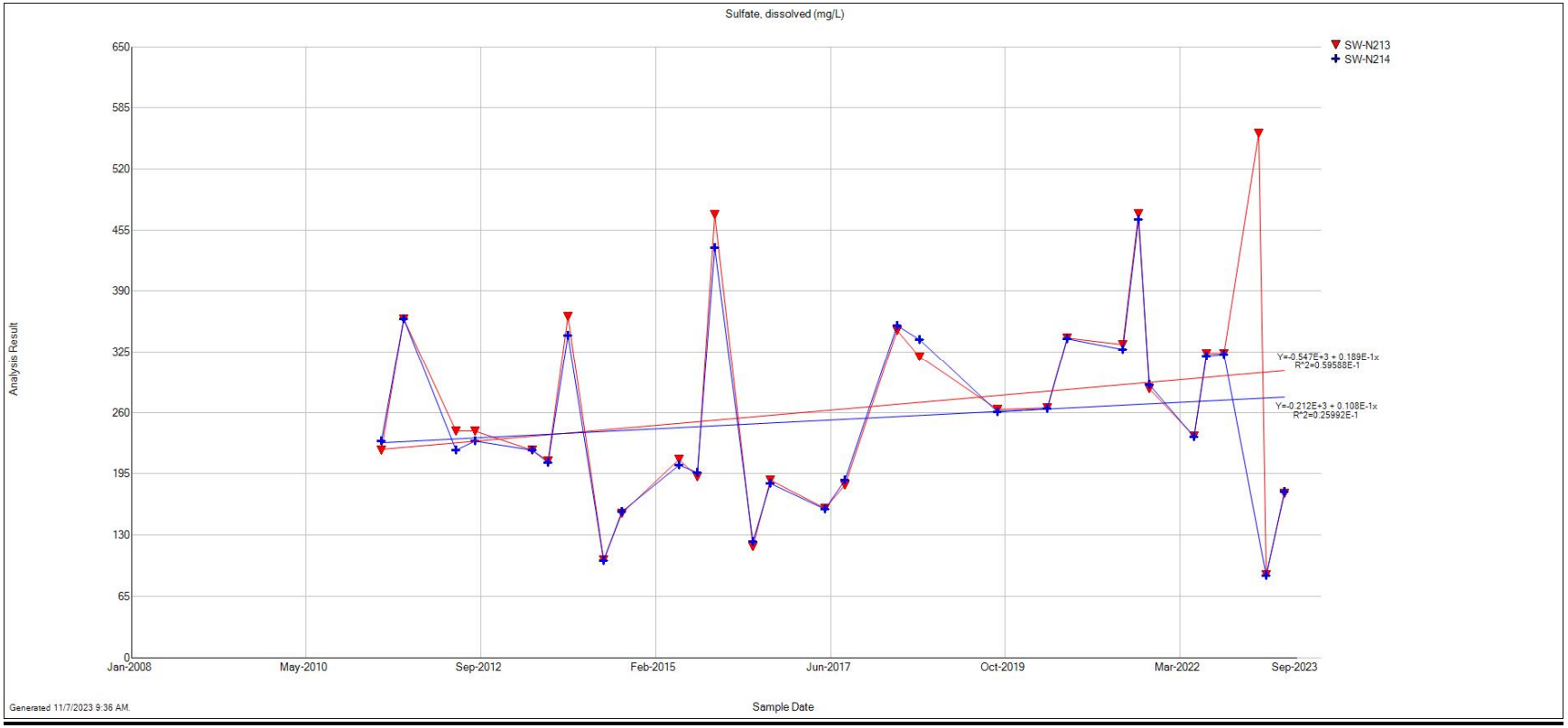

Specific Conductance @ 25C (lab) (umhos/cm)
SW-N213
SW-N214
Y=-0.102E+4 + 0.464E-1x
R^2=0.68103E-1
Y=-0.357E+3 + 0.304E-1x
R^2=0.33319E-1
Analysis Result
2500
2250
2000
1750
1500
1250
1000
750
500
250
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/7/2023 9:36 AM.
Sample Date

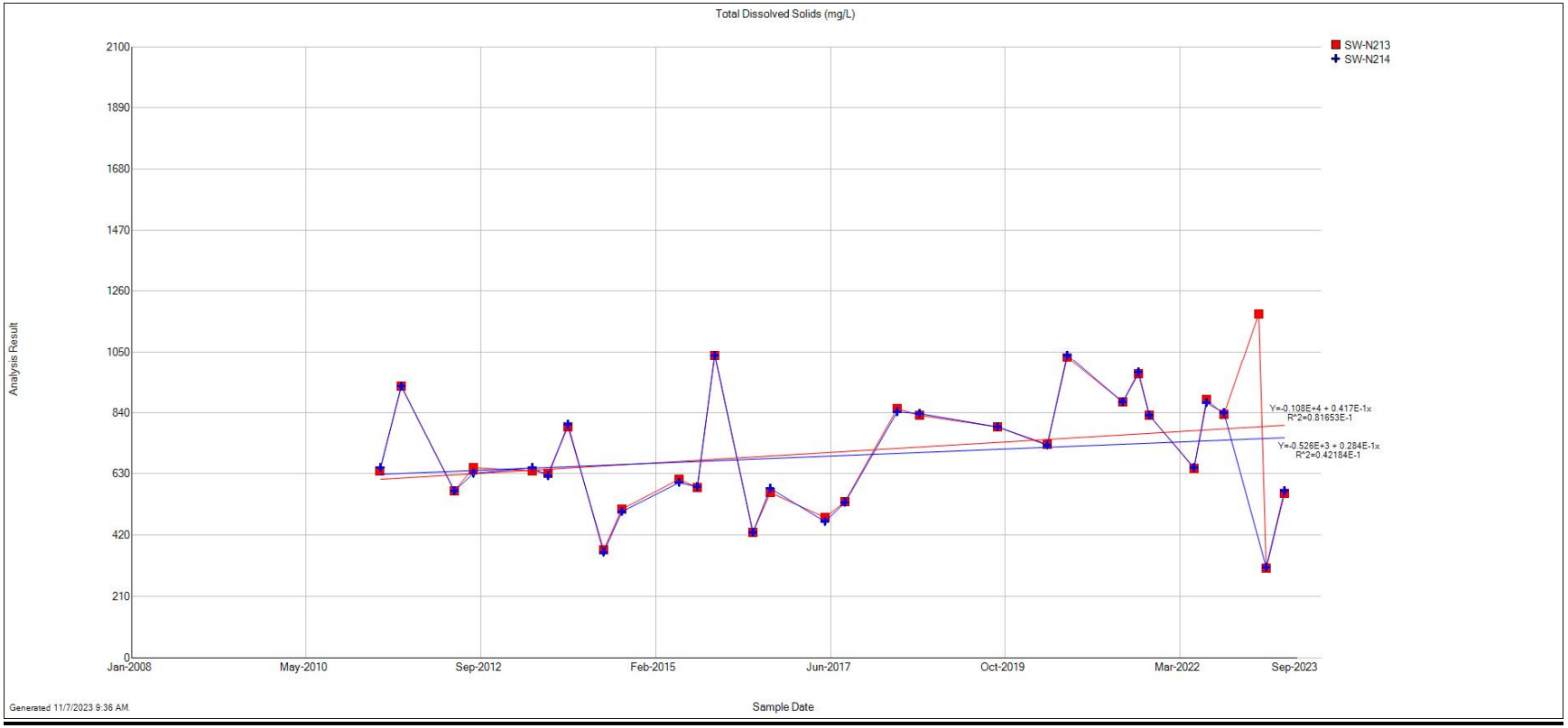

Iron, total recoverable (ug/L)
SW-N213
SW-N214
Analysis Result
770
693
616
539
462
385
308
231
154
77
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=0.224E+4 -0.479E-1x
R^2=0.19333E+0
Y=0.165E+4 -0.354E-1x
R^2=0.22221E+0
Generated 11/7/2023 9:36 AM.
Sample Date


Magnesium, dissolved (mg/L)
SW-N213
SW-N214
97.29
86.48
75.67
64.86
54.05
43.24
32.43
21.62
10.81
0
Analysis Result
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Sample Date
Y=-0.716E-2 + 0.273E-2x
R^2=0.51224E-1
Y=-0.173E+1 + 0.107E-2x
R^2=0.10698E-1
Generated 11/7/2023 9:36 AM.


pH (lab)
SW-N213
SW-N214
Y=0.907E+1 -0.150E-4x
R^2=0.61012E-1
Y=0.925E+1 -0.200E-4x
R^2=0.37429E-1
Analysis Result
9
8.8
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
7
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/7/2023 9:36 AM.
Sample Date


Sodium, dissolved (mg/L)
SW-N213
SW-N214
Y=-0.602E+2 + 0.194E-2x
R^2=0.96005E-1
Y=-0.348E+2 + 0.133E-2x
R^2=0.55296E-1
Analysis Result
56.9
51.21
45.52
39.83
34.14
28.45
22.76
17.07
11.38
5.69
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/7/2023 9:36 AM.
Sample Date


Sulfate, dissolved (mg/L)
SW-N213
SW-N214
650
585
520
455
390
325
260
195
130
65
0
Analysis Result
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.547E+3 + 0.189E-1x
R^2=0.59588E-1
Y=-0.212E+3 + 0.108E-1x
R^2=0.25992E-1
Generated 11/7/2023 9:36 AM.
Sample Date


Total Dissolved Solids (mg/L)
SW-N213
SW-N214
Analysis Result
2100
1890
1680
1470
1260
1050
840
630
420
210
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.108E+4 + 0.417E-1x
R^2=0.81653E-1
Y=-0.526E+3 + 0.284E-1x
R^2=0.42184E-1
Generated 11/7/2023 9:36 AM.
Sample Date

Appendix 3
Groundwater Monitoring Data

New Horizon North Mine

Analysis Results by Date (column) and Parameter (row)

Date Range: 10/01/2022 to 09/30/2023

Well: GW-N50

	11/15/2022	2/8/2023	4/12/2023	7/12/2023
Al, diss, mg/L	0.018	0.02	0.031	0.11
Alkalinity, lab, mg/L	540	610	410	430
As, diss, mg/L	<0.00020	<0.00020	<0.0010	<0.00020
Ca, diss, mg/L	330	330	250	250
Cation-Anion Bal, %	4.1	-6.2	-3.6	-1.8
Cl, diss, mg/L	41	43	26	27
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.25	0.26	0.39	0.27
HCO3, mg/L	540	610	410	430
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	23	24	19	18
Mg, diss, mg/L	180	180	130	130
Mn, diss, mg/L	0.29	0.29	0.21	0.22
Mo, diss, mg/L	<0.040	<0.040	<0.020	<0.020
Na, diss, mg/L	120	120	83	81
NH3 as N, diss, mg/L	1.3	0.93	0.66	0.93
NO2, diss, mg/L	0.017	0.019	0.042	0.038
NO3, diss, mg/L	0.85	0.71	1.6	1.1
Orthophosphate, diss, mg/L	<0.030	<0.030	0.04	0.074
Pb, diss, mg/L	<0.00010	<0.00010	0.00011	0.0001
pH (field), pH	7.1	6.8	7.3	7.1
pH (lab), pH	7.8	7.7	8	7.5
Se, diss, mg/L	<0.00010	<0.00010	<0.00050	<0.00010
SO4, diss, mg/L	1100	1400	950	870
Spec. Cond. (lab), umhos/cm	2405	2833	2117	2242
Spec. Cond. (field), umhos/cm	2630	2820	2140	2230
TDS, mg/L	2200	3200	1700	2000
Zn, diss, mg/L	<0.040	<0.040	<0.020	0.056

New Horizon North Mine
Analysis Results by Date
Date Range: 10/01/2022 to 09/30/2023
Well: GW-N51

	11/15/2022	2/8/2023	4/12/2023	7/12/2023
Al, diss, mg/L	0.39	0.31	0.14	0.2
Alkalinity, lab, mg/L	21	25	47	34
As, diss, mg/L	0.00078	0.00058	0.00047	0.00034
Ca, diss, mg/L	82	82	82	87
Cation-Anion Bal, %	-2.1	-8.4	-2.2	3.1
Cl, diss, mg/L	6.6	6.5	7.3	7.3
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	9.3	4.9	3.4	9.3
HCO3, mg/L	21	25	47	34
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	5.8	6.2	5.6	6
Mg, diss, mg/L	41	41	38	42
Mn, diss, mg/L	0.63	0.59	0.7	0.72
Mo, diss, mg/L	<0.020	<0.020	<0.020	<0.020
Na, diss, mg/L	23	23	22	25
NH3 as N, diss, mg/L	3.5	3.3	3	3
NO2, diss, mg/L	<0.010	<0.010	<0.010	<0.010
NO3, diss, mg/L	<0.20	<0.020	0.023	0.13
Orthophosphate, diss, mg/L	<0.030	0.043	0.05	0.04
Pb, diss, mg/L	0.00019	0.0002	0.00012	0.0001
pH (field), pH	5.3	5.2	5.5	5.5
pH (lab), pH	6	6	6.4	5.9
Se, diss, mg/L	0.00018	<0.00010	<0.00020	<0.00010
SO4, diss, mg/L	440	500	380	400
Spec. Cond. (lab), umhos/cm	919	922	820	916
Spec. Cond. (field), umhos/cm	900	895	840	920
TDS, mg/L	700	740	650	730
Zn, diss, mg/L	0.57	0.49	0.42	0.55

New Horizon North Mine

Analysis Results by Date (column) and Parameter (row)

Date Range: 10/01/2022 to 09/30/2023

Well: GW-N52

	11/15/2022	2/8/2023	4/6/2023	7/12/2023
Al, diss, mg/L	0.013	0.0069	0.01	0.046
Alkalinity, lab, mg/L	230	310	250	220
As, diss, mg/L	<0.00020	0.00047	<0.00020	<0.00020
Ca, diss, mg/L	150	160	130	150
Cation-Anion Bal, %	-2.2	-3.7	-0.6	2.7
Cl, diss, mg/L	4.1	6.1	9.6	3.4
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.038	0.28	0.0077	0.041
HCO3, mg/L	230	310	250	220
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	0.83	2.5	1.2	0.99
Mg, diss, mg/L	16	42	22	19
Mn, diss, mg/L	0.019	1.4	<0.010	<0.010
Mo, diss, mg/L	<0.020	<0.020	<0.020	<0.020
Na, diss, mg/L	7.7	15	9.4	8.3
NH3 as N, diss, mg/L	<0.050	1.19	<0.050	<0.10
NO2, diss, mg/L	<0.010	<0.010	0.011	<0.010
NO3, diss, mg/L	<0.020	0.11	0.95	0.3
Orthophosphate, diss, mg/L	<0.030	<0.030	0.053	0.037
Pb, diss, mg/L	<0.00010	<0.00010	<0.00010	0.00014
pH (field), pH	6.6	6.6	6.6	6.6
pH (lab), pH	7.3	7.3	7	7.4
Se, diss, mg/L	0.00021	<0.00010	0.0012	0.0023
SO4, diss, mg/L	220	350	170	220
Spec. Cond. (lab), umhos/cm	866	1081	742	826
Spec. Cond. (field), umhos/cm	831	1080	760	842
TDS, mg/L	600	840	520	640
Zn, diss, mg/L	<0.020	<0.020	<0.020	0.07

New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Well: GW-N53

	11/9/2022	2/8/2023	4/6/2023	7/12/2023
Al, diss, mg/L	0.012	<0.010	<0.010	0.074
Alkalinity, lab, mg/L	510	590	580	530
As, diss, mg/L	0.001	0.00042	<0.00040	0.00038
Ca, diss, mg/L	330	340	360	350
Cation-Anion Bal, %	-3	-5.8	-1	-2
Cl, diss, mg/L	67	67	71	66
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.048	<0.014	0.02	0.028
HCO3, mg/L	510	590	580	530
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	35	36	36	35
Mg, diss, mg/L	280	280	290	280
Mn, diss, mg/L	0.056	0.06	0.067	0.059
Mo, diss, mg/L	<0.020	<0.020	<0.040	<0.040
Na, diss, mg/L	180	180	190	180
NH3 as N, diss, mg/L	2.8	2.4	2.7	2.7
NO2, diss, mg/L	0.2	0.23	0.18	0.2
NO3, diss, mg/L	0.38	0.42	0.44	0.42
Orthophosphate, diss, mg/L	<0.030	0.04	0.056	0.081
Pb, diss, mg/L	0.00026	<0.00020	<0.00020	<0.00010
pH (field), pH	7.1	7.1	7.1	7.2
pH (lab), pH	7.8	7.7	7.6	7.7
Se, diss, mg/L	0.00024	<0.00020	<0.00020	0.00016
SO4, diss, mg/L	1900	2000	1900	1700
Spec. Cond. (field), umhos/cm	3480	3565	3694	3425
Spec. Cond. (lab), umhos/cm	3590	3560	3620	3550
TDS, mg/L	3200	3400	3300	3300
Zn, diss, mg/L	<0.020	0.048	<0.040	0.1

New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Well: GW-N54

	11/9/2022	2/8/2023	4/6/2023	7/12/2023
Al, diss, mg/L	<0.0050	<0.010	<0.025	<0.0050
Alkalinity, lab, mg/L	500	560	540	500
As, diss, mg/L	0.00023	<0.00040	<0.0010	<0.00020
Ca, diss, mg/L	450	450	480	470
Cation-Anion Bal, %	-2.7	-9.4	2	-0.7
Cl, diss, mg/L	68	75	82	70
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.045	0.034	0.049	0.052
HCO3, mg/L	500	560	540	500
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	28	28	29	27
Mg, diss, mg/L	510	490	520	480
Mn, diss, mg/L	0.18	0.18	0.18	0.16
Mo, diss, mg/L	<0.020	<0.040	<0.040	<0.10
Na, diss, mg/L	170	180	190	170
NH3 as N, diss, mg/L	2.8	2.6	2.6	3
NO2, diss, mg/L	0.028	0.042	0.031	0.026
NO3, diss, mg/L	0.064	0.094	0.13	0.15
Orthophosphate, diss, mg/L	<0.030	<0.030	0.047	0.047
Pb, diss, mg/L	<0.00050	<0.00020	<0.00050	<0.00010
pH (field), pH	6.9	7	6.9	6.9
pH (lab), pH	7.5	7.7	7.5	7.5
Se, diss, mg/L	<0.00010	<0.00020	<0.00050	<0.00010
SO4, diss, mg/L	3100	3500	2800	2800
Spec. Cond. (field), umhos/cm	4616	4871	4834	4510
Spec. Cond. (lab), umhos/cm	4800	4760	4800	4590
TDS, mg/L	4900	4900	4900	4600
Zn, diss, mg/L	<0.020	<0.040	<0.040	<0.10

New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Well: GW-N55

	11/9/2022	2/8/2023	4/6/2023	7/12/2023
Al, diss, mg/L	<0.0050	<0.025	<0.050	0.065
Alkalinity, lab, mg/L	680	790	770	720
As, diss, mg/L	0.00024	<0.0010	<0.0020	<0.00020
Ca, diss, mg/L	400	420	430	410
Cation-Anion Bal, %	1.8	-1	1	9.5
Cl, diss, mg/L	160	150	100	150
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.3	0.29	0.26	0.22
HCO3, mg/L	680	790	770	720
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	28	27	30	29
Mg, diss, mg/L	2400	2100	2600	2400
Mn, diss, mg/L	1.1	1.2	1.4	1.3
Mo, diss, mg/L	<0.020	<0.10	<0.10	<0.020
Na, diss, mg/L	270	270	290	270
NH3 as N, diss, mg/L	3.5	3.5	3.1	3.2
NO2, diss, mg/L	0.017	0.016	0.027	0.017
NO3, diss, mg/L	0.038	0.1	0.13	0.15
Orthophosphate, diss, mg/L	<0.030	<0.030	0.068	0.27
Pb, diss, mg/L	<0.0010	<0.00050	<0.0010	<0.00010
pH (field), pH	6.7	6.7	6.8	6.8
pH (lab), pH	7.6	7.6	7.5	7.4
Se, diss, mg/L	<0.0010	<0.00050	<0.0010	0.0002
SO4, diss, mg/L	9700	9000	11000	8200
Spec. Cond. (field), umhos/cm	9840	10910	10920	9945
Spec. Cond. (lab), umhos/cm	11600	10900	11300	11500
TDS, mg/L	14000	13000	14000	16000
Zn, diss, mg/L	<0.020	<0.10	<0.10	0.12

New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Well: GW-N56

	11/8/2022	2/7/2023	4/11/2023	7/12/2023
Al, diss, mg/L	<0.0050	<0.010	<0.025	0.0084
Alkalinity, lab, mg/L	610	690	630	600
As, diss, mg/L	0.00054	<0.00040	<0.0010	0.0002
Ca, diss, mg/L	450	490	490	440
Cation-Anion Bal, %	-6	0	0.7	3
Cl, diss, mg/L	45	44	44	48
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.041	0.093	0.12	0.18
HCO3, mg/L	610	690	630	600
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	30	31	32	31
Mg, diss, mg/L	490	510	520	470
Mn, diss, mg/L	0.57	0.63	0.54	0.45
Mo, diss, mg/L	<0.020	<0.040	<0.040	<0.020
Na, diss, mg/L	170	170	180	170
NH3 as N, diss, mg/L	3.2	2.6	2.9	2.6
NO2, diss, mg/L	<0.010	<0.010	<0.010	<0.010
NO3, diss, mg/L	<0.020	<0.020	<0.020	0.054
Orthophosphate, diss, mg/L	<0.030	0.034	0.056	0.05
Pb, diss, mg/L	<0.00010	<0.00020	<0.00050	<0.00010
pH (field), pH	6.6	6.7	6.7	6.7
pH (lab), pH	7.6	7.3	7.4	7.3
Se, diss, mg/L	<0.00010	<0.00020	<0.00050	<0.00010
SO4, diss, mg/L	3200	2900	2900	2500
Spec. Cond. (field), umhos/cm	4451	5012	4330	4398
Spec. Cond. (lab), umhos/cm	4640	4740	4630	4520
TDS, mg/L	4600	4700	4800	4600
Zn, diss, mg/L	<0.020	<0.040	<0.040	<0.020

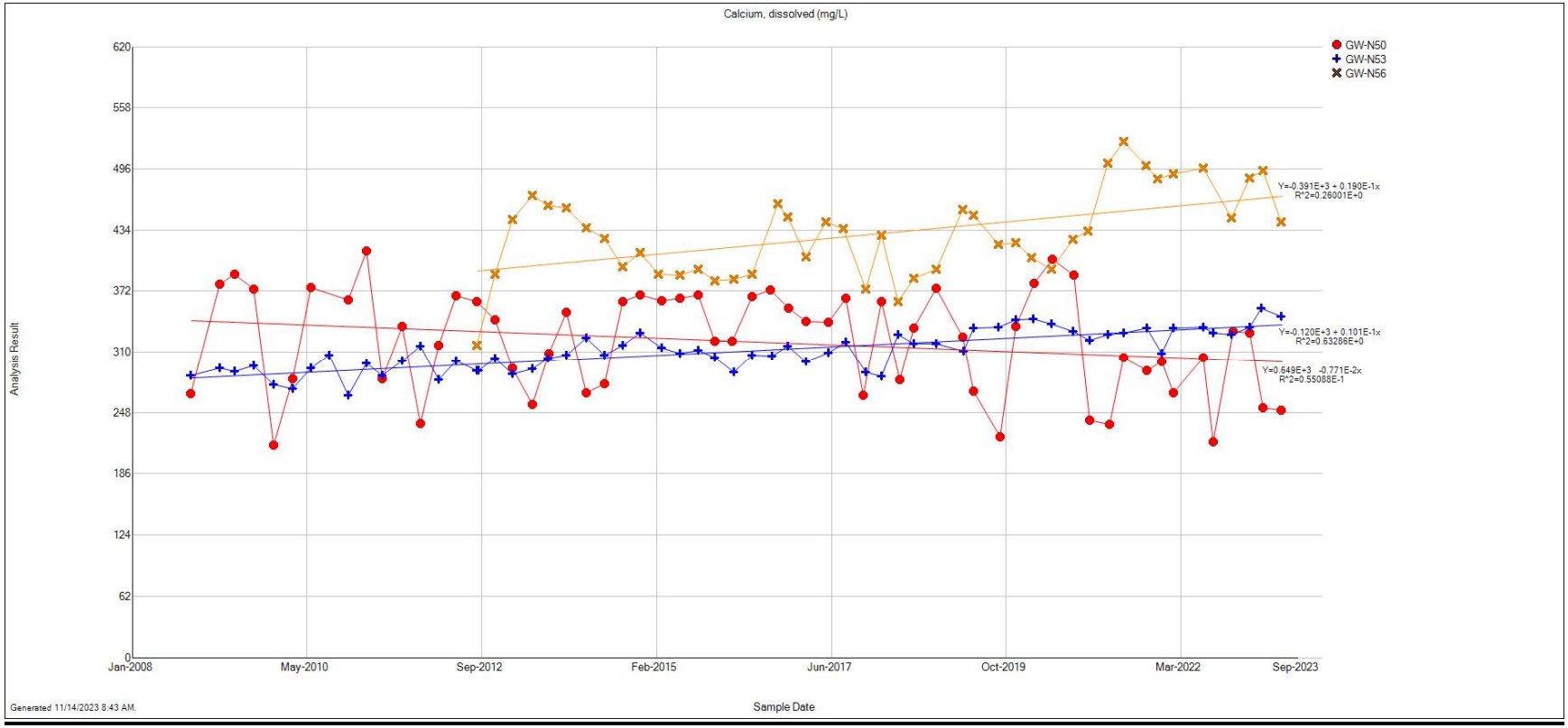
New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2022 to 09/30/2023
Well: GW-N57

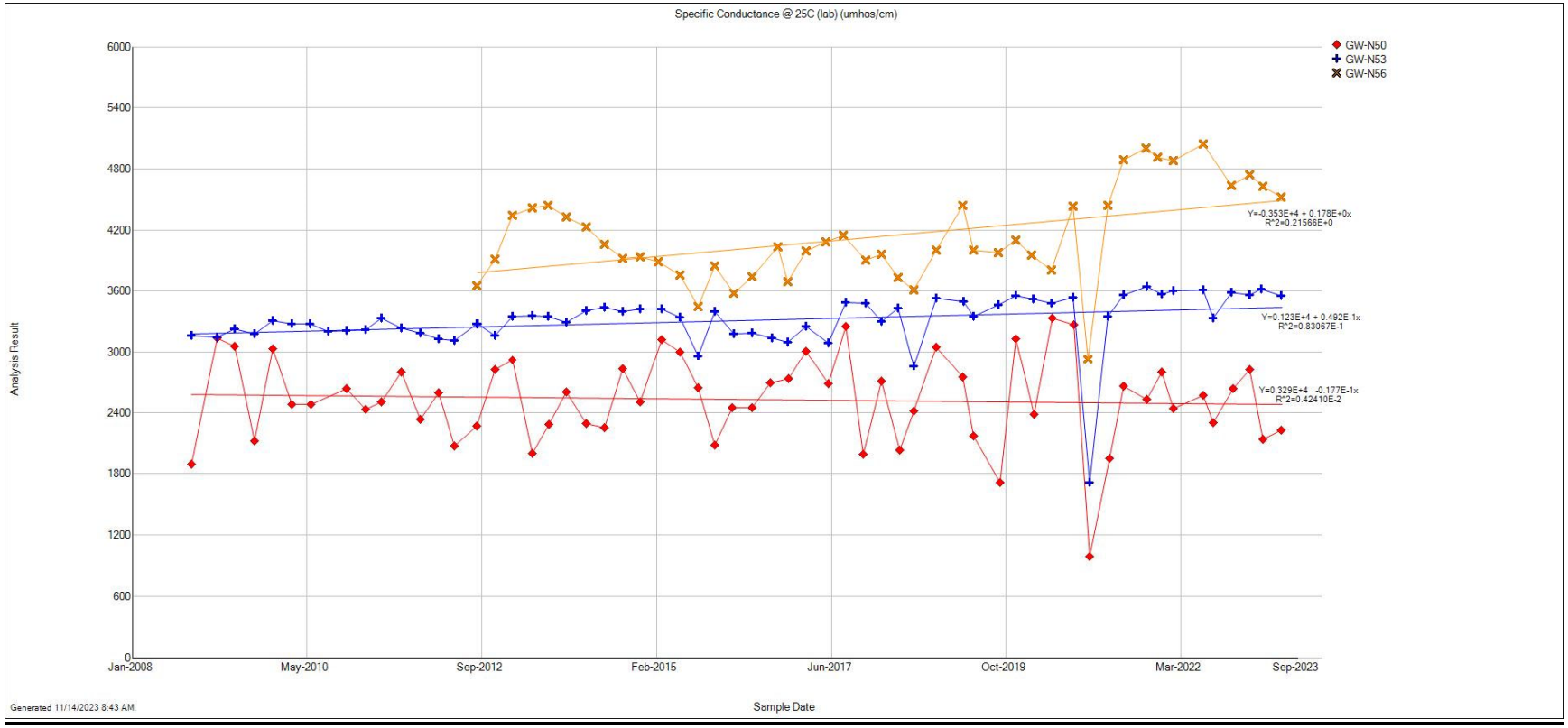
	11/8/2022	2/7/2023	4/11/2023	7/12/2023
Al, diss, mg/L	<0.0050	<0.010	<0.025	0.0087
Alkalinity, lab, mg/L	620	710	710	650
As, diss, mg/L	0.0007	<0.00040	<0.0010	0.00029
Ca, diss, mg/L	520	540	550	500
Cation-Anion Bal, %	-2.9	-3.4	1.1	-1.8
Cl, diss, mg/L	32	30	29	31
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.3	0.49	0.41	0.24
HCO3, mg/L	620	710	710	650
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	29	29	31	29
Mg, diss, mg/L	620	620	630	610
Mn, diss, mg/L	0.72	0.72	0.79	0.71
Mo, diss, mg/L	<0.020	<0.040	<0.10	<0.020
Na, diss, mg/L	160	160	170	160
NH3 as N, diss, mg/L	3.5	2.9	3.2	3.4
NO2, diss, mg/L	<0.010	<0.010	<0.010	<0.010
NO3, diss, mg/L	<0.020	<0.020	<0.020	0.049
Orthophosphate, diss, mg/L	<0.030	<0.030	0.047	0.05
Pb, diss, mg/L	<0.00010	<0.00020	<0.00050	<0.00010
pH (field), pH	6.7	6.6	6.6	6.6
pH (lab), pH	7.6	7.3	7.4	7.2
Se, diss, mg/L	<0.00010	<0.00020	<0.00050	<0.00010
SO4, diss, mg/L	3600	3700	3400	3400
Spec. Cond. (field), umhos/cm	5084	5378	5000	5208
Spec. Cond. (lab), umhos/cm	5210	5210	5190	5130
TDS, mg/L	5500	5300	5300	5800
Zn, diss, mg/L	<0.020	<0.040	<0.10	0.032

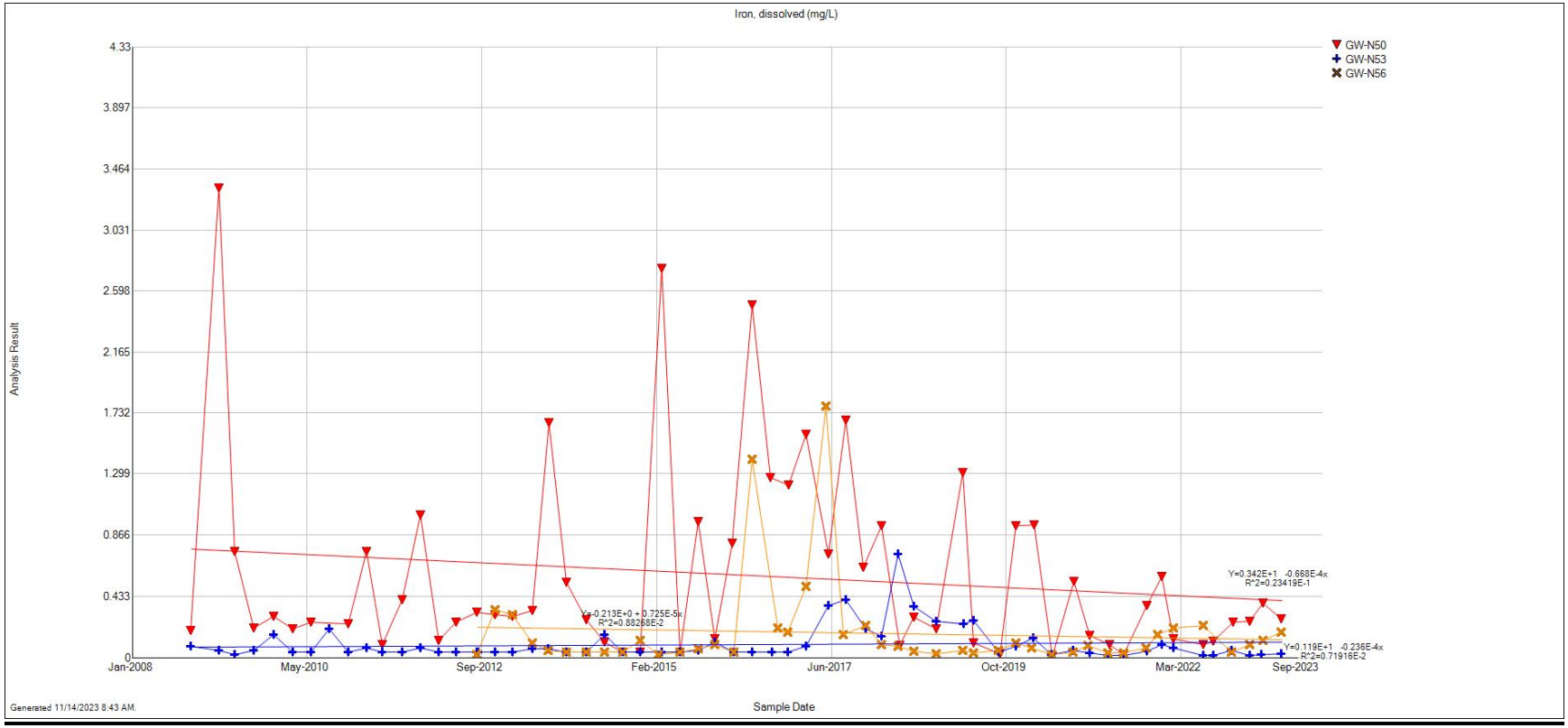
New Horizon North Mine
Analysis Results by Date (column) and Parameter (row)
Date Range: 10/01/2020 to 09/30/2021
Well: GW-N58

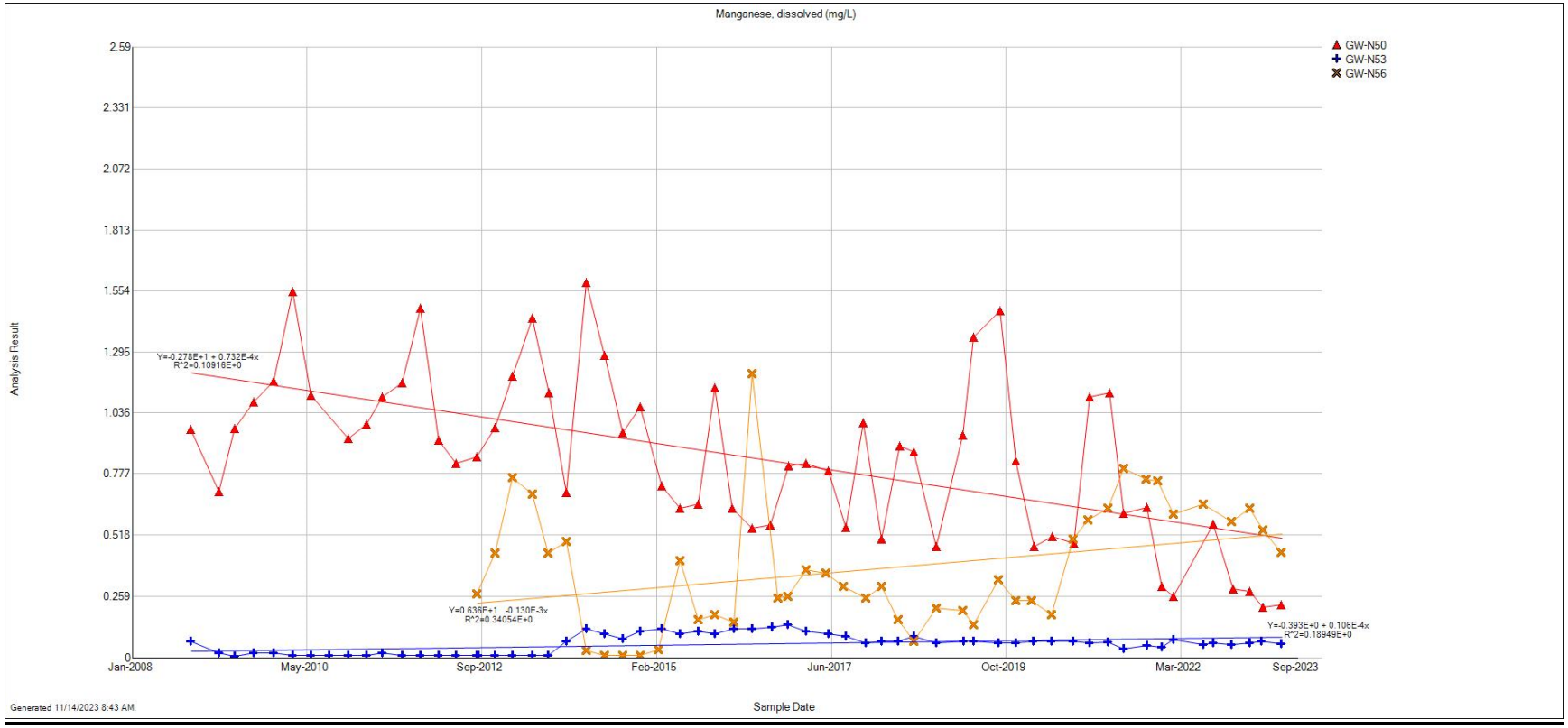
	11/8/2022	2/7/2023	4/11/2023	8/3/2023
Al, diss, mg/L	<0.0050	<0.010	<0.025	<0.010
Alkalinity, lab, mg/L	590	660	650	640
As, diss, mg/L	0.00069	<0.00040	<0.0010	<0.00040
Ca, diss, mg/L	460	490	530	480
Cation-Anion Bal, %	-1.7	-0.6	4.9	0
Cl, diss, mg/L	34	32	33	32
CO3, mg/L	<2.0	<2.0	<2.0	<2.0
Fe, diss, mg/L	0.99	0.73	0.71	0.56
HCO3, mg/L	590	660	650	640
Hg, diss, mg/L	<0.00020	<0.00020	<0.00020	<0.00020
K, diss, mg/L	27	28	29	27
Mg, diss, mg/L	700	700	740	690
Mn, diss, mg/L	0.97	0.95	1	0.95
Mo, diss, mg/L	<0.020	<0.040	<0.10	<0.040
Na, diss, mg/L	160	160	180	160
NH3 as N, diss, mg/L	2.3	2.1	2	1.8
NO2, diss, mg/L	<0.010	<0.010	<0.010	<0.010
NO3, diss, mg/L	0.032	<0.020	<0.020	<0.020
Orthophosphate, diss, mg/L	0.078	0.03	0.04	0.23
Pb, diss, mg/L	<0.00010	<0.00020	<0.00050	<0.00020
pH (field), pH	6.6	6.6	6.6	6.6
pH (lab), pH	7.6	7.2	7.4	6.8
Se, diss, mg/L	<0.00010	<0.00020	<0.00050	0.0003
SO4, diss, mg/L	3700	3700	3500	3600
Spec. Cond. (field), umhos/cm	5190	5602	5200	5356
Spec. Cond. (lab), umhos/cm	5430	5390	5440	5310
TDS, mg/L	5700	5500	5700	5700
Zn, diss, mg/L	0.056	<0.040	<0.10	0.058

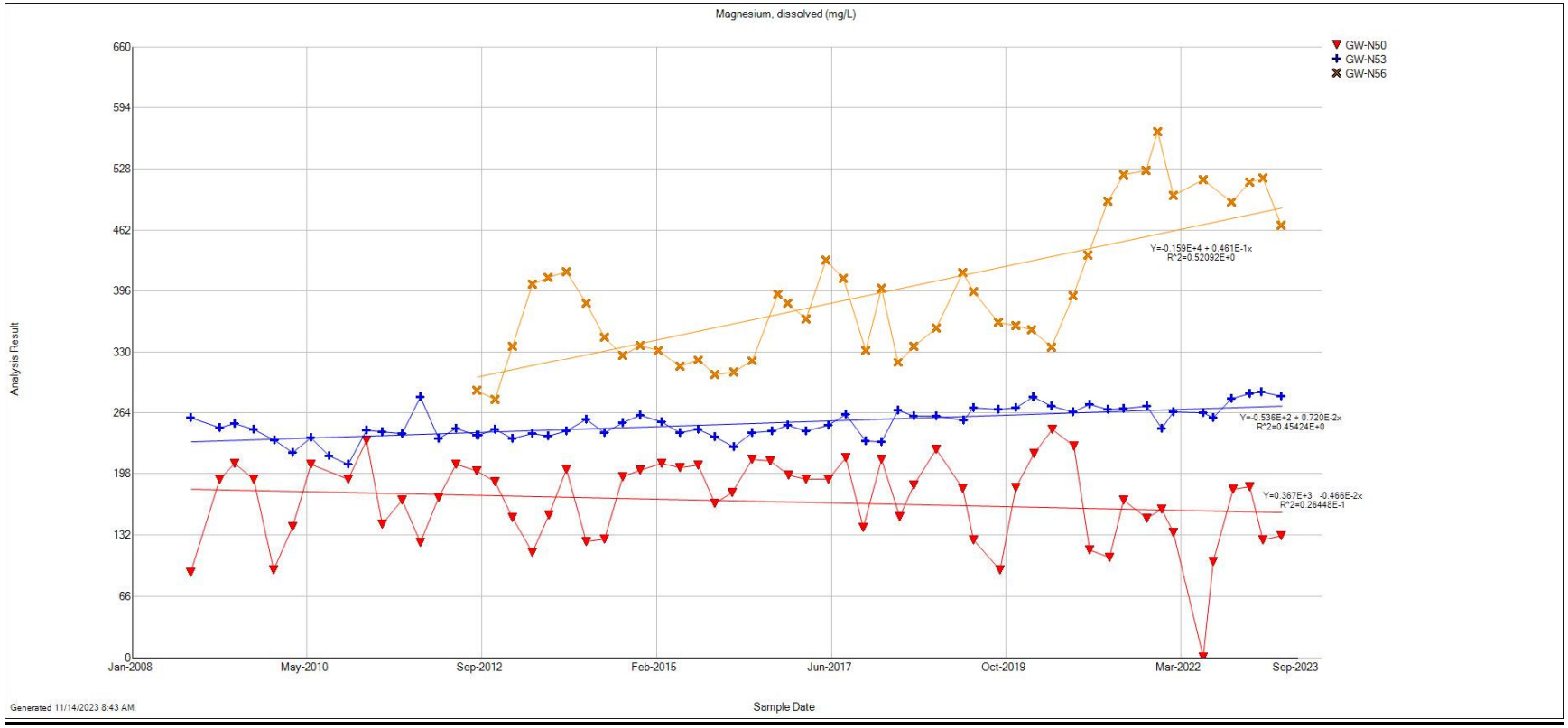
Appendix 4
Groundwater Monitoring Graphs

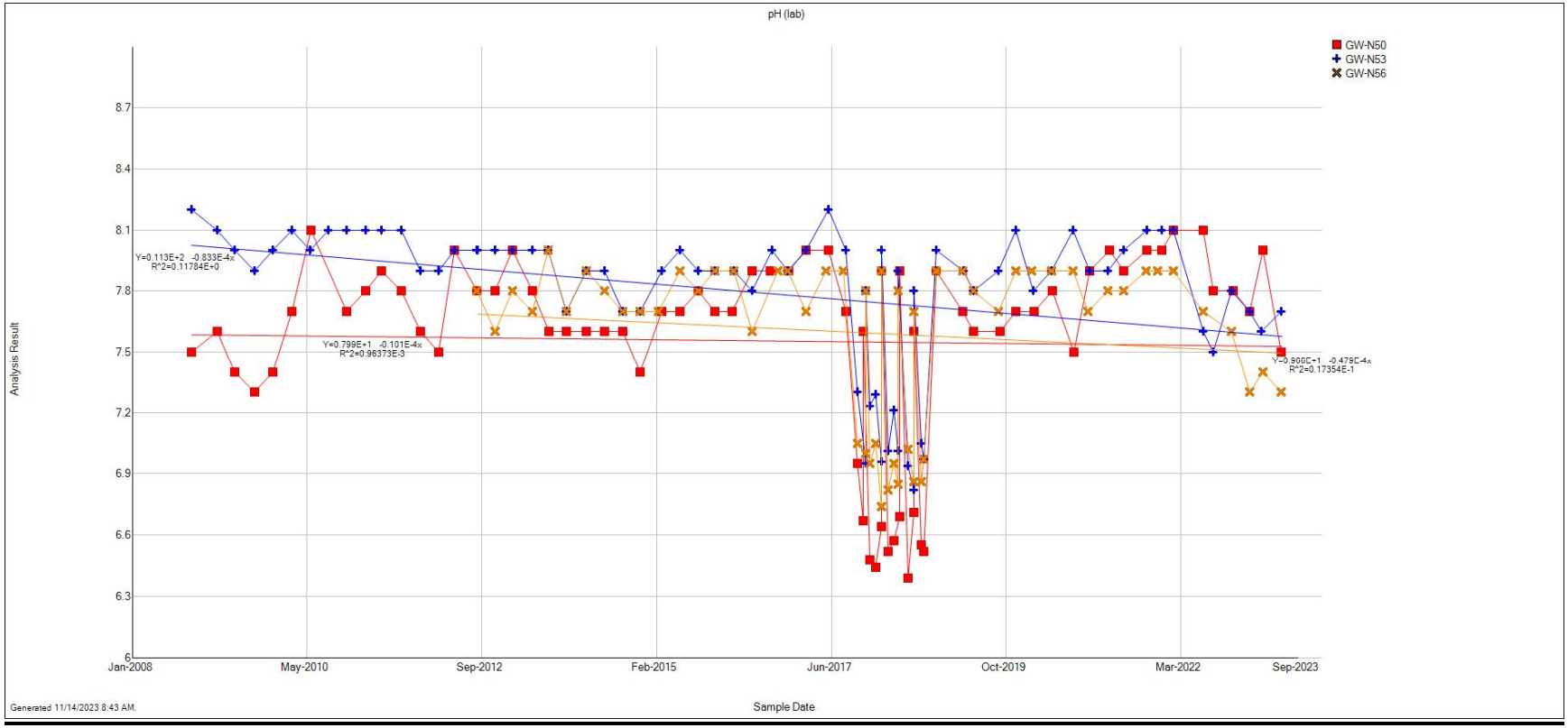

Calcium, dissolved (mg/L)
GW-N50
GW-N53
GW-N56
Y=-0.391E+3 + 0.190E-1x
R^2=0.26001E+0
Y=-0.120E+3 + 0.101E-1x
R^2=0.63286E+0
Y=0.649E+3 -0.771E-2x
R^2=0.55088E-1
620
558
496
434
372
310
248
186
124
62
0
Analysis Result
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Sample Date
Generated 11/14/2023 8:43 AM.

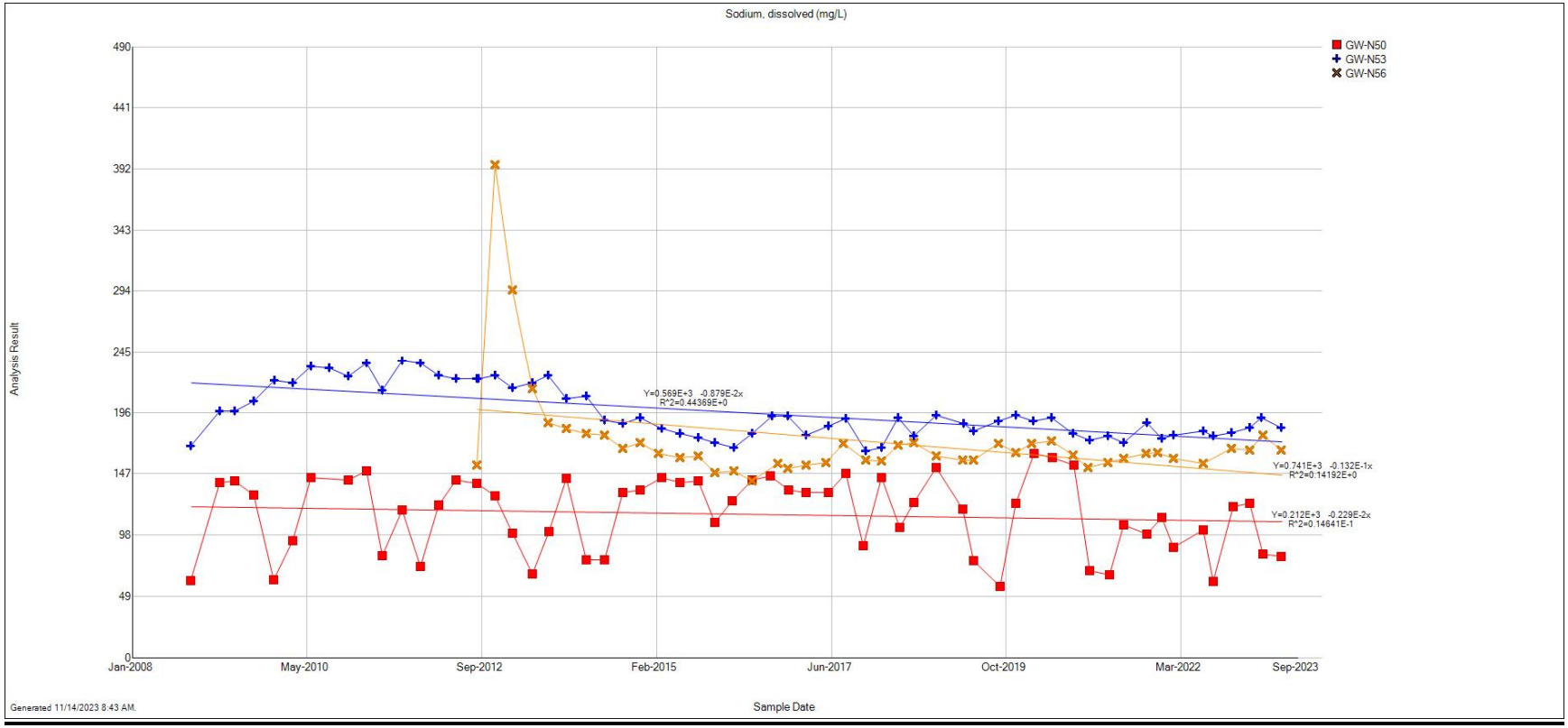

Specific Conductance @ 25C (lab) (umhos/cm)
GW-N50
GW-N53
GW-N56
Y=-0.353E+4 + 0.178E+0x
R^2=0.21566E+0
Y=0.123E+4 + 0.492E-1x
R^2=0.83067E-1
Y=0.329E+4 -0.177E-1x
R^2=0.42410E-2
Analysis Result
6000
5400
4800
4200
3600
3000
2400
1800
1200
600
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:43 AM.
Sample Date

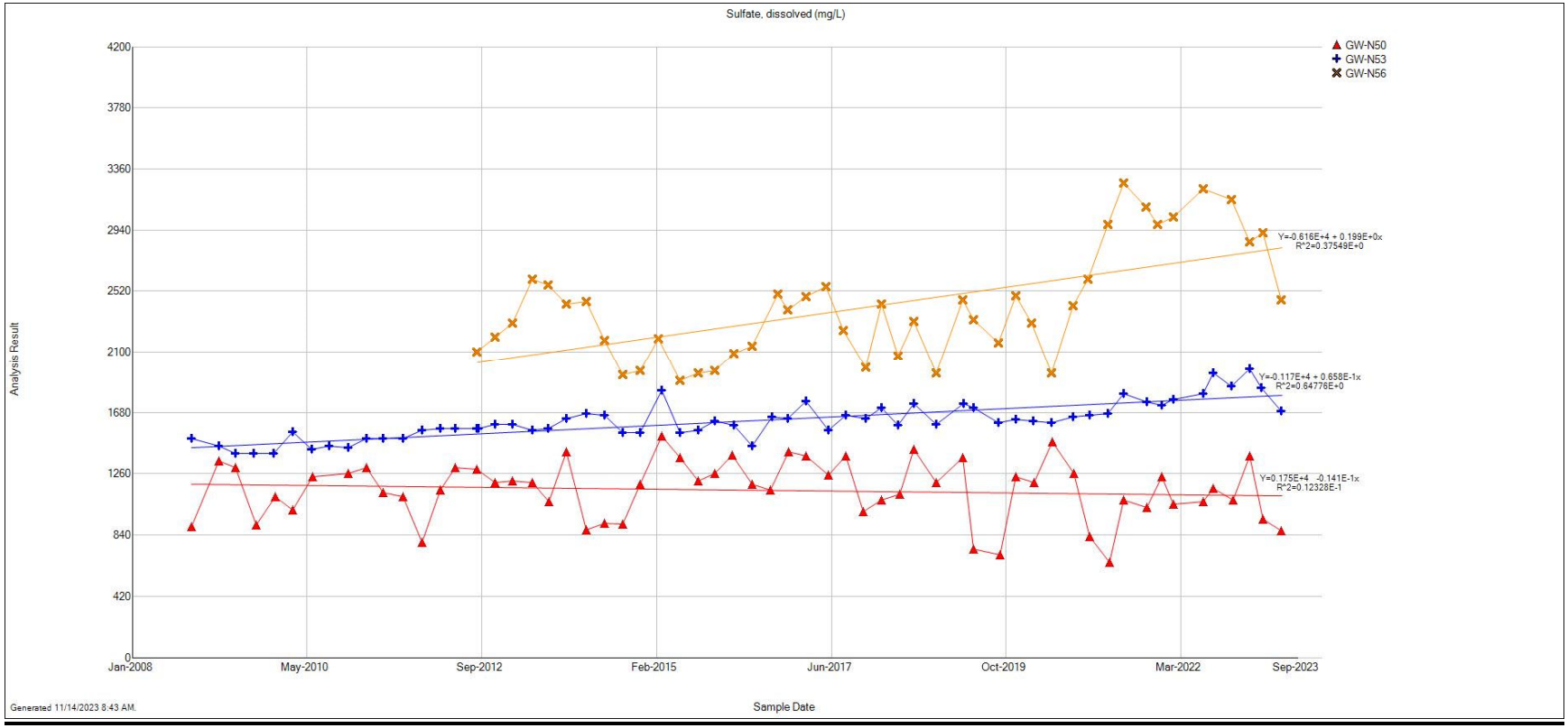

Iron, dissolved (mg/L)
GW-N50
GW-N53
GW-N56
Analysis Result
4.33
3.897
3.464
3.031
2.598
2.165
1.732
1.299
0.866
0.433
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=0.342E+1 -0.668E-4x
R^2=0.23419E-1
Y=0.213E+0 + 0.725E-5x
R^2=0.88268E-2
Y=0.119E+1 -0.236E-4x
R^2=0.71916E-2
Generated 11/14/2023 8:43 AM.
Sample Date

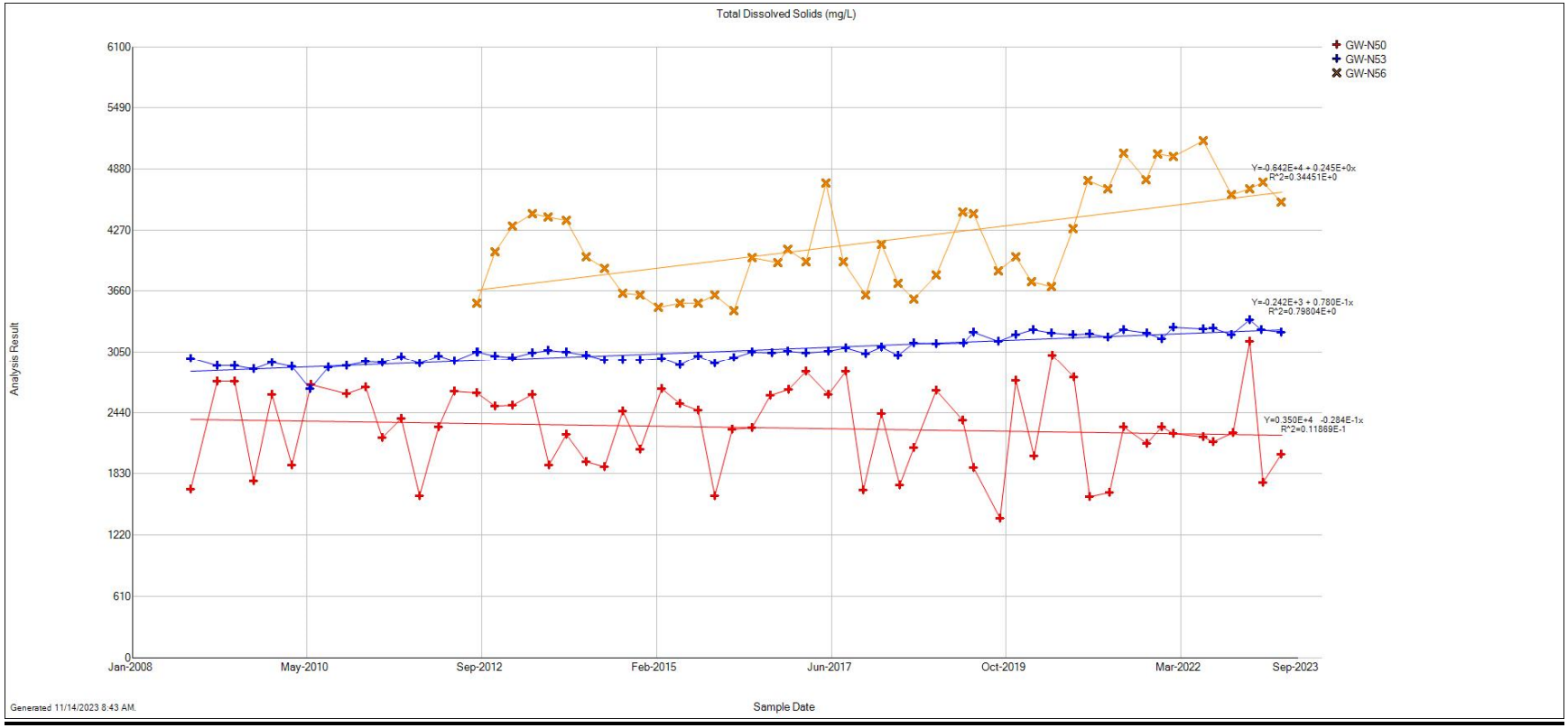

Manganese, dissolved (mg/L)
GW-N50
GW-N53
GW-N56
Analysis Result
2.59
2.331
2.072
1.813
1.554
1.295
1.036
0.777
0.518
0.259
0
Y=-0.278E+1 + 0.732E-4x
R^2=0.10916E+0
Y=0.636E+1 -0.130E-3x
R^2=0.34054E+0
Y=-0.393E+0 + 0.106E-4x
R^2=0.18949E+0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:43 AM.
Sample Date

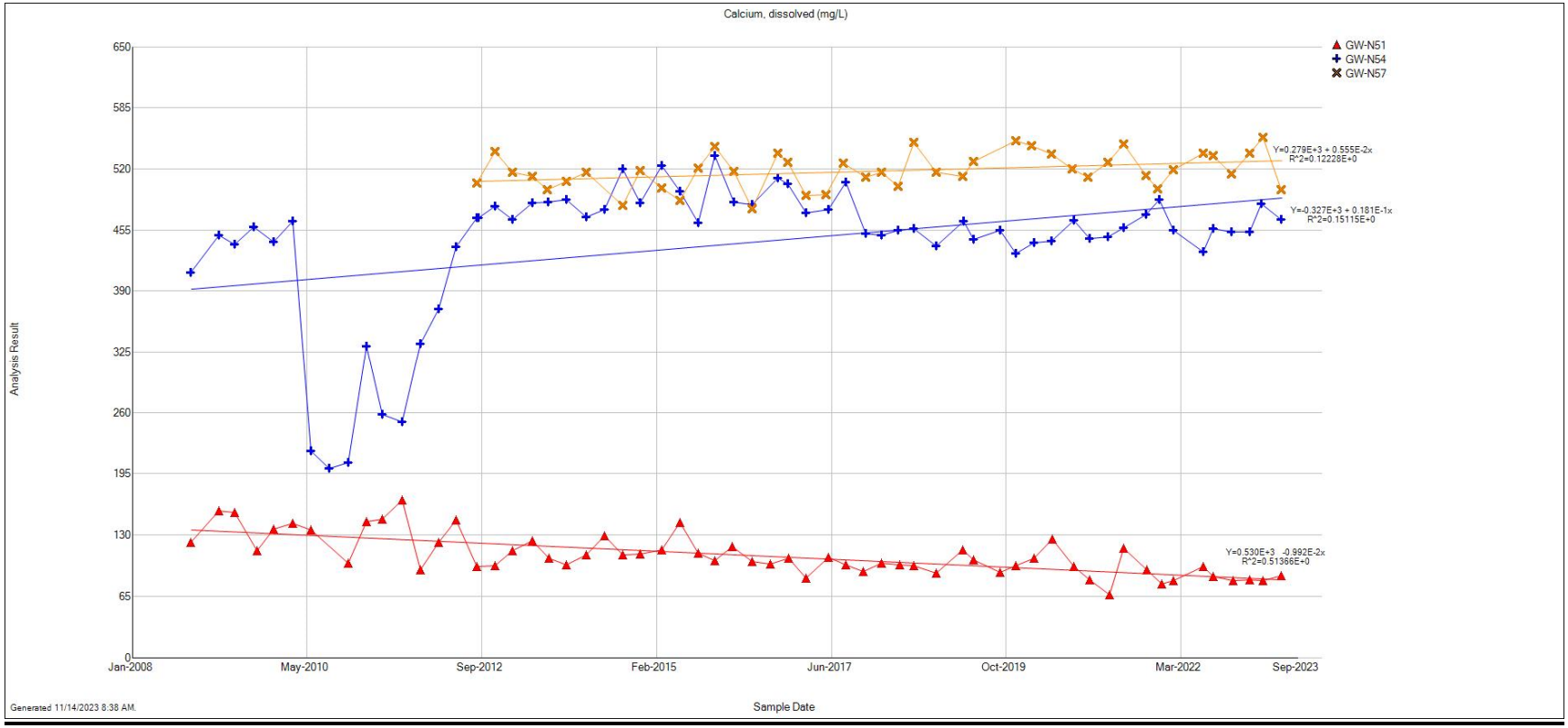

Magnesium, dissolved (mg/L)
GW-N50
GW-N53
GW-N56
Y=-0.159E+4 + 0.461E-1x
R^2=0.52092E+0
Y=-0.536E+2 + 0.720E-2x
R^2=0.45424E+0
Y=0.367E+3 -0.466E-2x
R^2=0.26448E-1
660
594
528
462
396
330
264
198
132
66
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Analysis Result
Sample Date
Generated 11/14/2023 8:43 AM.

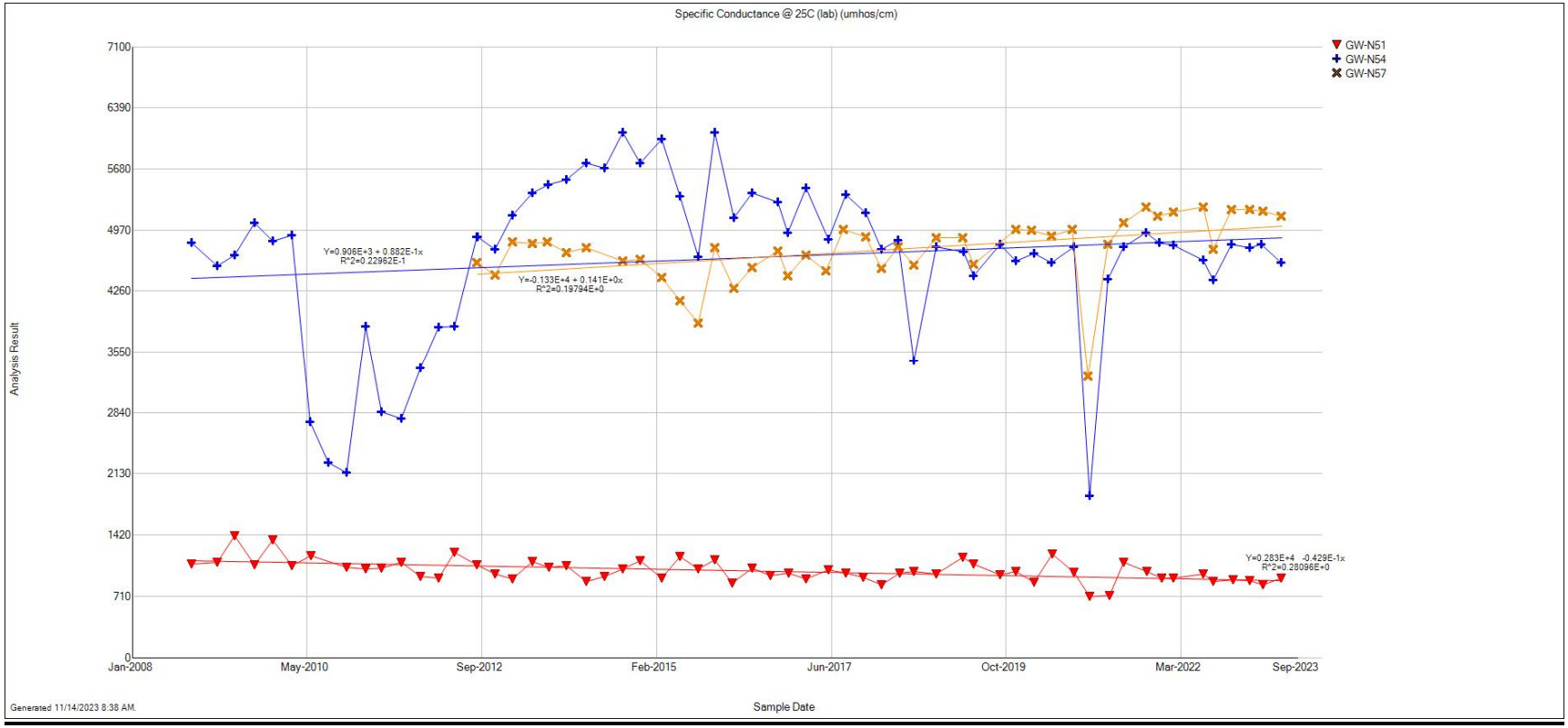

pH (lab)
GW-N50
GW-N53
GW-N56
Y=0.113E+2 -0.833E-4x
R^2=0.11784E+0
Y=0.799E+1 -0.101E-4x
R^2=0.96373E-3
Y=0.809E+1 -0.479E-4x
R^2=0.17354E-1
Analysis Result
8.7
8.4
8.1
7.8
7.5
7.2
6.9
6.6
6.3
6
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:43 AM.
Sample Date

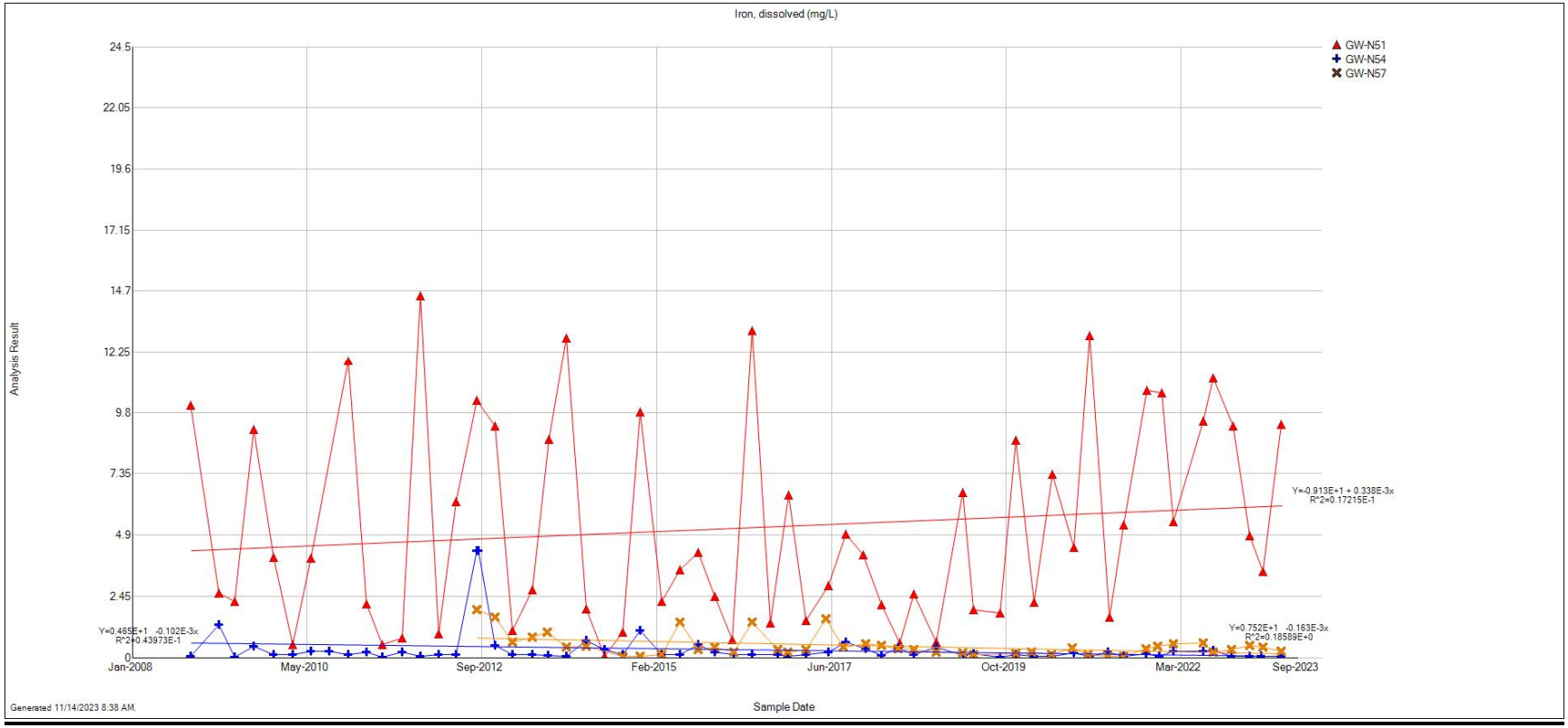

Sodium, dissolved (mg/L)
GW-N50
GW-N53
GW-N56
Y=0.569E+3 -0.879E-2x
R^2=0.44369E+0
Y=0.741E+3 -0.132E-1x
R^2=0.14192E+0
Y=0.212E+3 -0.229E-2x
R^2=0.14641E-1
Analysis Result
490
441
392
343
294
245
196
147
98
49
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:43 AM.
Sample Date

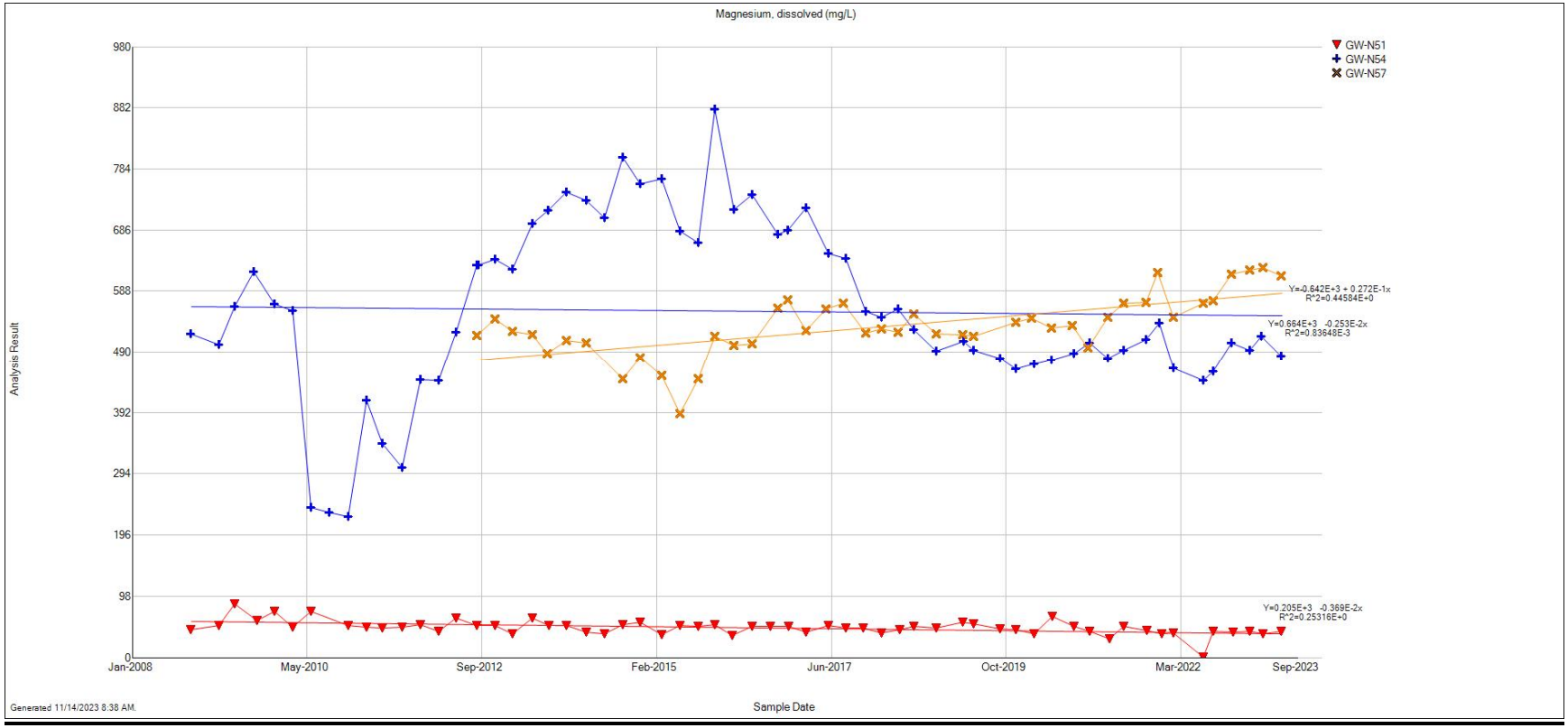

Sulfate, dissolved (mg/L)
GW-N50
GW-N53
GW-N56
Y=-0.616E+4 + 0.199E+0x
R^2=0.37549E+0
Y=-0.117E+4 + 0.658E-1x
R^2=0.64778E+0
Y=0.175E+4 -0.141E-1x
R^2=0.12328E-1
Analysis Result
4200
3780
3360
2940
2520
2100
1680
1260
840
420
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:43 AM.
Sample Date

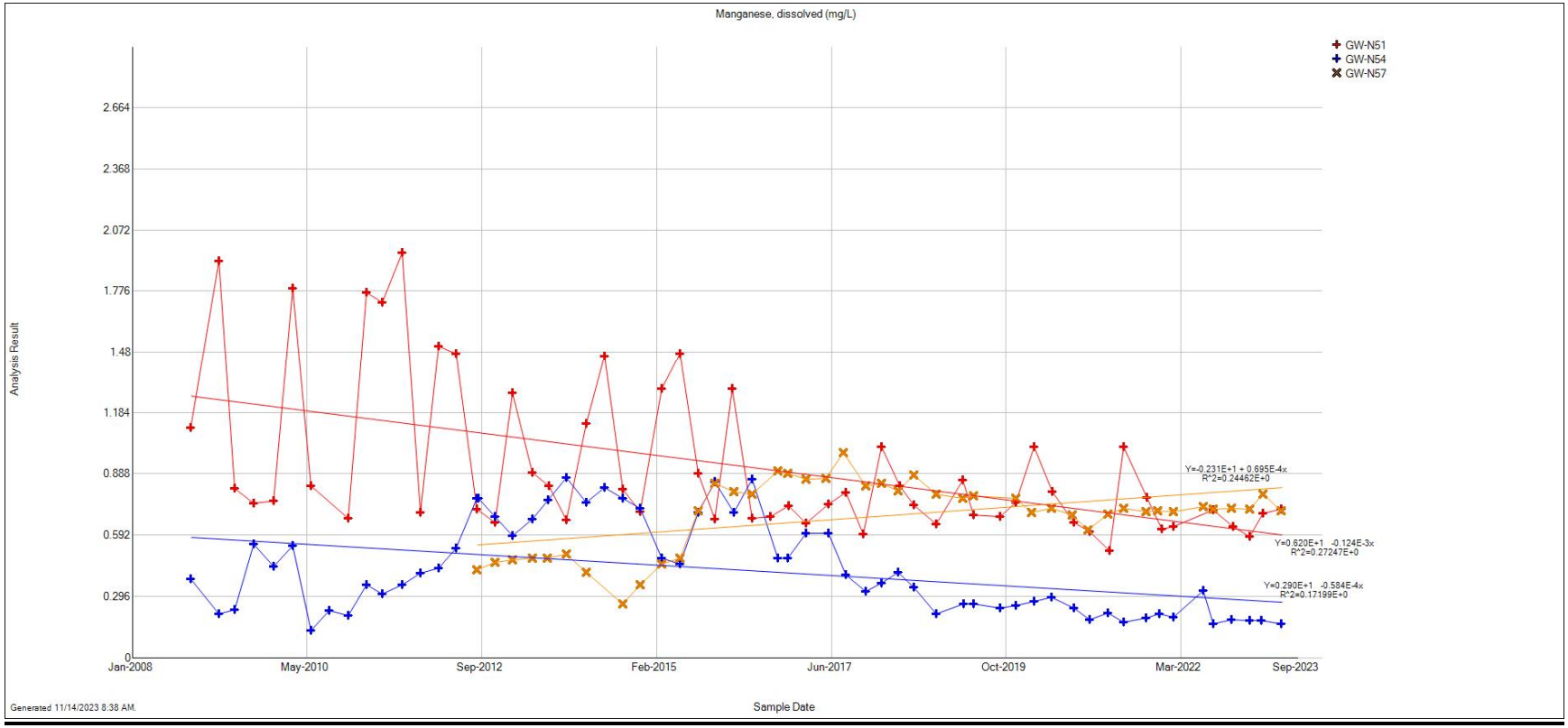

Total Dissolved Solids (mg/L)
GW-N50
GW-N53
GW-N56
Y=-0.642E+4 + 0.245E+0x
R^2=0.34451E+0
Y=-0.242E+3 + 0.780E-1x
R^2=0.79804E+0
Y=0.350E+4 -0.284E-1x
R^2=0.11869E-1
6100
5490
4880
4270
3660
3050
2440
1830
1220
610
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Analysis Result
Sample Date
Generated 11/14/2023 8:43 AM.

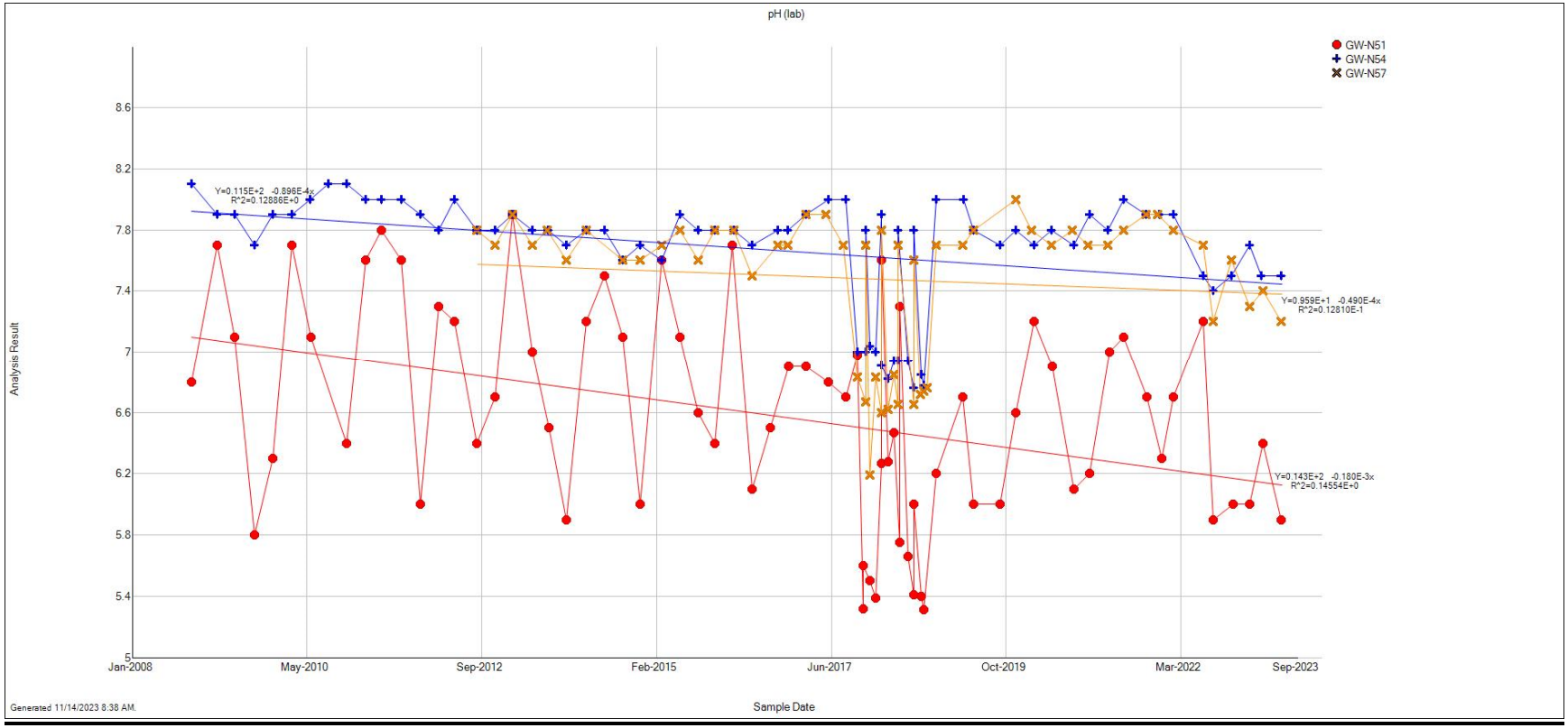

Calcium, dissolved (mg/L)
GW-N51
GW-N54
GW-N57
Y=0.279E+3 + 0.555E-2x
R^2=0.12228E+0
Y=-0.327E+3 + 0.181E-1x
R^2=0.15115E+0
Y=0.530E+3 -0.992E-2x
R^2=0.51366E+0
650
585
520
455
390
325
260
195
130
65
0
Analysis Result
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Sample Date
Generated 11/14/2023 8:38 AM.

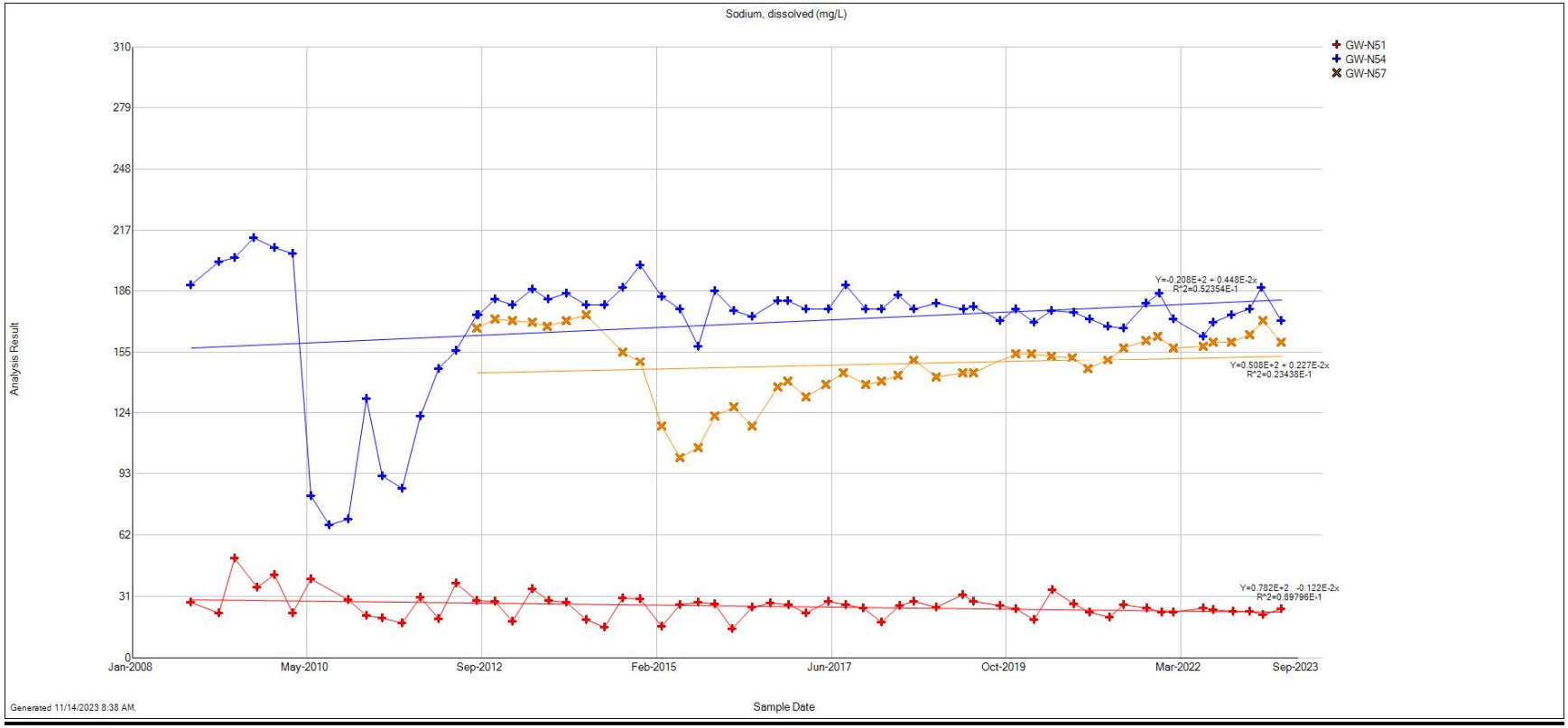

Specific Conductance @ 25C (lab) (umhos/cm)
GW-N51
GW-N54
GW-N57
Y=0.906E+3 + 0.882E-1x
R^2=0.22962E-1
Y=-0.133E+4 + 0.141E+0x
R^2=0.19794E+0
Y=0.283E+4 -0.429E-1x
R^2=0.28096E+0
7100
6390
5680
4970
4260
3550
2840
2130
1420
710
0
Analysis Result
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Sample Date
Generated 11/14/2023 8:38 AM.

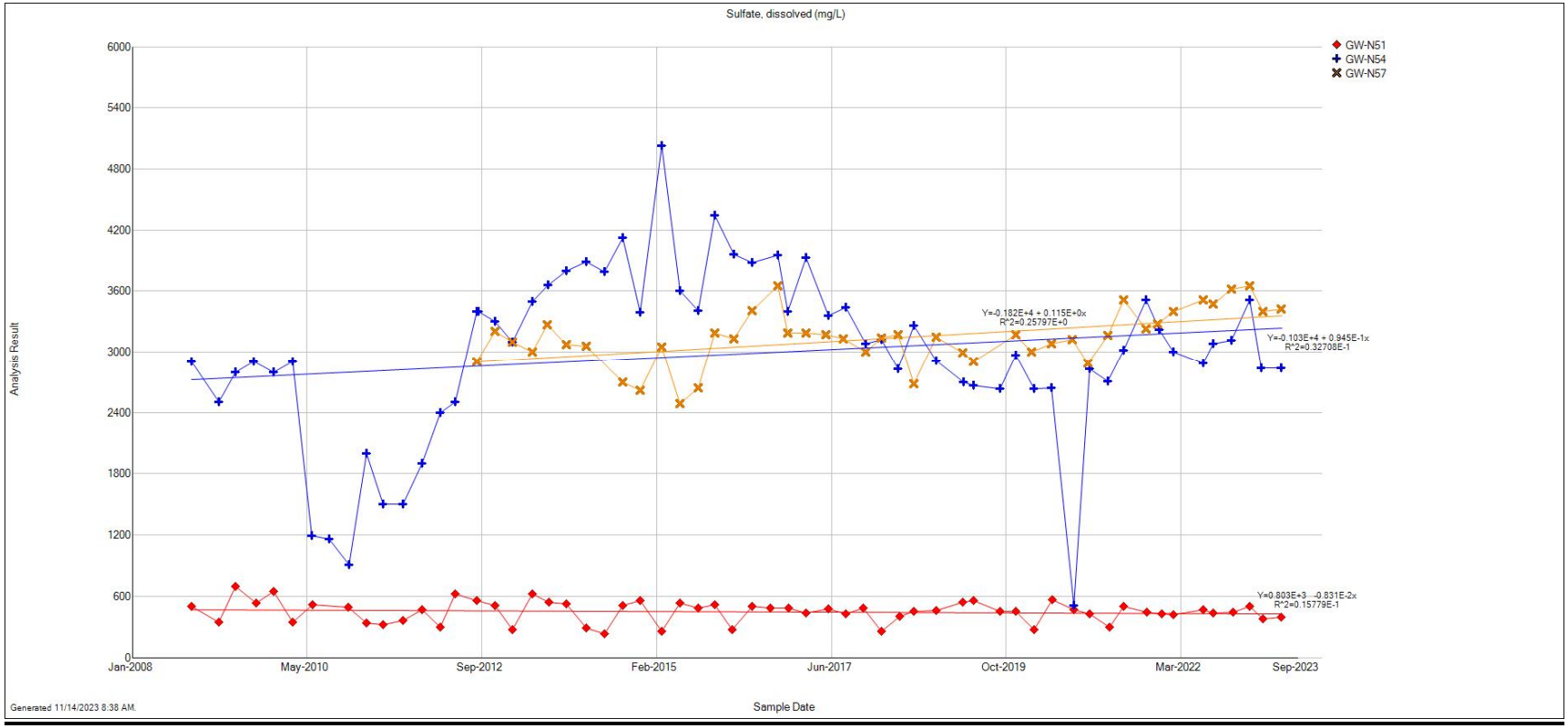

Iron, dissolved (mg/L)
GW-N51
GW-N54
GW-N57
Analysis Result
24.5
22.05
19.6
17.15
14.7
12.25
9.8
7.35
4.9
2.45
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.913E+1 + 0.338E-3x
R^2=0.17215E-1
Y=0.485E+1 -0.102E-3x
R^2=0.43973E-1
Y=0.752E+1 -0.163E-3x
R^2=0.18589E+0
Generated 11/14/2023 8:38 AM.
Sample Date

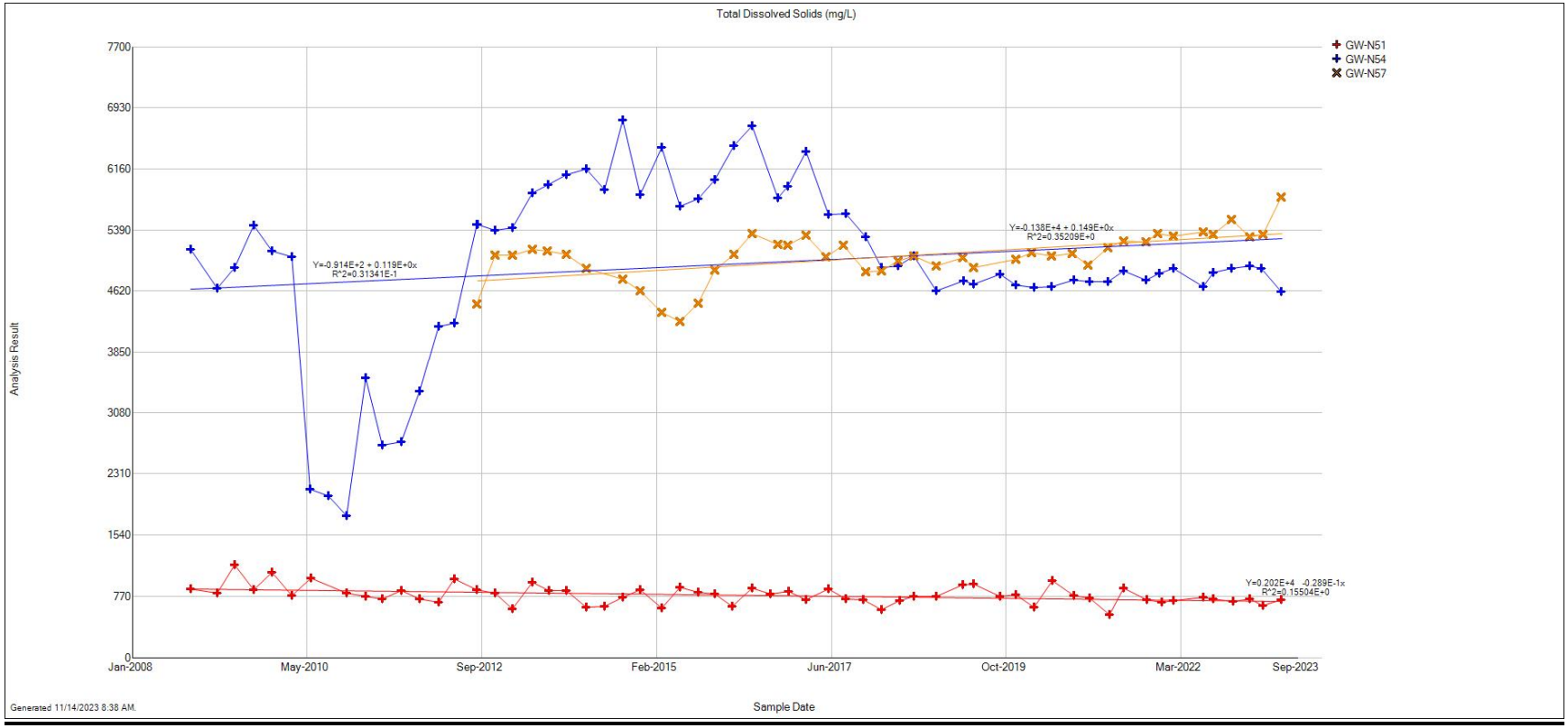

Magnesium, dissolved (mg/L)
GW-N51
GW-N54
GW-N57
Y=-0.642E+3 + 0.272E-1x
R^2=0.44584E+0
Y=0.664E+3 -0.253E-2x
R^2=0.83648E-3
Y=0.205E+3 -0.369E-2x
R^2=0.25316E+0
Analysis Result
980
882
784
686
588
490
392
294
196
98
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:38 AM.
Sample Date

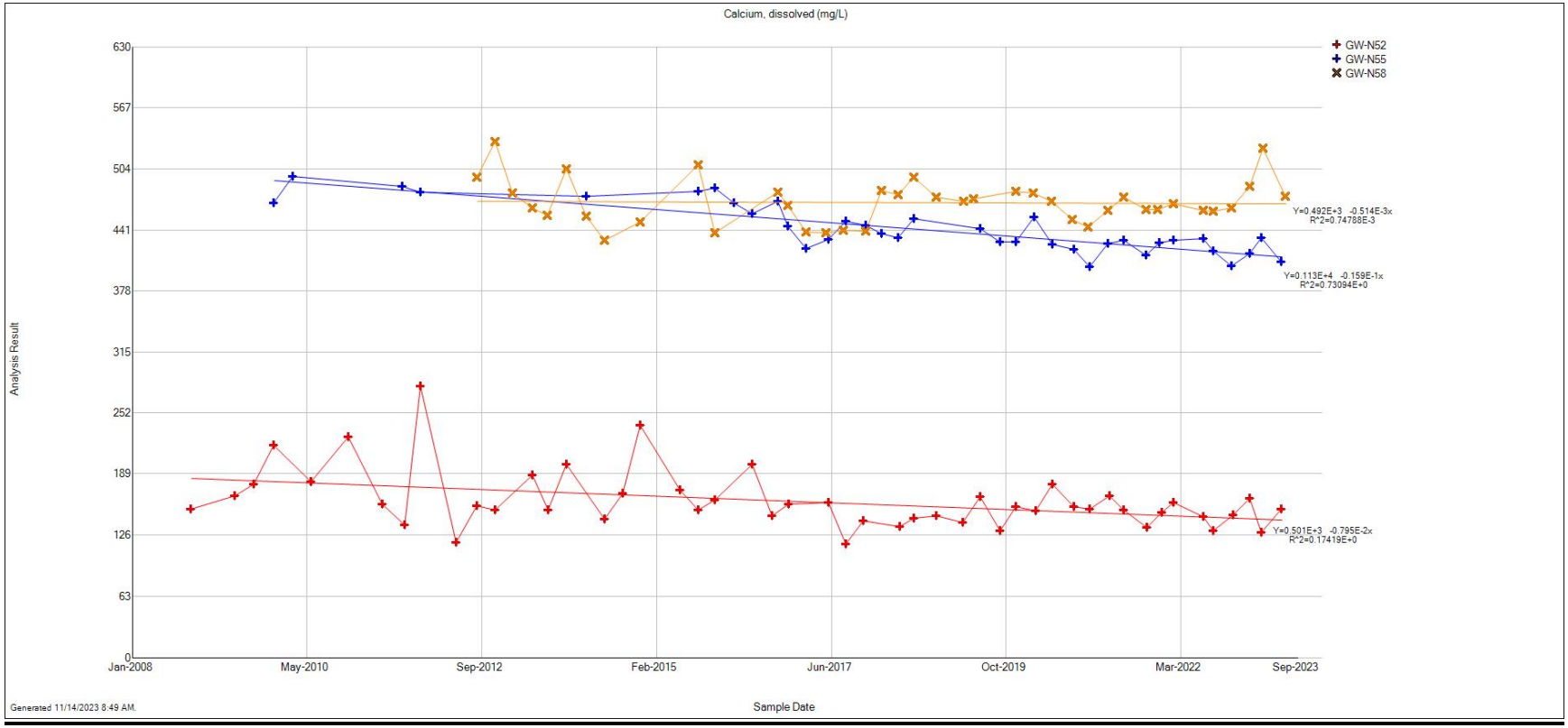

Manganese, dissolved (mg/L)
GW-N51
GW-N54
GW-N57
Analysis Result
2.664
2.368
2.072
1.776
1.48
1.184
0.888
0.592
0.296
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.231E+1 + 0.695E-4x
R^2=0.24462E+0
Y=0.620E+1 -0.124E-3x
R^2=0.27247E+0
Y=0.290E+1 -0.584E-4x
R^2=0.17199E+0
Generated 11/14/2023 8:38 AM.
Sample Date

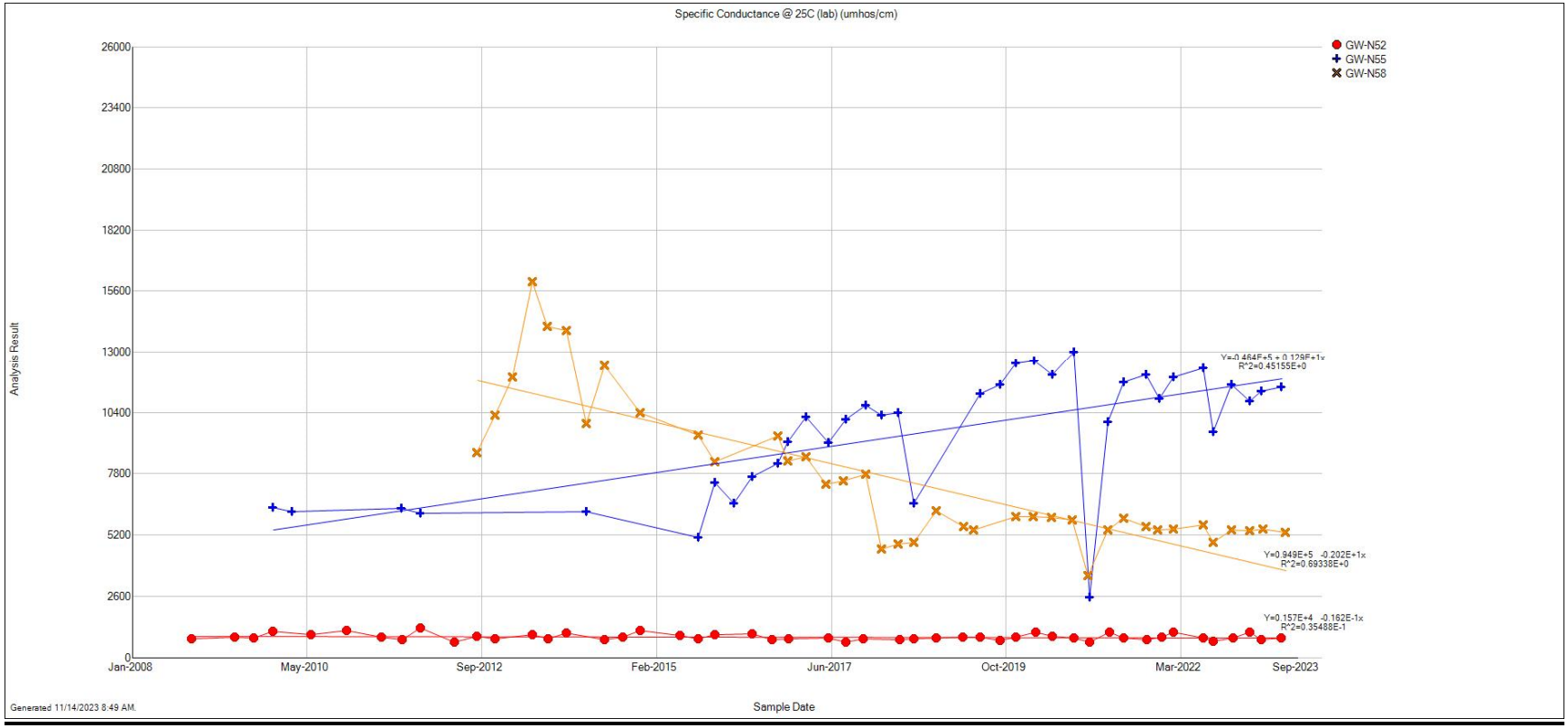

pH (lab)
GW-N51
GW-N54
GW-N57
Y=0.115E+2 -0.896E-4x
R^2=0.12886E+0
Y=0.959E+1 -0.490E-4x
R^2=0.12810E-1
Y=0.143E+2 -0.180E-3x
R^2=0.14554E+0
Analysis Result
8.6
8.2
7.8
7.4
7
6.6
6.2
5.8
5.4
5
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:38 AM.
Sample Date

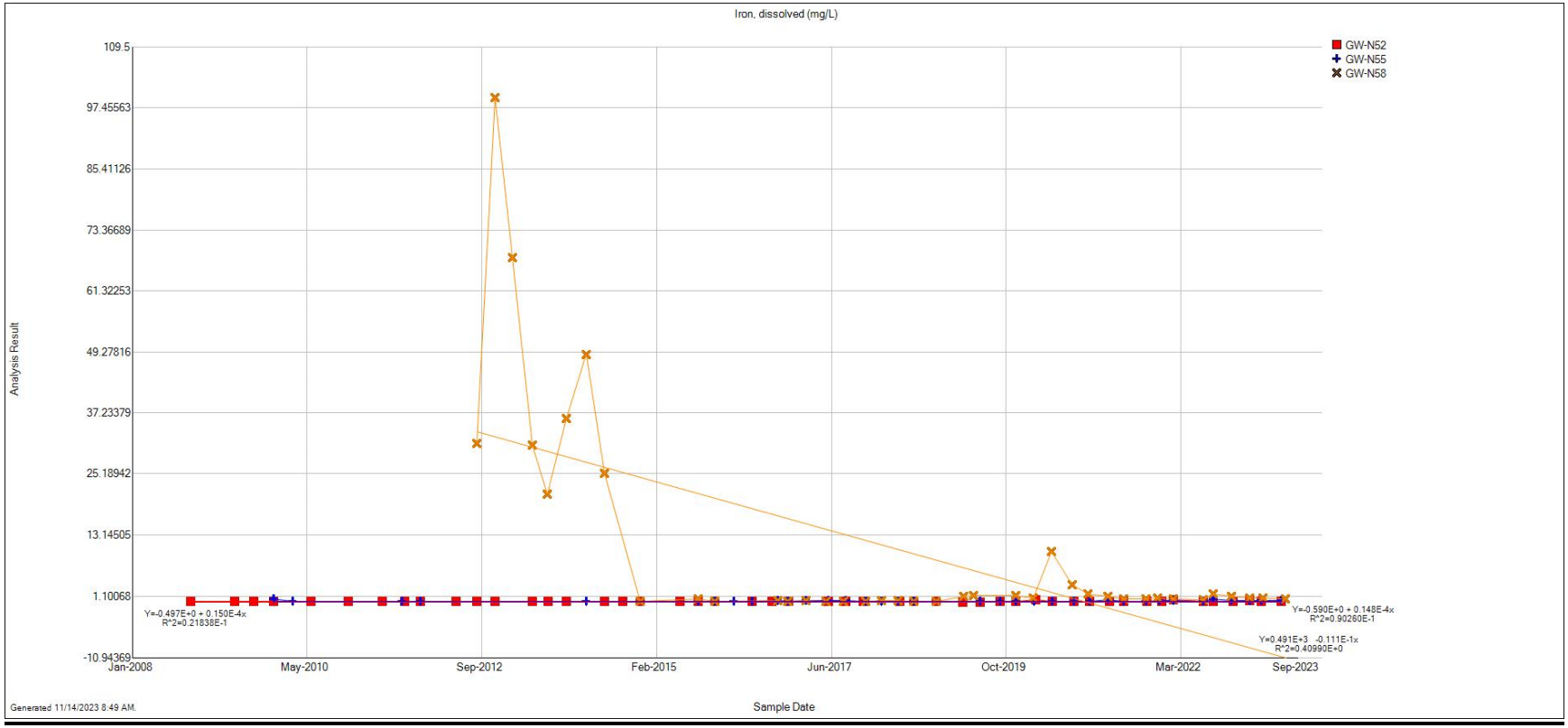

Sodium, dissolved (mg/L)
GW-N51
GW-N54
GW-N57
Y=-0.208E+2 + 0.448E-2x
R^2=0.52354E-1
Y=0.508E+2 + 0.227E-2x
R^2=0.23438E-1
Y=0.782E+2 -0.122E-2x
R^2=0.89796E-1
Analysis Result
310
279
248
217
186
155
124
93
62
31
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:38 AM.
Sample Date

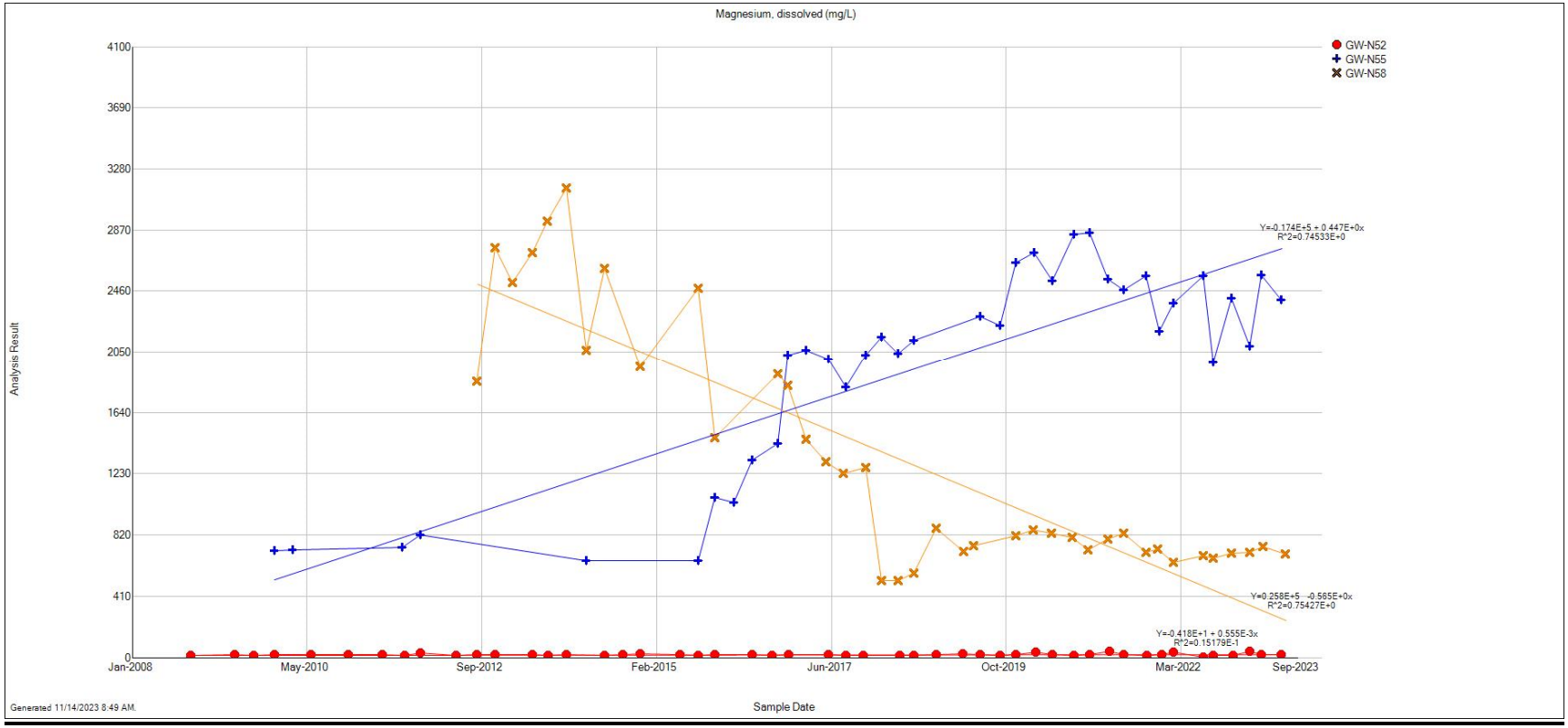

Sulfate, dissolved (mg/L)
GW-N51
GW-N54
GW-N57
Analysis Result
6000
5400
4800
4200
3600
3000
2400
1800
1200
600
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.182E+4 + 0.115E+0x
R^2=0.25797E+0
Y=-0.103E+4 + 0.945E-1x
R^2=0.32708E-1
Y=0.803E+3 -0.831E-2x
R^2=0.15779E-1
Generated 11/14/2023 8:38 AM.
Sample Date

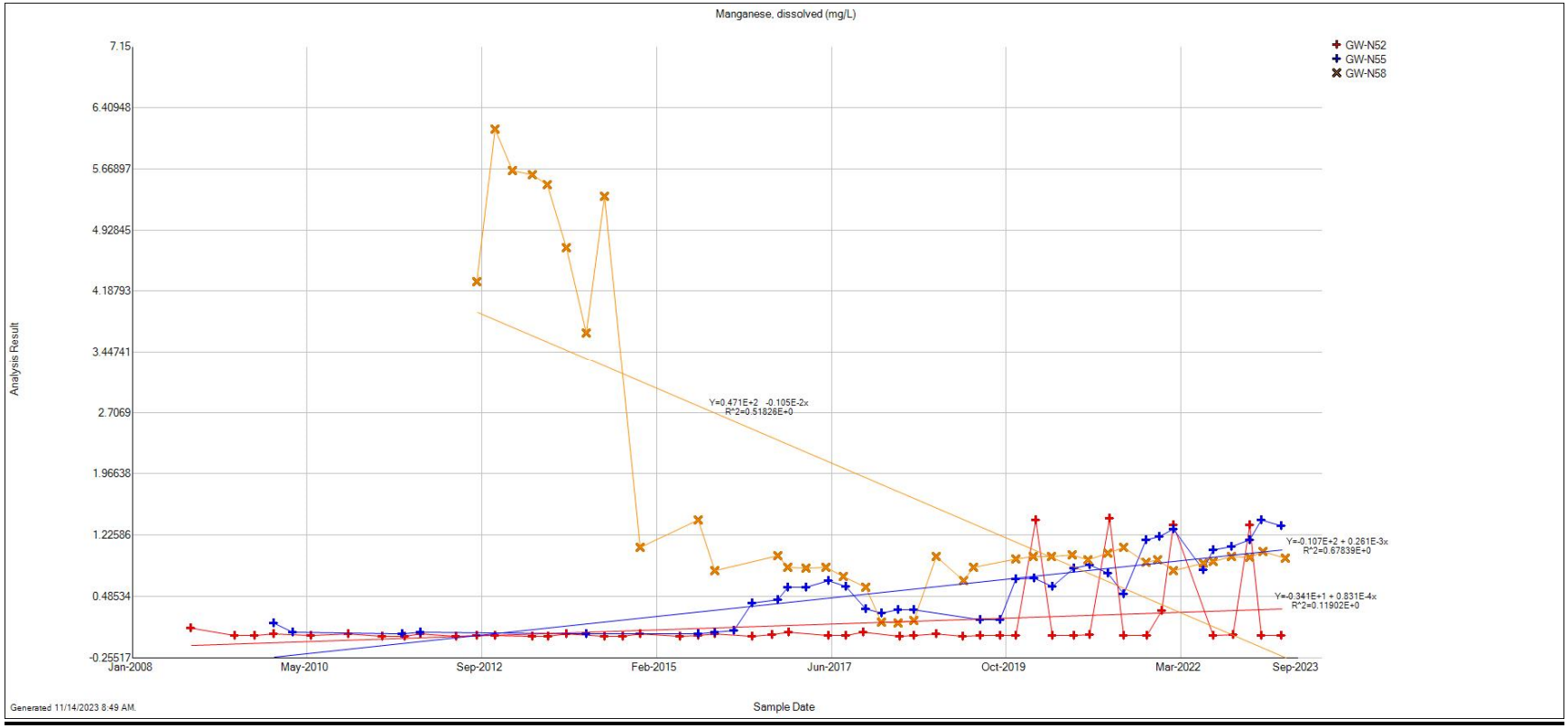

Total Dissolved Solids (mg/L)
GW-N51
GW-N54
GW-N57
Y=-0.914E+2 + 0.119E+0x
R^2=0.31341E-1
Y=-0.138E+4 + 0.149E+0x
R^2=0.35209E+0
Y=0.202E+4 -0.289E-1x
R^2=0.15504E+0
7700
6930
6160
5390
4620
3850
3080
2310
1540
770
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Analysis Result
Sample Date
Generated 11/14/2023 8:38 AM.

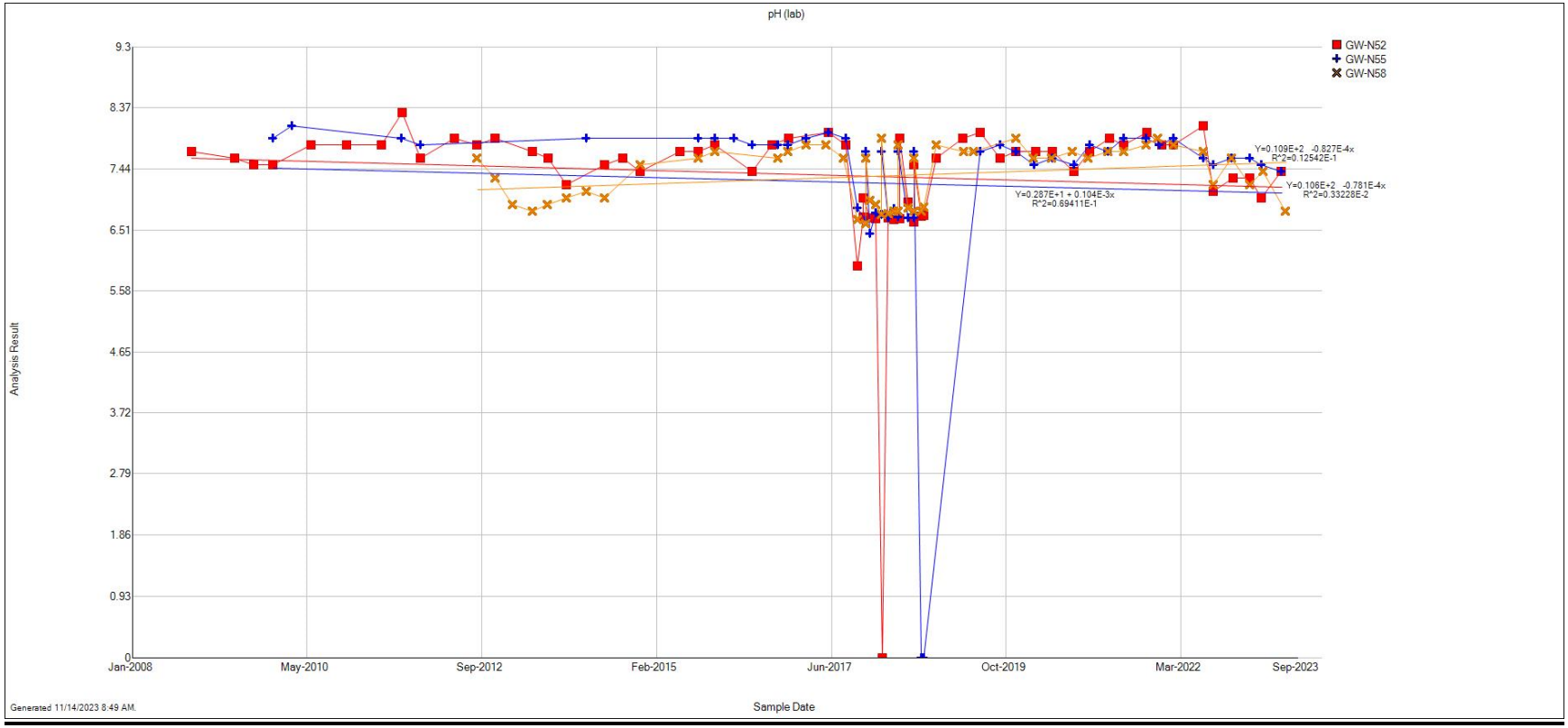

Calcium, dissolved (mg/L)
GW-N52
GW-N55
GW-N58
Y=0.492E+3 -0.514E-3x
R^2=0.74788E-3
Y=0.113E+4 -0.159E-1x
R^2=0.73094E+0
Y=0.501E+3 -0.795E-2x
R^2=0.17419E+0
Analysis Result
630
567
504
441
378
315
252
189
126
63
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:49 AM.
Sample Date

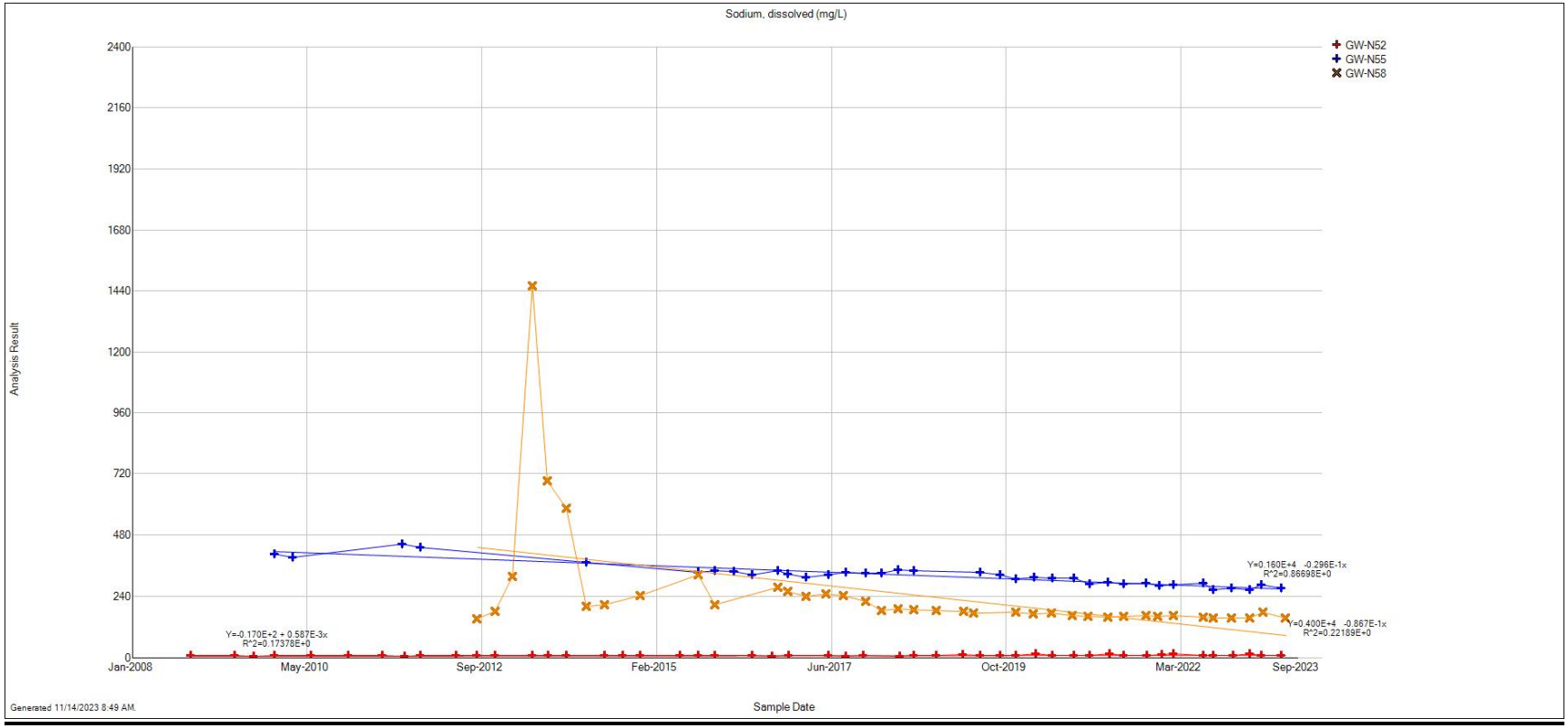

Specific Conductance @ 25C (lab) (umhos/cm)
GW-N52
GW-N55
GW-N58
Analysis Result
26000
23400
20800
18200
15600
13000
10400
7800
5200
2600
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.464E+5 + 0.129E+1x
R^2=0.45155E+0
Y=0.949E+5 -0.202E+1x
R^2=0.69338E+0
Y=0.157E+4 -0.162E-1x
R^2=0.35488E-1
Generated 11/14/2023 8:49 AM.
Sample Date

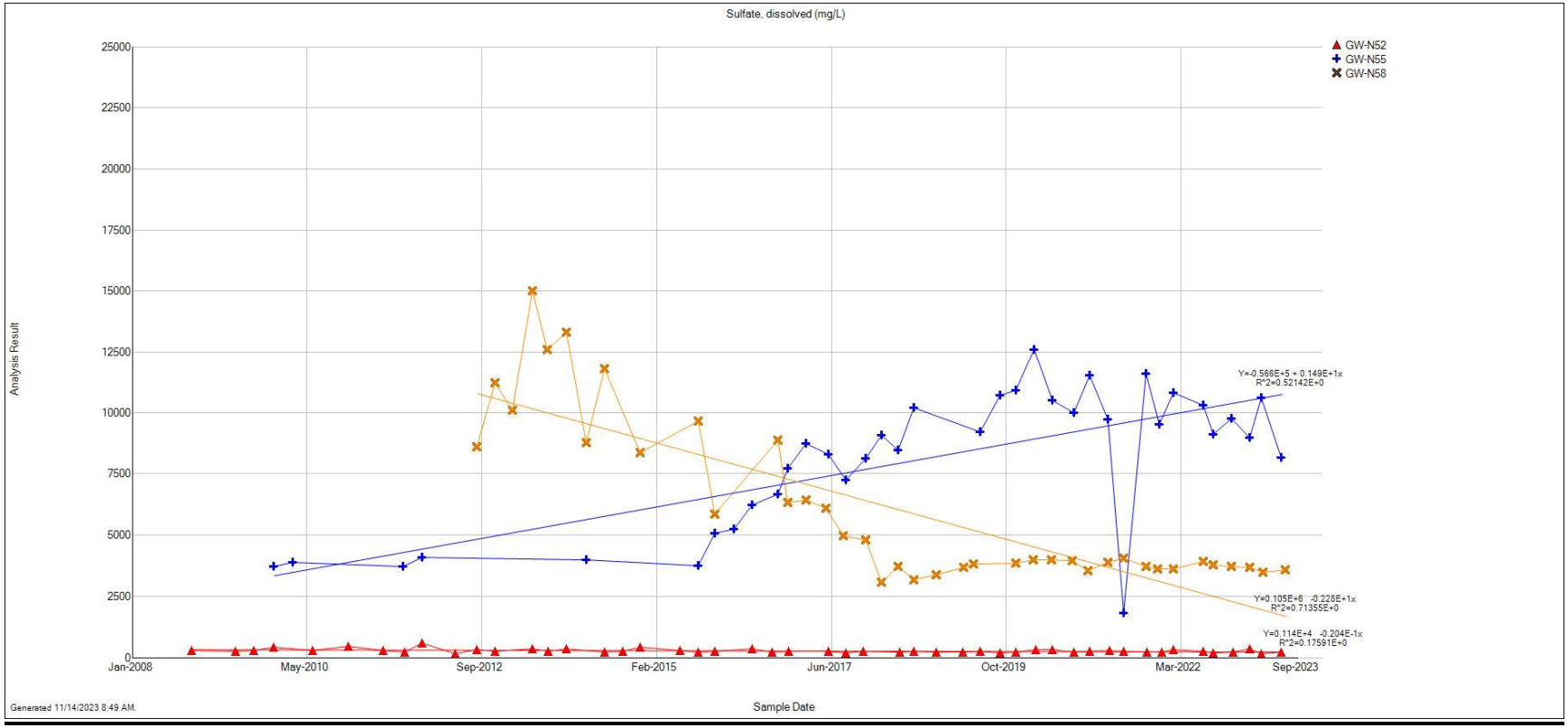

Iron, dissolved (mg/L)
GW-N52
GW-N55
GW-N58
109.5
97.45563
85.41126
73.36689
61.32253
49.27816
37.23379
25.18942
13.14505
1.10068
-10.94369
Analysis Result
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Sample Date
Y=-0.497E+0 + 0.150E-4x
R^2=0.21838E-1
Y=-0.590E+0 + 0.148E-4x
R^2=0.90260E-1
Y=0.491E+3 -0.111E-1x
R^2=0.40990E+0
Generated 11/14/2023 8:49 AM.

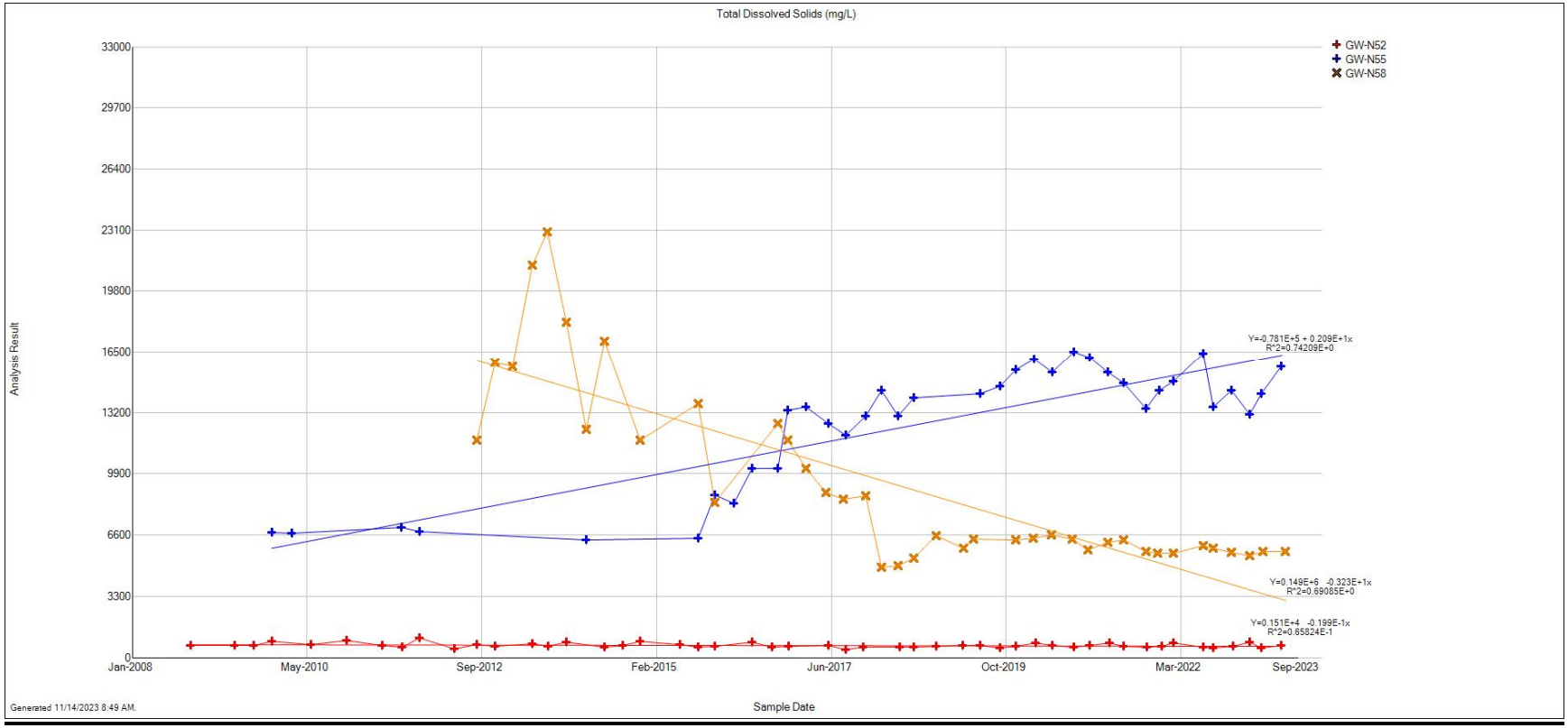

Magnesium, dissolved (mg/L)
GW-N52
GW-N55
GW-N58
Y=-0.174E+5 + 0.447E+0x
R^2=0.74533E+0
Y=0.258E+5 + -0.565E+0x
R^2=0.75427E+0
Y=-0.418E+1 + 0.555E-3x
R^2=0.15179E-1
Analysis Result
4100
3690
3280
2870
2460
2050
1640
1230
820
410
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:49 AM.
Sample Date


Manganese, dissolved (mg/L)
GW-N52
GW-N55
GW-N58
7.15
6.40948
5.66897
4.92845
4.18793
3.44741
2.7069
1.96638
1.22586
0.48534
-0.25517
Analysis Result
Y=0.471E+2 -0.105E-2x
R^2=0.51826E+0
Y=-0.107E+2 + 0.261E-3x
R^2=0.67839E+0
Y=-0.341E+1 + 0.831E-4x
R^2=0.11902E+0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Generated 11/14/2023 8:49 AM.
Sample Date


pH (lab)
GW-N52
GW-N55
GW-N58
Y=0.109E+2 -0.827E-4x
R^2=0.12542E-1
Y=0.106E+2 -0.781E-4x
R^2=0.33228E-2
Y=0.287E+1 + 0.104E-3x
R^2=0.69411E-1
9.3
8.37
7.44
6.51
5.58
4.65
3.72
2.79
1.86
0.93
0
Analysis Result
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Sample Date
Generated 11/14/2023 8:49 AM.


Sodium, dissolved (mg/L)
GW-N52
GW-N55
GW-N58
Analysis Result
2400
2160
1920
1680
1440
1200
960
720
480
240
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=0.160E+4 -0.296E-1x
R^2=0.86698E+0
Y=0.400E+4 -0.867E-1x
R^2=0.22189E+0
Y=-0.170E+2 + 0.587E-3x
R^2=0.17378E+0
Generated 11/14/2023 8:49 AM.
Sample Date


Sulfate, dissolved (mg/L)
GW-N52
GW-N55
GW-N58
Analysis Result
25000
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.568E+5 + 0.149E+1x
R^2=0.52142E+0
Y=0.105E+6 -0.228E+1x
R^2=0.71355E+0
Y=0.114E+4 -0.204E-1x
R^2=0.17591E+0
Generated 11/14/2023 8:49 AM.
Sample Date


Total Dissolved Solids (mg/L)
GW-N52
GW-N55
GW-N58
Analysis Result
33000
29700
26400
23100
19800
16500
13200
9900
6600
3300
0
Jan-2008
May-2010
Sep-2012
Feb-2015
Jun-2017
Oct-2019
Mar-2022
Sep-2023
Y=-0.781E+5 + 0.209E+1x
R^2=0.74209E+0
Y=0.149E+6 -0.323E+1x
R^2=0.69085E+0
Y=0.151E+4 -0.199E-1x
R^2=0.65824E-1
Generated 11/14/2023 8:49 AM.
Sample Date