Appendix E

Eagle Mine

Facilities Water Quality

Monitoring Results

2024
Mine Permit Water Quality Monitoring Data
TDRSA Contact Water Sump
Eagle Mine

		Q1 2024	Q2 2024	Q3 2024	Q4 2024
Parameter	**Unit**	**02/19/24**	**05/06/24**	**07/29/24**	**11/11/24**
Field					
pH	SU	**6.2**	**6.4**	**6.5**	**6.8**
Specific Conductivity	µS/cm	**4,244**	**3,480**	**4,681**	**4,632**
Metals					
Aluminum, Total	µg/L	—	<50.0	—	—
Antimony, Total	µg/L	—	**1.0**	—	—
Arsenic, Total	µg/L	<1.0	<1.0	<1.0	—
Barium, Total	µg/L	—	**38.2**	—	—
Beryllium, Total	µg/L	—	<1.0	—	—
Boron, Total	µg/L	**758**	**689**	**847**	**901**
Cadmium, Total	µg/L	—	**4.8**	—	—
Chromium, Total	µg/L	—	<1.0	—	—
Cobalt, Total	µg/L	—	**154**	—	—
Copper, Total	µg/L	**12.3**	**13.0**	**15.5**	**16.2**
Iron, Total	µg/L	<100	<100	<100	<100
Lead, Total	µg/L	—	<1.0	—	—
Lithium, Total	µg/L	—	—	—	—
Manganese, Total	µg/L	**896**	**710**	**1,190**	**1,390**
Mercury, Total	µg/L	**0.001**	**0.001**	**0.001**	**0.001**
Molybdenum, Total	µg/L	—	**20.3**	—	—
Nickel, Total	µg/L	**4,880**	**3,220**	**5,480**	**6,480**
Selenium, Total	µg/L	**11.1**	**10.4**	**13.4**	**13.2**
Silver, Total	µg/L	—	<0.20	—	—
Strontium, Total	µg/L	—	**2,980**	—	—
Thallium, Total	µg/L	—	<2.0	—	—
Vanadium, Total	µg/L	—	<1.0	—	—
Zinc, Total	µg/L	**912**	**747**	**1,120**	**1,530**
Major Anions					
Alkalinity, Bicarbonate	mg/L	**66.2**	**69.4**	**80.4**	**63.8**
Alkalinity, Carbonate	mg/L	<10.0	<10.0	<10.0	<10.0
Chloride	mg/L	**235**	**183**	**214**	**217**
Fluoride	mg/L	—	<0.10	—	—
Nitrogen, Ammonia	mg/L	<0.10	**1.1**	<0.10	<0.10
Nitrogen, Nitrate	mg/L	**112**	**99.7**	**159**	**141**
Nitrogen, Nitrite	mg/L	<1.0	<1.0	<0.25	<1.0
Sulfate	mg/L	**1,380**	**590**	**1,880**	**2,000**
Major Cations					
Calcium, Total	mg/L	—	**387**	—	—
Magnesium, Total	mg/L	**195**	**147**	**248**	**249**
Potassium, Total	µg/L	—	**43,600**	—	—
Sodium, Total	mg/L	**284**	**215**	**288**	**285**

— Analyte not included in the quarterly parameter list.

2024
Mine Permit Water Quality Monitoring Data
TDRSA Leak Detection Sump
Eagle Mine

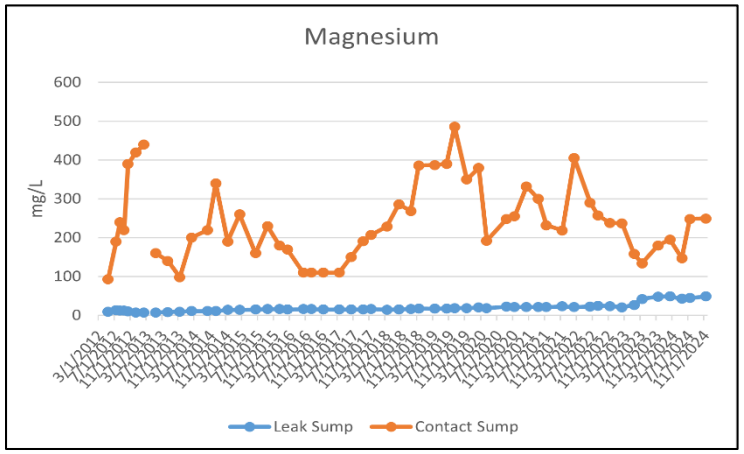
		Q1 2024	Q2 2024	Q3 2024	Q4 2024
Parameter	**Unit**	**02/19/24**	**05/06/24**	**07/29/24**	**11/11/24**
Field					
pH	SU	**6.2**	**8.0**	**6.5**	**7.2**
Specific Conductivity	µS/cm	**3,689**	**3,794**	**3,791**	**3,844**
Major Anions					
Chloride	mg/L	**85.9**	**87.8**	**72.8**	**88.7**
Nitrogen, Ammonia	mg/L	**0.13**	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	**102**	**101**	**101**	**87.3**
Nitrogen, Nitrite	mg/L	<1.0	<1.0	<0.25	<1.0
Sulfate	mg/L	**844**	**704**	**1,120**	**1,300**
Major Cations					
Magnesium, Total	mg/L	**48.6**	**42.8**	**44.8**	**49.0**
Sodium, Total	mg/L	**641**	**690**	**643**	**663**

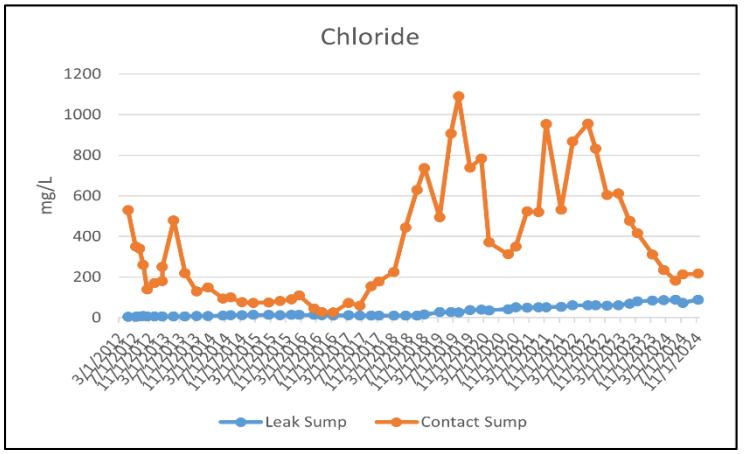
2024

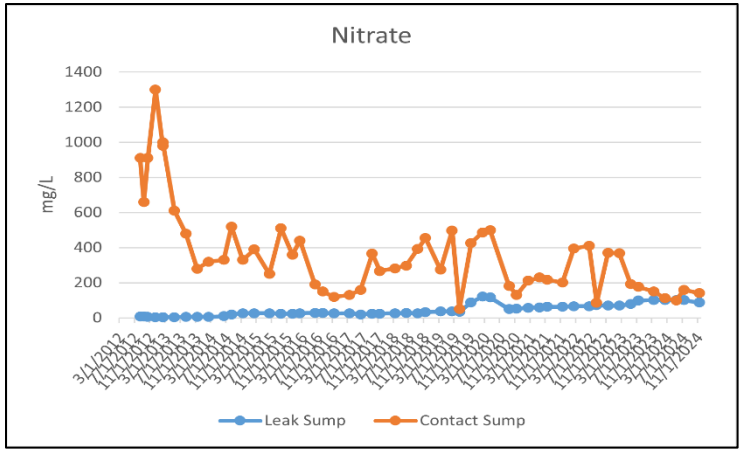
Mine Permit Water Quality Monitoring Data

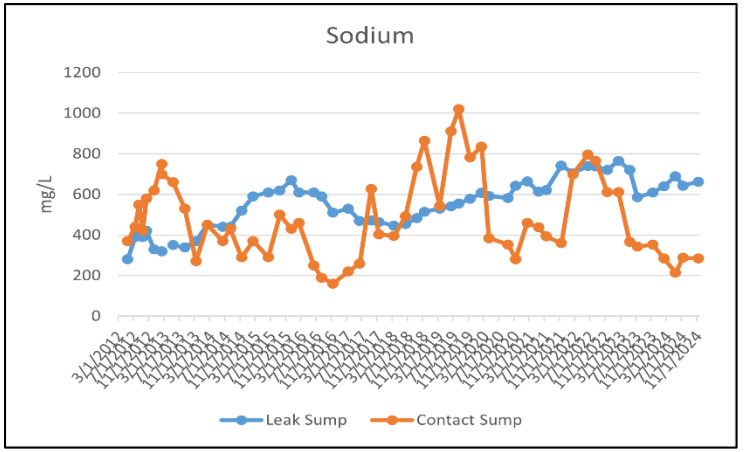
TDRSA Contact Water & Leak Sump

Eagle Mine







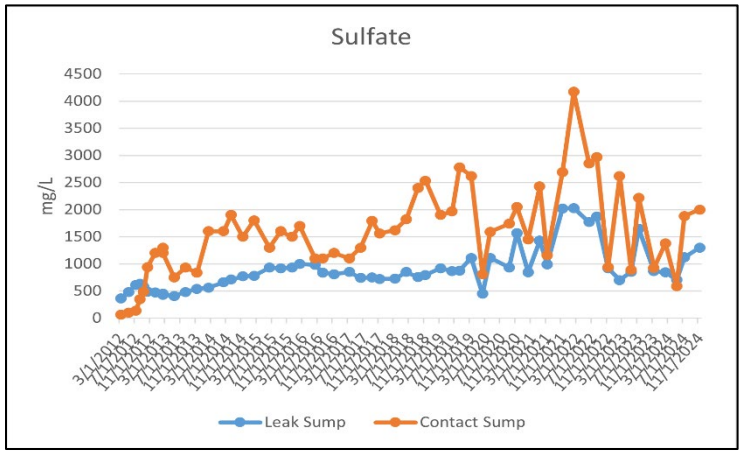


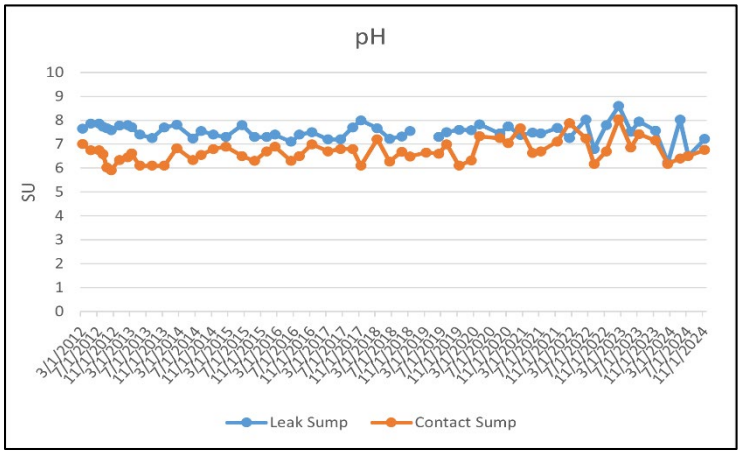
2024

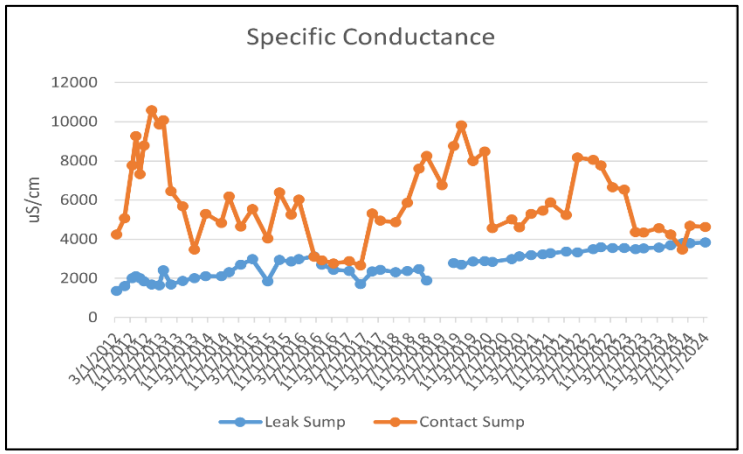
Mine Permit Water Quality Monitoring Data

TDRSA Contact Water & Leak Sump

Eagle Mine







2024
Mine Permit Water Quality Monitoring Data
Underground Influent
Eagle Mine

		Q1 2024	Q2 2024	Q3 2024	Q4 2024
Parameter	**Unit**	**02/19/24**	**05/06/24**	**07/29/24**	**11/01/24**
Field					
pH	SU	**6.7**	**6.4**	**8.3**	**7.7**
Specific Conductivity	µS/cm	**4,447**	**2,861**	**2,640**	**2,536**
Metals					
Aluminum, Total	µg/L	—	**587**	—	—
Antimony, Total	µg/L	—	**6.3**	—	—
Arsenic, Total	µg/L	**14.3**	**7.5**	**16.9**	**6.6**
Barium, Total	µg/L	—	**36.6**	—	—
Beryllium, Total	µg/L	—	<1.0	—	—
Boron, Total	µg/L	**456**	**495**	**1,230**	**686**
Cadmium, Total	µg/L	—	<0.20	—	—
Chromium, Total	µg/L	—	**4.9**	—	—
Cobalt, Total	µg/L	—	<15.0	—	—
Copper, Total	µg/L	**984**	**60.3**	**436**	**1,020**
Iron, Total	µg/L	**146,000**	**1,420**	**29,800**	**18,700**
Lead, Total	µg/L	—	**2.1**	—	—
Lithium, Total	µg/L	—	**21.2**	—	—
Manganese, Total	µg/L	**1,270**	**26.9**	**578**	**160**
Mercury, Total	µg/L	**0.121**	**0.010**	**0.216**	**0.068**
Molybdenum, Total	µg/L	—	**35.6**	—	—
Nickel, Total	µg/L	**2,270**	**132**	**1,130**	**1,710**
Selenium, Total	µg/L	**6.8**	**3.8**	**13.3**	**10.8**
Silver, Total	µg/L	—	<0.20	—	—
Strontium, Total	µg/L	—	**927**	—	—
Thallium, Total	µg/L	—	<2.0	—	—
Vanadium, Total	µg/L	—	**6.0**	—	—
Zinc, Total	µg/L	**407**	**17.6**	**426**	**143**
Major Anions					
Alkalinity, Bicarbonate	mg/L	**133**	**77.4**	**85.8**	**68.6**
Alkalinity, Carbonate	mg/L	<10.0	**14.8**	**14.4**	<10.0
Chloride	mg/L	**843**	**253**	**130**	**171**
Fluoride	mg/L	—	**0.22**	—	—
Nitrogen, Nitrate	mg/L	**22.4**	**9.9**	**50.7**	**27.0**
Nitrogen, Nitrite	mg/L	—	—	—	—
Sulfate	mg/L	**652**	**180**	**906**	**1,000**
Major Cations					
Calcium, Total	mg/L	—	**87.1**	—	—
Magnesium, Total	mg/L	—	**11.2**	—	—
Potassium, Total	µg/L	—	**28,800**	—	—
Sodium, Total	mg/L	—	**197**	—	—

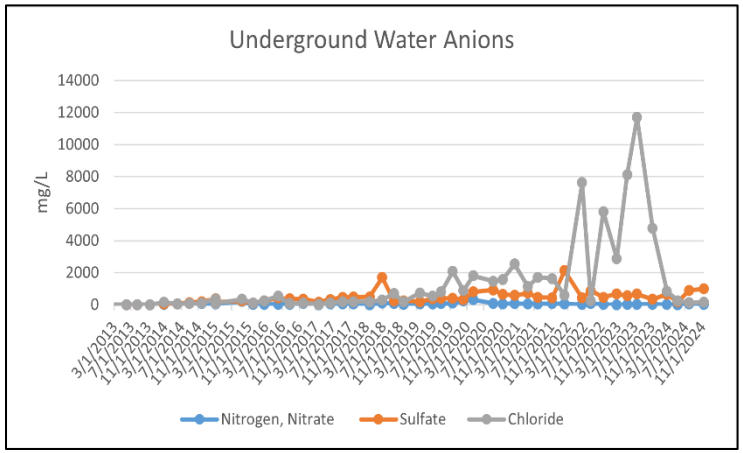
— Analyte not included in the quarterly parameter list.

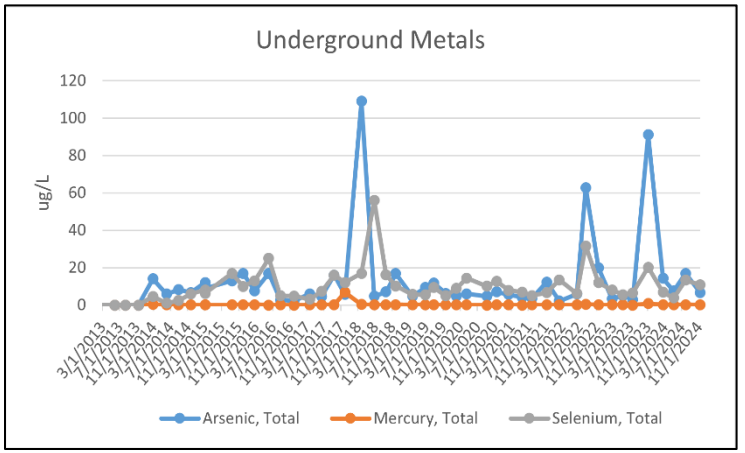
2024

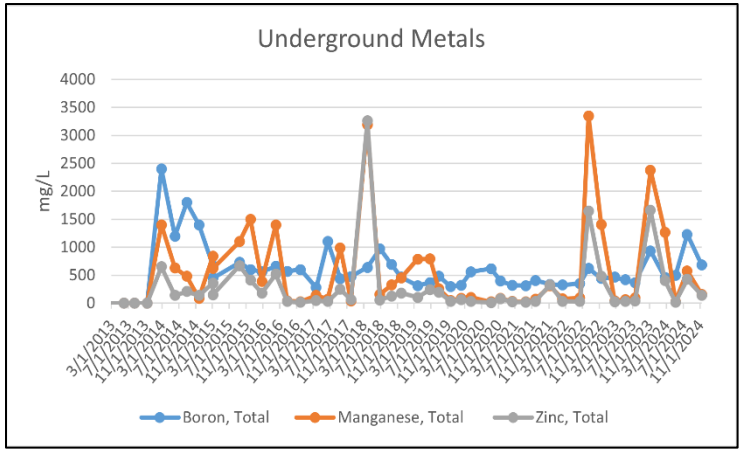
Mine Permit Water Quality Monitoring Data

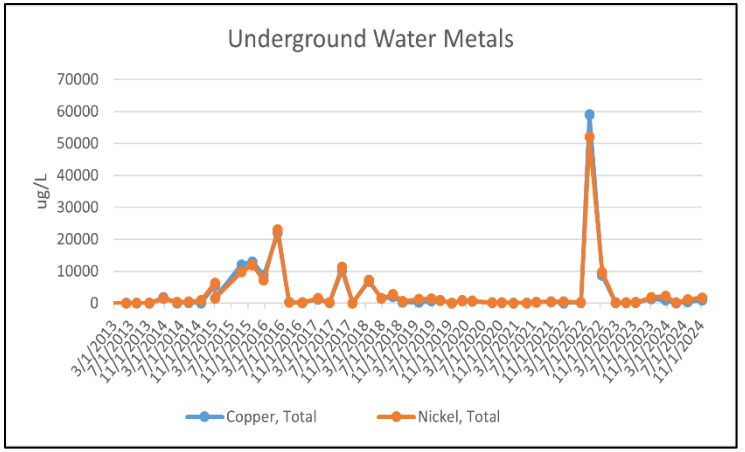
Underground Influent

Eagle Mine









2024
Mine Permit Water Quality Monitoring Data
Contact Water Basins
Eagle Mine

		Q1 2024	Q2 2024	Q3 2024	Q4 2024
Parameter	**Unit**	**02/19/24**	**05/06/24**	**07/29/24**	**11/11/24**
Field					
pH	SU	**9.4**	**9.0**	**8.8**	**9.7**
Specific Conductivity	µS/cm	**11,850**	**8,449**	**7,692**	**4,930**
Metals					
Aluminum, Total	µg/L	<5.0	**150**	**206**	**283**
Antimony, Total	µg/L	**2.9**	**2.6**	**1.8**	**1.4**
Arsenic, Total	µg/L	**1.8**	**2.0**	**2.1**	**1.3**
Barium, Total	µg/L	**63.2**	**34.7**	**43.5**	**31.9**
Beryllium, Total	µg/L	<1.0	<1.0	<1.0	<1.0
Boron, Total	µg/L	**448**	**441**	**502**	**422**
Cadmium, Total	µg/L	<0.20	<0.20	<0.20	<0.20
Chromium, Total	µg/L	**1.5**	**2.4**	**1.3**	**2.2**
Cobalt, Total	µg/L	<15.0	<15.0	<15.0	<15.0
Copper, Total	µg/L	**11.1**	**11.8**	**10.8**	**13.8**
Iron, Total	µg/L	**246**	**332**	**384**	**623**
Lead, Total	µg/L	<1.0	<1.0	<1.0	<1.0
Lithium, Total	µg/L	**132**	**79.6**	**52.9**	**42.3**
Manganese, Total	µg/L	**10.2**	**6.0**	**6.1**	**9.7**
Mercury, Total	µg/L	**0.001**	**0.001**	**0.001**	**0.001**
Molybdenum, Total	µg/L	**37.6**	**33.0**	**18.2**	**15.9**
Nickel, Total	µg/L	**43.0**	**24.4**	**18.4**	**23.2**
Selenium, Total	µg/L	**3.6**	**3.1**	**1.8**	**1.6**
Silver, Total	µg/L	<0.20	<0.20	<0.20	<0.20
Strontium, Total	µg/L	**7,340**	**4,290**	**5,880**	**4,550**
Thallium, Total	µg/L	<2.0	<2.0	<2.0	<2.0
Vanadium, Total	µg/L	**1.7**	**3.5**	**3.5**	**3.8**
Zinc, Total	µg/L	<10.0	<10.0	<10.0	<10.0
Major Anions					
Alkalinity, Bicarbonate	mg/L	**81.4**	**76.0**	**79.4**	**64.6**
Alkalinity, Carbonate	mg/L	**114**	**185**	**76.8**	**71.2**
Chloride	mg/L	**3,950**	**2,650**	**2,440**	**1,390**
Fluoride	mg/L	**0.11**	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	**27.1**	**25.5**	**8.7**	**11.1**
Sulfate	mg/L	NA	**401**	**301**	**215**
Major Cations					
Calcium, Total	mg/L	**72**	**35.4**	**28.4**	**31.3**
Magnesium, Total	mg/L	**32.2**	**13.9**	**10.8**	**13.1**
Potassium, Total	µg/L	**88,700**	**62,600**	**37,200**	**30,600**
Sodium, Total	mg/L	**2,380**	**1,670**	**1,100**	**792**

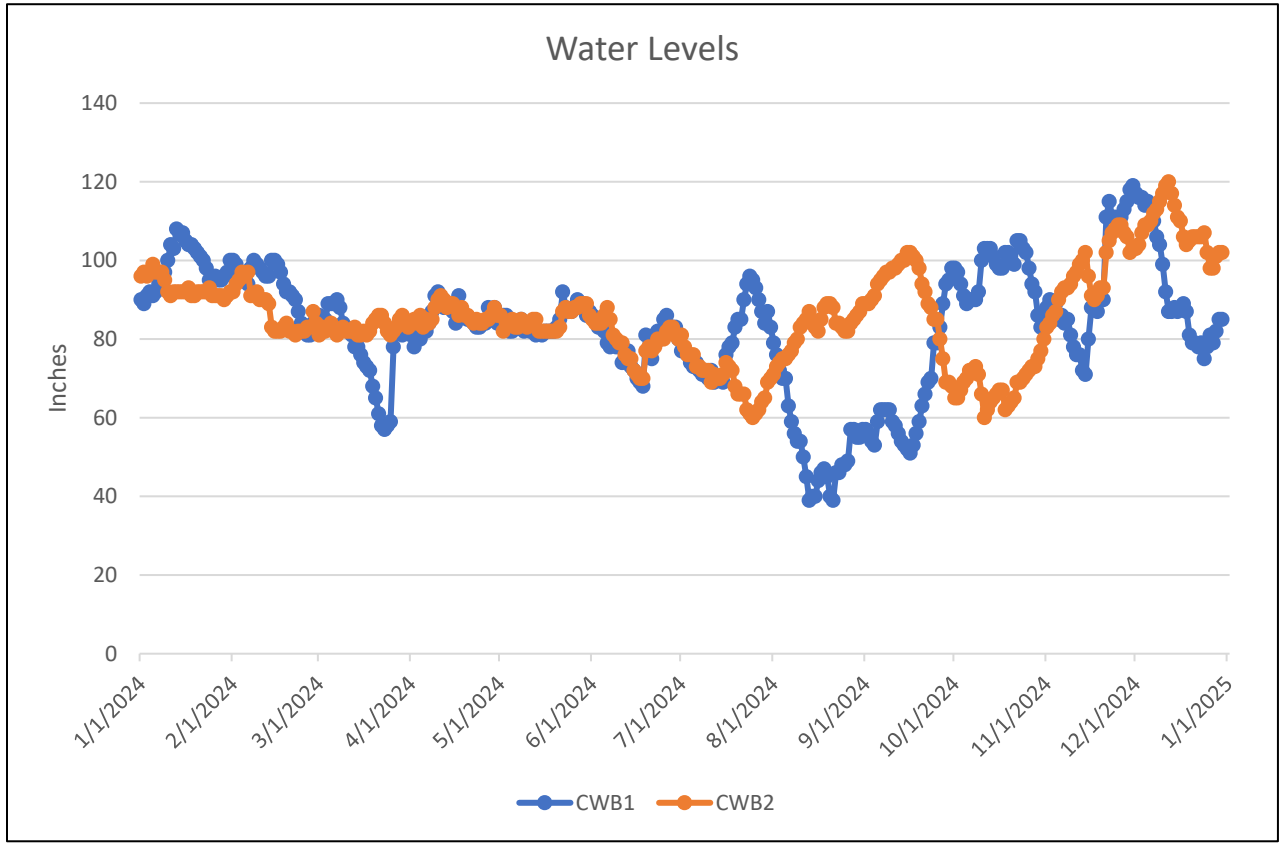
NA - Parameter was missed, not required by the Part 632 permit.

2024

Mine Permit Water Level Monitoring Data

Contact Water Basins

Eagle Mine

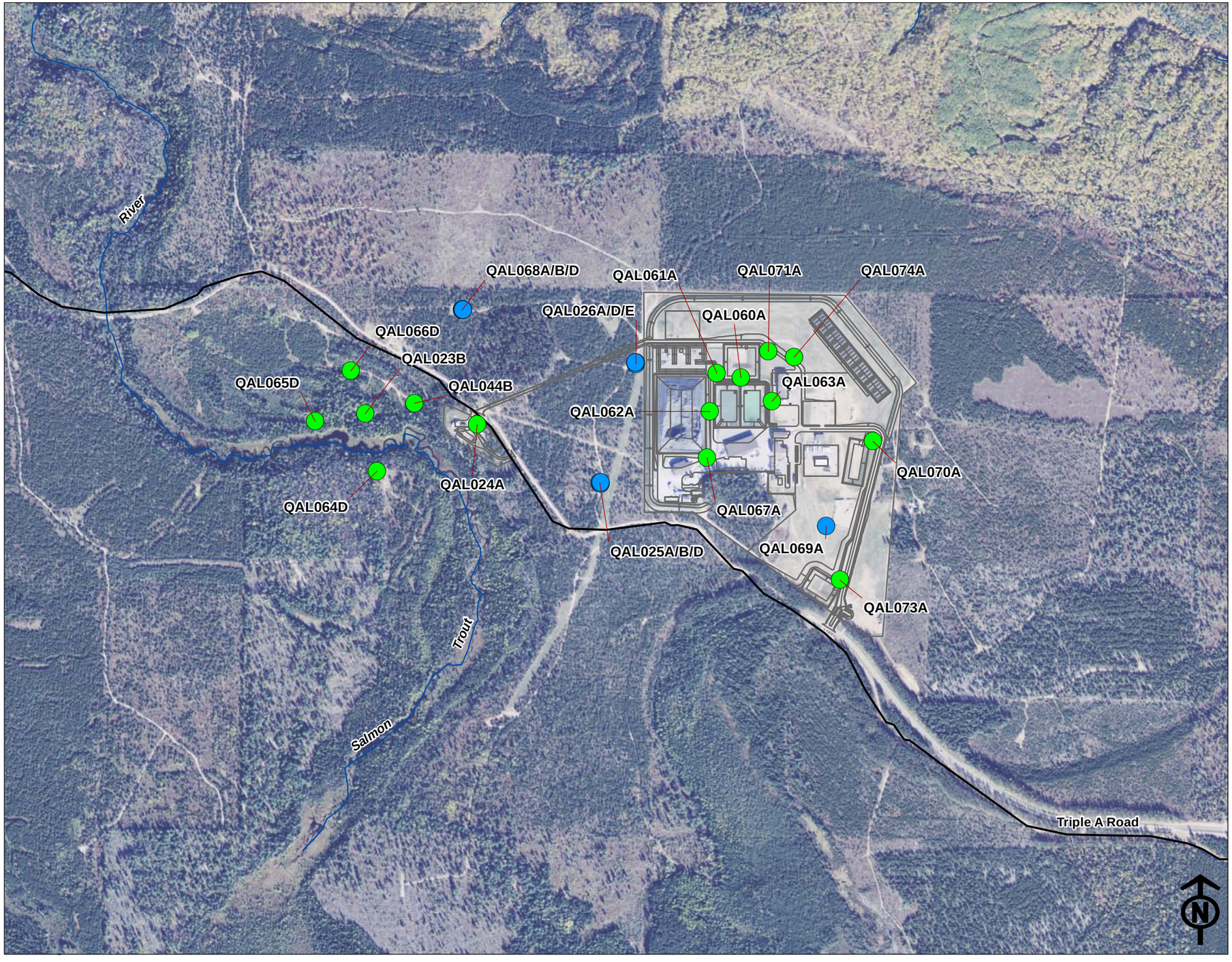


Appendix F

Eagle Mine

Groundwater Monitoring Well Location Map

MINE PERMIT GROUNDWATER QUALITY MONITORING LOCATIONS Project View



- COMPLIANCE WATER QUALITY
- BACKGROUND WATER QUALITY
- ROAD
- HYDROGRAPHY
- MINE FACILITY

Reference

Data provided by: Eagle Mine and North Jackson Company

Projection & Datum: UTM NAD 83 Zone 16N

0 — 2,000 Feet

Scale: 1:12,000

Eagle Mine
a subsidiary of hudbay mining

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Appendix G

Eagle Mine

Groundwater Monitoring Well Results and Benchmark Summary Table

2024
Mine Permit Groundwater Quality Monitoring Data
Benchmark Comparison Summary

Location	Location Classification	Q1	Q2	Q3	Q4
QAL023B	Compliance		calcium, magnesium, hardness		iron
QAL024A	Compliance	alkalinity bicarbonate, chloride, nitrate, sodium	alkalinity bicarbonate, chloride, nitrate, sodium	pH, alkalinity bicarbonate, chloride, nitrate, sodium	alkalinity bicarbonate, chloride, nitrate, sodium
QAL025A	Background	alkalinity bicarbonate	alkalinity bicarbonate, calcium, magnesium, hardness	alkalinity bicarbonate	alkalinity bicarbonate
QAL025B	Background				
QAL025D	Background	vanadium, chloride	vanadium, chloride, calcium, magnesium, hardness	chloride	vanadium
QAL026A	Background		iron		
QAL026D	Background	alkalinity bicarbonate	pH, alkalinity bicarbonate, calcium	alkalinity bicarbonate	alkalinity bicarbonate
QAL026E	Background	arsenic	pH, arsenic, calcium, magnesium, hardness	arsenic	arsenic
QAL044B	Compliance		alkalinity carbonate	pH	
QAL060A	Compliance	alkalinity bicarbonate, nitrate	alkalinity bicarbonate, nitrate, calcium, magnesium, hardness	alkalinity bicarbonate, nitrate	alkalinity bicarbonate, nitrate
QAL061A	Compliance	alkalinity bicarbonate, nitrate	alkalinity bicarbonate, calcium, magnesium, hardness	alkalinity bicarbonate	pH, alkalinity bicarbonate
QAL062A	Compliance	pH, alkalinity bicarbonate, chloride, nitrate, sodium	pH, alkalinity bicarbonate, chloride, nitrate, calcium, magnesium, potassium, sodium, hardness	pH, alkalinity bicarbonate, chloride, nitrate, sodium	pH, alkalinity bicarbonate, chloride, nitrate, sodium
QAL063A	Compliance	pH, alkalinity bicarbonate, chloride, nitrate, sodium	pH, alkalinity bicarbonate, chloride, nitrate, calcium, magnesium, potassium, sodium, hardness	pH, alkalinity bicarbonate, chloride, nitrate, sodium	pH, alkalinity bicarbonate, chloride, nitrate, sodium
QAL064D	Compliance		magnesium, hardness		
QAL065D	Compliance		calcium, magnesium, hardness		
QAL066D	Compliance	pH, iron, mercury, vanadium, alkalinity bicarbonate, sodium	pH, aluminum, iron, mercury, vanadium, alkalinity bicarbonate, magnesium, sodium	pH, alkalinity bicarbonate	pH, iron, alkalinity bicarbonate
QAL067A	Compliance	alkalinity bicarbonate, chloride, nitrate, sulfate, sodium	alkalinity bicarbonate, chloride, nitrate, sulfate, calcium, magnesium, sodium, hardness	alkalinity bicarbonate, chloride, nitrate, sulfate, sodium	alkalinity bicarbonate, chloride, nitrate, sulfate, sodium
QAL068A	Background				
QAL068B	Background		calcium, hardness	pH	alkalinity bicarbonate
QAL068D	Background	arsenic	arsenic, vanadium, magnesium, hardness	arsenic	arsenic, vanadium
QAL069A	Background	pH, chloride, nitrate, sodium	pH, chloride, sodium	pH, sodium	pH, alkalinity bicarbonate, chloride, sodium
QAL070A*	Compliance		pH, alkalinity bicarbonate, chloride, nitrate, sulfate, calcium, magnesium, sodium, hardness		
QAL071A	Compliance	pH, alkalinity bicarbonate, chloride, nitrate, sodium	pH, alkalinity bicarbonate, chloride, nitrate, sulfate, calcium, magnesium, sodium, hardness	alkalinity bicarbonate, chloride, nitrate, sulfate, sodium	alkalinity bicarbonate, chloride, nitrate, sulfate, sodium
QAL073A*	Compliance		pH, iron, alkalinity bicarbonate, nitrate, calcium, magnesium, sodium, hardness		
QAL074A	Compliance	iron, alkalinity bicarbonate, chloride, nitrate, sodium	aluminum, chromium, cobalt, iron, alkalinity bicarbonate, chloride, nitrate, sodium	alkalinity bicarbonate, nitrate, sodium	alkalinity bicarbonate, chloride, nitrate, sodium

Parameters listed in this table had values reported that were equal to or greater than a site-specific benchmark. *Monitoring location is only sampled on an annual basis in Q2.

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL023B (UMB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**0.10**	**0.50**	**0.20**	**0.30**
ORP	mV	--	**-232**	**-147**	**-222**	**-236**
pH	SU	7.8-8.8	**8.1**	**8.4**	**8.3**	**8.2**
Specific Conductance	µS/cm @ 25°C	--	**123**	**117**	**133**	**119**
Temperature	°C	--	**7.0**	**7.1**	**7.4**	**7.8**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1411.57**	**1411.07**	**1410.45**	**1409.05**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.5	<2.0	<2.0	<2.0	**2.6**
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	159	**126**	**43.6** J	**124**	**238**
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	**20.4**
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	67.0	**59.0**	**60.0**	**58.0**	**66.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.05 e	<0.05 e	<0.05 e	<0.05
Sulfate	mg/L	8.0	**5.3**	**5.8** e	**5.9**	**5.1**
Major Cations						
Calcium	mg/L	16.0	**--**	**16.6** e	**--**	**--**
Magnesium	mg/L	3.7	**--**	**4.0**	**--**	**--**
Potassium	mg/L	2.0	--	<0.50	--	--
Sodium	mg/L	11.0	**3.6**	**3.0** e	**3.0**	**2.7**
General						
Hardness	mg/L	55.0	**--**	**58.0**	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL024A (UMB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**11.0**	**11.0**	**11.0**	**10.0**
ORP	mV	--	**-26.0**	**69.0**	**-15.0**	**254**
pH	SU	6.1-7.1	**6.2**	**6.2**	**6.1**	**6.4**
Specific Conductance	µS/cm @ 25°C	--	**318**	**326**	**235**	**240**
Temperature	°C	--	**7.7**	**8.1**	**8.0**	**8.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1417.78**	**1417.81**	**1417.66**	**1416.15**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	86.0	--	**27.6**	**--**	**--**
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	105	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**64.4**	**--**	**--**
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	24.0	**28.0**	**27.0**	**29.0**	**35.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	**73.5**	**81.9** a	**39.8** e	**49.1**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	**1.2** e	**1.5** e	**0.84** e	**1.3**
Sulfate	mg/L	8.0	**5.4**	**6.1** e	**4.7**	**5.4**
Major Cations						
Calcium	mg/L	48.0	**--**	**18.6** e	**--**	**--**
Magnesium	mg/L	8.1	**--**	**3.1**	**--**	**--**
Potassium	mg/L	3.7	**--**	**1.9**	**--**	**--**
Sodium	mg/L	2.0	**31.8**	**38.4** e	**27.2**	**32.1**
General						
Hardness	mg/L	153	**--**	**59.0**	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL025A (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**12.0**	**12.0**	**14.0**	**12.0**
ORP	mV	--	**279**	**29.0**	**261**	**188**
pH	SU	6.4-7.4	**6.6**	**6.6**	**7.3**	**7.2**
Specific Conductance	µS/cm @ 25°C	--	**76.0**	**71.0**	**100**	**81.0**
Temperature	°C	--	**7.1**	**7.8**	**7.2**	**7.2**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1413.12**	**1416.19**	**1414.13**	**1415.93**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	126	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	**25.5**
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	**--**	**0.35**	**--**	**--**
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	25.0	**38.0**	**39.0**	**42.0**	**51.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	1.1	**0.15** e	**0.10** e	**0.09** e	**0.09**
Sulfate	mg/L	8.0	<2.0	<2.0 e	<2.0	<2.0
Major Cations						
Calcium	mg/L	8.5	**--**	**11.0 e**	**--**	**--**
Magnesium	mg/L	2.0	**--**	**2.2**	**--**	**--**
Potassium	mg/L	2.0	**--**	**0.93**	**--**	**--**
Sodium	mg/L	2.0	<1.0	<1.0 e	<1.0	<1.0
General						
Hardness	mg/L	28.0	**--**	**37.0**	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL025B (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**11.0**	**11.0**	**13.0**	**11.0**
ORP	mV	--	**-27.0**	**22.0**	**220**	**109**
pH	SU	8.5-9.5	**9.0**	**8.8**	**9.4**	**9.2**
Specific Conductance	µS/cm @ 25°C	--	**65.0**	**63.0**	**81.0**	**60.0**
Temperature	°C	--	**6.7**	**7.2**	**7.2**	**7.2**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1416.52**	**1416.16**	**1416.36**	**1415.82**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	56.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	**1.1**	**1.1**	**1.1**	**1.1**
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	36.0	**28.0**	**29.0**	**30.0**	**35.0**
Alkalinity, Carbonate	mg/L	12.0	**4.2**	**4.4**	**4.0**	**4.5**
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.08** e	**0.08** e	**0.06** e	**0.07**
Sulfate	mg/L	8.0	<2.0	<2.0 e	<2.0	<2.0
Major Cations						
Calcium	mg/L	10.0	**--**	**9.9** e	**--**	**--**
Magnesium	mg/L	2.0	**--**	**1.7**	**--**	**--**
Potassium	mg/L	2.0	--	<0.50	--	--
Sodium	mg/L	4.5	**1.1**	**1.1** e	**1.1**	**1.1**
General						
Hardness	mg/L	33.0	**--**	**32.0**	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL025D (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**5.3**	**5.6**	**7.1**	**5.6**
ORP	mV	--	**233**	**-51**	**225**	**171**
pH	SU	8.2-9.2	**8.6**	**8.5**	**9.0**	**8.8**
Specific Conductance	µS/cm @ 25°C	--	**111**	**105**	**132**	**99.0**
Temperature	°C	--	**6.9**	**7.4**	**7.3**	**7.1**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1412.72**	**1412.16**	**1412.23**	**1411.94**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.5	**2.9**	**2.7**	**2.6**	**2.8**
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	137	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	**4.0**	**4.2**	**3.9**	**4.0**
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	52.0	**43.0**	**43.0**	**43.0**	**50.0**
Alkalinity, Carbonate	mg/L	14.0	<2.0	<2.0	<2.0	**2.1**
Chloride	mg/L	4.0	**4.7**	**4.7** a	**4.1** e	**3.9**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.10** e	**0.11** e	**0.09** e	**0.10**
Sulfate	mg/L	8.0	**5.1**	**5.2** e	**5.1**	**5.2**
Major Cations						
Calcium	mg/L	12.0	--	**14.6** e	--	--
Magnesium	mg/L	2.7	--	**3.2**	--	--
Potassium	mg/L	2.0	--	**0.65**	--	--
Sodium	mg/L	12.0	**2.7**	**2.6** e	**2.4**	**2.3**
General						
Hardness	mg/L	42.0	--	**50.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL026A (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 Not Sampled	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	i	**11.0**	i	i
ORP	mV	--	i	**244**	i	i
pH	SU	6.2-7.2	i	**6.9**	i	i
Specific Conductance	µS/cm @ 25°C	--	i	**103**	i	i
Temperature	°C	--	i	**8.0**	i	i
Turbidity	NTU	--	i	<1.0	i	i
Water Elevation	ft MSL	--	**<1415.40** BP	**1415.72**	**<<1415.40** BP	**<<1415.40** BP
Metals						
Aluminum	ug/L	236	--	**214**	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	i	<2.0	i	i
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	i	<100	i	i
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	i	<5.0	i	i
Iron	ug/L	368	i	**504**	i	i
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	i	<20.0	i	i
Mercury	ng/L	2.0	i	**1.5**	i	i
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	i	<25.0	i	i
Selenium	ug/L	4.0	i	<1.0	i	i
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	i	<1.0	i	i
Zinc	ug/L	40.0	i	<10.0	i	i
Major Anions						
Alkalinity, Bicarbonate	mg/L	114	i	**42.0** a	i	i
Alkalinity, Carbonate	mg/L	8.0	i	<2.0	i	i
Chloride	mg/L	4.0	i	<1.0 a	i	i
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.73	i	**0.28** a,e	i	i
Sulfate	mg/L	8.0	i	**2.0** e	i	i
Major Cations						
Calcium	mg/L	40.0	--	**24.0** a,e	--	--
Magnesium	mg/L	5.9	--	**3.6** a	--	--
Potassium	mg/L	2.0	--	**1.0** a	--	--
Sodium	mg/L	2.4	i	**1.0** e	i	i
General						
Hardness	mg/L	124	--	**75.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL026D (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**11.0**	**11.0**	**13.0**	**9.8**
ORP	mV	--	**221**	**268**	**251**	**241**
pH	SU	8.4-9.4	**8.9**	**7.9**	**9.3**	**9.1**
Specific Conductance	µS/cm @ 25°C	--	**84.0**	**77.0**	**102**	**73.0**
Temperature	°C	--	**7.0**	**7.0**	**7.3**	**7.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1409.51**	**1408.95**	**1408.94**	**1408.68**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	31.0	**33.0**	**35.0**	**35.0**	**40.0**
Alkalinity, Carbonate	mg/L	8.0	**3.3**	**3.6**	**2.4**	**3.6**
Chloride	mg/L	4.0	**2.5**	**1.9** a	**1.9** e	**2.1**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.18** e	**0.14** e	**0.12** e	**0.16**
Sulfate	mg/L	8.0	<2.0	<2.0 e	<2.0	<2.0
Major Cations						
Calcium	mg/L	13.0	**--**	**13.2** e	**--**	**--**
Magnesium	mg/L	2.4	**--**	**1.9**	**--**	**--**
Potassium	mg/L	2.0	**--**	**0.54**	**--**	**--**
Sodium	mg/L	2.0	<1.0	<1.0 e	<1.0	<1.0
General						
Hardness	mg/L	43.0	**--**	**41.0**	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL026E (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	<0.10	<0.10	**0.20**	**0.20**
ORP	mV	--	**149**	**143**	**172**	**159**
pH	SU	8.1-9.1	**8.5**	**7.7**	**8.9**	**8.7**
Specific Conductance	µS/cm @ 25°C	--	**124**	**116**	**150**	**114**
Temperature	°C	--	**6.9**	**7.1**	**7.2**	**7.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1409.28**	**1408.74**	**1408.68**	**1408.46**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	7.8	**8.6**	**8.2**	**8.0**	**8.3**
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**62.1**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	91.0	**55.0**	**56.0**	**55.0**	**62.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.05 e	<0.05 e	<0.05 e	<0.05
Sulfate	mg/L	8.6	**7.9**	**8.1** e	**7.9**	**7.6**
Major Cations						
Calcium	mg/L	17.0	--	**17.2 e**	--	--
Magnesium	mg/L	4.3	--	**4.3**	--	--
Potassium	mg/L	2.0	--	**1.7**	--	--
Sodium	mg/L	2.0	**1.7**	**1.7 e**	**1.7**	**1.6**
General						
Hardness	mg/L	60.0	--	**61.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL044B (UMB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**0.10**	**0.50**	**8.9**	**1.6**
ORP	mV	--	**-373**	**-70.0**	**-202**	**-148**
pH	SU	8.3-9.3	**9.1**	**9.2**	**9.5**	**9.2**
Specific Conductance	µS/cm @ 25°C	--	**92.0**	**98.0**	**131**	**99.0**
Temperature	°C	--	**7.7**	**7.5**	**7.8**	**7.7**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1415.12**	**1413.89**	**1413.67**	**1413.19**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	**19.7** J	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	64.0	**37.0**	**41.0**	**42.0**	**51.0**
Alkalinity, Carbonate	mg/L	8.0	**4.8**	**8.8**	**7.1**	**4.1**
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.05 e	<0.05 e	<0.05 e	<0.05
Sulfate	mg/L	24.0	**5.9**	**6.8** e	**7.2**	**6.1**
Major Cations						
Calcium	mg/L	17.0	**--**	**16.1** e	**--**	**--**
Magnesium	mg/L	4.0	**--**	**2.2**	**--**	**--**
Potassium	mg/L	2.0	**--**	**1.1**	**--**	**--**
Sodium	mg/L	2.6	**2.2**	**2.2** e	**2.2**	**2.1**
General						
Hardness	mg/L	58.0	**--**	**49.0**	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL060A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**11.0**	**11.0**	**11.0**	**10.0**
ORP	mV	--	**-25.0**	**24.0**	**-1.0**	**118**
pH	SU	8.1-9.1	**8.3**	**8.3**	**8.2**	**8.3**
Specific Conductance	µS/cm @ 25°C	--	**136**	**125**	**142**	**123**
Temperature	°C	--	**7.7**	**8.2**	**8.9**	**8.4**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1405.05**	**1404.55**	**1404.60**	**1404.44**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	7.2	**2.2**	**2.2**	**2.2**	**2.3**
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**52.1**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	62.0	**66.0**	**67.0**	**64.0**	**67.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	**2.0**
Chloride	mg/L	4.0	**1.0**	**1.2** a	**1.2** e	**1.3**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.28** e	**0.31** e	**0.33** e	**0.34**
Sulfate	mg/L	8.0	<2.0	**2.0** e	<2.0	<2.0
Major Cations						
Calcium	mg/L	17.0	--	**20.2** **e**	--	--
Magnesium	mg/L	4.2	--	**4.2**	--	--
Potassium	mg/L	2.0	--	**0.90**	--	--
Sodium	mg/L	2.1	**1.0**	<1.0 e	<1.0	<1.0
General						
Hardness	mg/L	61.0	--	**68.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL061A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**11.0**	**11.0**	**11.0**	**10.0**
ORP	mV	--	**-30.0**	**20.0**	**-19.0**	**116**
pH	SU	8.1-9.1	**8.3**	**8.2**	**8.2**	**8.0**
Specific Conductance	µS/cm @ 25°C	--	**177**	**166**	**170**	**167**
Temperature	°C	--	**7.0**	**9.0**	**8.9**	**8.4**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1406.43**	**1405.86**	**1405.94**	**1405.71**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	40.0	**92.0**	**92.0**	**80.0**	**93.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	**1.6** e	**1.5**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.27	**0.29** e	**0.25** e	**0.24** e	**0.26**
Sulfate	mg/L	8.0	<2.0	**2.0** e	<2.0	<2.0
Major Cations						
Calcium	mg/L	15.0	--	**27.9 e**	--	--
Magnesium	mg/L	2.2	--	**5.2**	--	--
Potassium	mg/L	2.0	--	**0.9**	**--**	**--**
Sodium	mg/L	2.0	<1.0	<1.0 e	<1.0	<1.0
General						
Hardness	mg/L	37.0	--	**91.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL062A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**7.6**	**8.0**	**7.8**	**7.7**
ORP	mV	--	**-43.0**	**-11.0**	**-34.0**	**88.0**
pH	SU	8.3-9.3	**7.2**	**7.3**	**7.2**	**7.1**
Specific Conductance	µS/cm @ 25°C	--	**603**	**536**	**570**	**489**
Temperature	°C	--	**7.4**	**8.4**	**8.2**	**8.1**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1407.73**	<1.0	**1407.29**	**1407.11**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	**40.6**	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**107**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	48.0	**250**	**240**	**230**	**230**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	**42.8**	**36.8** a	**25.4** e	**24.1**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.41	**1.8** e	**1.7** e	**1.8** e	**1.6**
Sulfate	mg/L	8.0	**5.1**	**4.8** e	**4.6**	**4.4**
Major Cations						
Calcium	mg/L	12.0	--	**70.8** e	--	--
Magnesium	mg/L	2.2	--	**14.8**	--	--
Potassium	mg/L	2.0	--	**2.5**	--	--
Sodium	mg/L	2.0	**18.9**	**22.7** e	**21.6**	**17.9**
General						
Hardness	mg/L	40.0	--	**238**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL063A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**9.6**	<0.10	**9.7**	**7.5**
ORP	mV	--	**142**	**209**	**200**	**99**
pH	SU	8.1-9.1	**7.2**	**6.7**	**7.5**	**7.1**
Specific Conductance	µS/cm @ 25°C	--	**734**	**639**	**854**	**700**
Temperature	°C	--	**8.8**	**8.8**	**8.8**	**9.4**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1401.76**	**1401.27**	**1401.24**	**1401.26**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	**--**	**51.9**	**--**	**--**
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	**--**	**115**	**--**	**--**
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	42.0	**290**	**270**	**270**	**270**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	**66.8**	**61.6** a	**61.5** e	**62.6**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.29	**1.9** e	**1.8** e	**0.76** e	**1.90**
Sulfate	mg/L	8.0	**7.6**	**7.1** e	**7.0**	**7.1**
Major Cations						
Calcium	mg/L	12.0	**--**	**83.0** e	--	--
Magnesium	mg/L	2.0	**--**	**17.3**	--	--
Potassium	mg/L	2.0	**--**	**3.4**	--	--
Sodium	mg/L	2.0	**41.3**	**41.1** e	**39.4**	**38.3**
General						
Hardness	mg/L	40.0	**--**	**278**	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL064D (UMB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**0.40**	<0.10	**8.5**	**0.20**
ORP	mV	--	**-320**	**-139**	**-207**	**-175**
pH	SU	8.0-9.0	**8.5**	**8.6**	**8.9**	**8.7**
Specific Conductance	µS/cm @ 25°C	--	**140**	**125**	**177**	**130**
Temperature	°C	--	**7.3**	**7.0**	**7.1**	**7.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1415.85**	**1415.83**	**1415.81**	**1415.45**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	**23.4** J	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**95.9**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	82	**70.0**	**69.0**	**72.0**	**78.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	**2.1**	**2.5**
Chloride	mg/L	4.2	**2.0**	**1.8** a	**1.5** e	**1.6**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.05 e	<0.05 e	<0.05 e	<0.05
Sulfate	mg/L	8.0	<2.0	<2.0 e	<2.0	<2.0
Major Cations						
Calcium	mg/L	22.0	--	**19.0** e	--	--
Magnesium	mg/L	3.3	--	**3.8**	--	--
Potassium	mg/L	2.0	--	**1.2**	--	--
Sodium	mg/L	6.9	**4.1**	**4.1** e	**4.1**	**3.9**
General						
Hardness	mg/L	51.0	--	**63.0**	--	--

Explanations of abbreviations are included on the final page of this table.

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL065D (UMB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**0.10**	**0.20**	**0.20**	**0.20**
ORP	mV	--	**-139**	**-124**	**-170**	**-272**
pH	SU	7.9-8.9	**8.2**	**8.4**	**8.3**	**8.3**
Specific Conductance	µS/cm @ 25°C	--	**149**	**138**	**158**	**140**
Temperature	°C	--	**6.8**	**7.0**	**7.7**	**7.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1415.23**	**1415.34**	**1415.17**	**1414.64**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.6	**4.4**	**4.5**	**4.4**	**4.6**
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	**48.0** J	**43.5** J	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	**0.85**	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**192**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	86.0	**76.0**	**78.0**	**77.0**	**80.0**
Alkalinity, Carbonate	mg/L	8.7	<2.0	**2.2**	<2.0	**2.6**
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	**0.11**	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.05 e	<0.05 e	<0.05 e	<0.050
Sulfate	mg/L	8.0	<2.0	<2.0 e	<2.0	<2.0
Major Cations						
Calcium	mg/L	14.0	--	**14.5** e	--	--
Magnesium	mg/L	4.8	--	**4.9**	--	--
Potassium	mg/L	3.0	--	**2.9**	--	--
Sodium	mg/L	12.0	**9.5**	**9.0** e	**8.8**	**7.9**
General						
Hardness	mg/L	53.0	--	**56.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL066D (UMB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**5.9**	**1.2**	**0.70**	**6.5**
ORP	mV	--	**324**	**246**	**-190**	**-138**
pH	SU	8.7-9.7	**8.3**	**8.5**	**8.4**	**8.4**
Specific Conductance	µS/cm @ 25°C	--	**151**	**137**	**186**	**131**
Temperature	°C	--	**7.1**	**7.6**	**8.5**	**7.8**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1414.55**	**1414.39**	**1413.89**	**1413.30**
Metals						
Aluminum	ug/L	557	--	**1,830**	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	8.9	**8.1**	**8.7**	**6.0**	**8.5**
Barium	ug/L	80.0	--	**30.7**	**--**	**--**
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	288	**3,510**	**2,850**	<100	**1,090**
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	**33.4**	**26.5**	**31.2**	**20.1**
Mercury	ng/L	2.0	**3.8**	**2.6**	**0.57**	**1.3**
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	367	--	**64.9**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	**4.2**	**4.4**	<1.0	**1.9**
Zinc	ug/L	40.0	**10.9**	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	61.0	**72.0**	**72.0**	**76.0**	**76.0**
Alkalinity, Carbonate	mg/L	52.0	**2.6**	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.06** e	<0.05 e	<0.05 e	<0.05
Sulfate	mg/L	11.0	**8.0**	**7.7** e	**6.2**	**6.8**
Major Cations						
Calcium	mg/L	58.0	--	**21.4** e	--	--
Magnesium	mg/L	2.9	--	**3.8**	--	--
Potassium	mg/L	2.6	--	**1.9**	--	--
Sodium	mg/L	8.0	**11.0**	**8.5** e	**7.9**	**5.8**
General						
Hardness	mg/L	146	--	**69.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL067A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**9.7**	**9.8**	**9.5**	**9.4**
ORP	mV	--	**-38.0**	**14.0**	**-20.0**	**132**
pH	SU	5.6-6.6	**6.3**	**6.1**	**6.1**	**6.1**
Specific Conductance	µS/cm @ 25°C	--	**276**	**260**	**299**	**261**
Temperature	°C	--	**7.6**	**8.4**	**8.3**	**8.2**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1414.87**	**1414.29**	**1414.32**	**1413.99**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	**26.6**	--	**--**
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	**0.88**	**0.57**	<0.50	<0.50
Molybdenum	ug/L	40	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**74.8**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	51.0	**57.0**	**64.0**	**72.0**	**76.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	**40.2**	**36.3** a	**30.2** e	**27.3**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.25	**1.0** e	**1.1** e	**1.4** e	**1.3**
Sulfate	mg/L	8.4	**11.4**	**11.4** e	**10.9**	**10.7**
Major Cations						
Calcium	mg/L	8.2	--	**18.0** e	--	--
Magnesium	mg/L	2.0	--	**5.4**	--	--
Potassium	mg/L	2.0	--	**1.7**	--	--
Sodium	mg/L	2.0	**28.8**	**25.7** e	**23.9**	**20.2**
General						
Hardness	mg/L	26.0	--	**67.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL068A (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**12.0**	**11.0**	**2.8**	**11.0**
ORP	mV	--	**340**	**292**	**292**	**270**
pH	SU	6.2-7.2	**6.4**	**6.7**	**6.9**	**6.8**
Specific Conductance	µS/cm @ 25°C	--	**48.0**	**34.0**	**47.0**	**37.0**
Temperature	°C	--	**7.2**	**7.4**	**7.2**	**7.1**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1421.70**	**1421.25**	**1421.43**	**1421.16**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	**9.3**	<5.0	<5.0
Iron	ug/L	80.0	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	35.0	**23.0**	**18.0**	**20.0**	**25.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.05 e	<0.05 e	<0.05 e	<0.05
Sulfate	mg/L	8.0	<2.0	<2.0 e	<2.0	<2.0
Major Cations						
Calcium	mg/L	6.7	--	**5.2** e	--	--
Magnesium	mg/L	2.0	--	<1.0	--	--
Potassium	mg/L	2.0	--	**0.74**	--	--
Sodium	mg/L	2.0	<1.0	<1.0 e	<1.0	<1.0
General						
Hardness	mg/L	21.0	--	<3.0	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL068B (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**11.0**	**10.0**	**13.0**	**10.0**
ORP	mV	--	**292**	**240**	**228**	**225**
pH	SU	8.4-9.4	**8.8**	**9.2**	**9.5**	**9.2**
Specific Conductance	µS/cm @ 25°C	--	**64.0**	**58.0**	**76.0**	**57.0**
Temperature	°C	--	**7.1**	**7.3**	**7.5**	**7.2**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1413.92**	**1413.29**	**1413.14**	**1412.90**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	184	<100	<100	<100	**100**
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	**1.2**	**1.2**	**1.1**	**1.1**
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	30.0	**28.0**	**28.0**	**28.0**	**33.0**
Alkalinity, Carbonate	mg/L	9.9	**3.5**	**3.6**	**3.4**	**3.4**
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.05 e	**0.07** e	<0.05 e	**0.05**
Sulfate	mg/L	8.0	<2.0	<2.0 e	<2.0	<2.0
Major Cations						
Calcium	mg/L	9.4	**--**	**9.4** e	--	--
Magnesium	mg/L	2.0	**--**	**1.8**	--	--
Potassium	mg/L	2.0	**--**	**0.61**	**--**	**--**
Sodium	mg/L	2.0	<1.0	<1.0 e	<1.0	<1.0
General						
Hardness	mg/L	31.0	**--**	**31.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL068D (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/06/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**2.7**	**3.5**	**6.0**	**4.3**
ORP	mV	--	**291**	**262**	**234**	**225**
pH	SU	8.0-9.0	**8.3**	**8.6**	**8.9**	**8.7**
Specific Conductance	µS/cm @ 25°C	--	**118**	**107**	**143**	**105**
Temperature	°C	--	**5.7**	**8.7**	**10.7**	**8.2**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1414.19**	**1413.33**	**1413.28**	**1412.99**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	7.2	**7.8**	**7.7**	**7.7**	**7.6**
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	119	<100	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.12	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	**3.9**	**4.0**	**3.6**	**4.9**
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	67.0	**57.0**	**57.0**	**58.0**	**63.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0 e	<1.0
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.21	<0.05 e	**0.05** e	<0.05 e	<0.05
Sulfate	mg/L	10.0	**4.7**	**4.7** e	**4.6**	**4.5**
Major Cations						
Calcium	mg/L	16.0	**--**	**14.8** e	--	--
Magnesium	mg/L	3.9	**--**	**3.9**	--	--
Potassium	mg/L	2.0	**--**	**1.4**	--	--
Sodium	mg/L	6.1	**4.2**	**3.7** e	**3.9**	**3.6**
General						
Hardness	mg/L	52.0	**--**	**53.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL069A (Background)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**9.6**	**10.0**	**10.0**	**9.5**
ORP	mV	--	**-41.0**	**76.0**	**-25.0**	**109**
pH	SU	7.8-8.8	**6.9**	**6.8**	**7.0**	**7.4**
Specific Conductance	µS/cm @ 25°C	--	**306**	**226**	**199**	**272**
Temperature	°C	--	**7.9**	**8.0**	**8.3**	**8.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1384.41**	**1383.76**	**1383.68**	**1383.02**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<100	**29.7** J	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	**0.55**	**0.64**
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	<50.0	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	138	**130**	**110**	**91.0**	**140**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	**17.7**	**6.3** a	**2.3** e	**14.0**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.57	**0.59** e	**0.30** e	**0.14** e	**0.54**
Sulfate	mg/L	8.0	**7.2**	**5.4** e	**3.9**	**6.9**
Major Cations						
Calcium	mg/L	35.0	--	**23.1** e	--	--
Magnesium	mg/L	18.0	--	**7.6**	--	--
Potassium	mg/L	2.0	--	**1.3**	--	--
Sodium	mg/L	2.0	**22.6**	**17.2** e	**11.6**	**9.6**
General						
Hardness	mg/L	162	--	**89.0**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL070A (NCWIB) (Annual Only)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q2 2020 05/06/20[T]	Q2 2021 05/10/21[T]	Q2 2022 06/07/22[T]	Q2 2023 05/16/23[T]	Q2 2024 05/06/23[T]
Field							
D.O.[1]	ppm	--	**11.0**	**10.0**	**10.0**	**11.0**	**11.0**
ORP	mV	--	**248**	**257**	**60.0**	**111**	**108**
pH	SU	8.3-9.3	**8.0**	**8.4**	**8.2**	**8.4**	**8.0**
Specific Conductance	µS/cm @ 25°C	--	**393**	**403**	**547**	**383**	**365**
Temperature	°C	--	**10.0**	**8.0**	**13.0**	**10.0**	**9.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1372.70**	**1371.95**	**1369.06**	**1369.75**	**1372.70**
Metals							
Aluminum	ug/L	200	<50	<50.0	**52.0**	<50.0	**67.0**
Antimony	ug/L	5.5	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	**30.2**	**27.9**	**29.7**	<20.0	**22.7**
Beryllium	ug/L	2.5	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	400	<100	<100	<100	<100	<100
Cadmium	ug/L	2.0	<0.50	<0.50	<0.50	<0.50	<0.50
Chromium	ug/L	20.0	<5.0	<5.0	**20.4**	<5.0	<5.0
Cobalt	ug/L	40.0	<10	<10.0	<10.0	<10.0	<10.0
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	80.0	<50	**79.9**	**184**	<100	**21.7** J
Lead	ug/L	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	32.0	<8.0	<8.0	<8.0	<8.0	<8.0
Manganese	ug/L	80.0	<20	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	**0.52**	**1.8**	**1.2**	**0.65**
Molybdenum	ug/L	40.0	<10	<10.0	<10.0	<10.0	<10.0
Nickel	ug/L	100	<25	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver	ug/L	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Strontium	ug/L	200	**92.2**	**88.8**	**68.9**	<50.0	**72.2**
Thallium	ug/L	2.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10	<10.0	<10.0	<10.0	<10.0
Major Anions							
Alkalinity, Bicarbonate	mg/L	42.0	**80.7**	**87.7**	**105**	**110**	**96.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	**102** e	**93.1** e	**102** e	**70.2**	**63.8** a
Fluoride	mg/L	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.22	**1.3** e	**1.0** e	**1.1**	**0.85** e	**0.96** e
Sulfate	mg/L	8.0	**8.9**	**9.1**	**12.4**	**8.0**	**8.9** e
Major Cations							
Calcium	mg/L	11.0	**51.9**	**47.5**	**39.0**	**29.9**	**41.8** e
Magnesium	mg/L	3.0	**9.8**	**8.4**	**8.0**	**5.4**	**6.5**
Potassium	mg/L	2.0	**2.2**	**2.0**	**2.0**	**1.9**	**1.9**
Sodium	mg/L	2.0	**28.4**	**35.2**	**57.1**	**44.0**	**27.1** e
General							
Hardness	mg/L	40.0	**170**	**153**	**130**	**97.0**	**131**

Explanations of abbreviations are included on the final page of this table.

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL071A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/06/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**12.0**	**10.0**	**13.0**	**11.0**
ORP	mV	--	**250**	**301**	**249**	**211**
pH	SU	8.1-9.1	**8.0**	**8.0**	**8.3**	**8.2**
Specific Conductance	µS/cm @ 25°C	--	**352**	**346**	**439**	**308**
Temperature	°C	--	**8.4**	**8.1**	**8.8**	**8.4**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1405.49**	**1405.24**	**1405.68**	**1404.80**
Metals						
Aluminum	ug/L	200	--	<50.0	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	**22.5**	**--**	**--**
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	<5.0	--	--
Cobalt	ug/L	40.0	--	<10.0	--	--
Copper	ug/L	20.0	**5.7**	**7.4**	**7.1**	**8.4**
Iron	ug/L	178	**69.8** J	<100	<100	<100
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	<8.0	--	--
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	<10.0	--	--
Nickel	ug/L	100	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	<0.20	--	--
Strontium	ug/L	200	--	**63.4**	--	--
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	44.0	**82.0**	**93.0**	**92.0**	**91.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	4.0	**13.7**	**14.8** a	**12.9** e	**12.0**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.31	**19.0** e	**20.3** e	**16.1** e	**13.9**
Sulfate	mg/L	8.0	**7.6**	**8.3** e	**10.2**	**10.6**
Major Cations						
Calcium	mg/L	12.0	--	**54.5** e	--	--
Magnesium	mg/L	2.0	--	**7.5**	--	--
Potassium	mg/L	2.0	--	**1.7**	--	--
Sodium	mg/L	2.0	**11.2**	**11.7** e	**9.2**	**9.0**
General						
Hardness	mg/L	38.0	--	**167**	--	--

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL073A (NCWIB) (Annual Only)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q2 2020 05/06/20[T]	Q2 2021 05/10/21[T]	Q2 2022 06/07/22[T]	Q2 2023 05/16/23[T]	Q2 2024 05/07/23[T]
Field							
D.O.[1]	ppm	--	**11.0**	**11.0**	**10.0**	**11.0**	**10.0**
ORP	mV	--	**265**	**267**	**111**	**138**	**77**
pH	SU	6.1-7.1	**6.5**	**6.9**	**7.1**	**7.1**	**6.7**
Specific Conductance	µS/cm @ 25°C	--	**116**	**110**	**126**	**128**	**105**
Temperature	°C	--	**8.4**	**7.4**	**11.0**	**8.6**	**10.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1384.72**	**1384.83**	**1382.39**	**1382.39**	**1384.2**
Metals							
Aluminum	ug/L	200	**72.7**	**57.9**	**66.8**	**126**	**201**
Antimony	ug/L	5.5	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	<20	<20.0	<20.0	<20.0	<20.0
Beryllium	ug/L	2.5	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	400	<100	<100	<100	<100	<100
Cadmium	ug/L	2.0	<0.50	<0.50	<0.50	<0.50	<0.50
Chromium	ug/L	20.0	<5.0	<5.0	<5.0	<5.0	5.4
Cobalt	ug/L	40.0	<10	<10.0	<10.0	<10.0	<10.0
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	132	**78.7**	**100**	**103**	**153**	**196**
Lead	ug/L	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	32.0	<8.0	<8.0	<8.0	<8.0	<8.0
Manganese	ug/L	80.0	<20	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	**0.55**	<0.50	**1.3**	**1.5**
Molybdenum	ug/L	40.0	<10	<10.0	<10.0	<10.0	<10.0
Nickel	ug/L	100	<25	<25.0	<25.0	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver	ug/L	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Strontium	ug/L	200	**68.7**	**54.8**	**54.2**	**52.8**	<50.0
Thallium	ug/L	2.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/L	40.0	<10	<10.0	<10.0	<10.0	<10.0
Major Anions							
Alkalinity, Bicarbonate	mg/L	44.0	**52.5**	**42.4**	**49.7**	**61.0**	**43.0**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	20.0	**3.0** e	**8.7** e	**8.5** e	<1.0	5.2 a
Fluoride	mg/L	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.60	**0.84** e	**0.57** e	**0.50**	**0.78** e	**0.46** e
Sulfate	mg/L	8.0	**7.0**	**4.9**	**4.5**	<2.0	4.7 e
Major Cations							
Calcium	mg/L	9.2	**19.7**	**17.9**	**17**	**18.8**	**14.6** e
Magnesium	mg/L	2.5	**4.0**	**3.4**	**3.4**	**4.0**	**3.0**
Potassium	mg/L	2.0	**1.1**	**1.2**	**1.0**	**1.2**	**1.1**
Sodium	mg/L	2.0	**2.6**	**2.3**	**2.3**	**2.2**	**2.6** e
General							
Hardness	mg/L	33.0	**66.0**	**59.0**	**56.0**	**63.0**	**49.0**

Explanations of abbreviations are included on the final page of this table.

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL074A (Septic & WWTP)
Eagle Mine

Parameter	Unit	Permit Benchmark	Q1 2024 02/26/24[T]	Q2 2024 05/05/24[T]	Q3 2024 08/07/24[T]	Q4 2024 11/04/24[T]
Field						
D.O.[1]	ppm	--	**9.6**	<0.10	**10.0**	**10.0**
ORP	mV	--	**44.0**	**66.0**	**82.0**	**110**
pH	SU	8.4-9.4	**8.7**	**8.5**	**8.9**	**8.9**
Specific Conductance	µS/cm @ 25°C	--	**178**	**158**	**210**	**165**
Temperature	°C	--	**7.0**	**8.0**	**9.0**	**10.0**
Turbidity	NTU	--	<1.0	<1.0	<1.0	<1.0
Water Elevation	ft MSL	--	**1403.93**	**1403.94**	**1404.27**	**1403.23**
Metals						
Aluminum	ug/L	200	--	**958**	--	--
Antimony	ug/L	5.5	--	<5.0	--	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	80.0	--	<20.0	--	--
Beryllium	ug/L	2.5	--	<1.0	--	--
Boron	ug/L	400	<100	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--	--
Chromium	ug/L	20.0	--	**96.6**	--	--
Cobalt	ug/L	40.0	--	**52.5**	--	--
Copper	ug/L	20.0	<5.0	<5.0	<5.0	<5.0
Iron	ug/L	212	**225**	**365**	<100	**67.3** J
Lead	ug/L	4.0	--	<1.0	--	--
Lithium	ug/L	32.0	--	**8.3**	**--**	**--**
Manganese	ug/L	80.0	<20.0	<20.0	<20.0	<20.0
Mercury	ng/L	2.0	<0.50	<0.50	<0.50	<0.50
Molybdenum	ug/L	40.0	--	**12.7**	--	--
Nickel	ug/L	100	<25.0	**46.9**	<25.0	<25.0
Selenium	ug/L	4.0	<1.0 e	<1.0	<1.0	<1.0
Silver	ug/L	0.80	--	**0.25**	**--**	**--**
Strontium	ug/L	200	--	**77.1**	**--**	**--**
Thallium	ug/L	2.0	--	<1.0	--	--
Vanadium	ug/L	4.0	<1.0	<5.0	<1.0	<1.0
Zinc	ug/L	40.0	<10.0	<10.0	<10.0	<10.0
Major Anions						
Alkalinity, Bicarbonate	mg/L	39.0	**74.0**	**79.0**	**72.0**	**85.0**
Alkalinity, Carbonate	mg/L	8.0	**6.6**	**3.3**	<2.0	**5.5**
Chloride	mg/L	4.0	**11.2**	**6.7** a	**2.3** e	**5.5**
Fluoride	mg/L	0.40	--	<0.10	--	--
Nitrogen, Nitrate	mg/L	0.43	**0.64** e	**0.57** e	**0.58** e	**0.67**
Sulfate	mg/L	8.0	**4.3**	**4.1** e	**3.4**	**3.6**
Major Cations						
Calcium	mg/L	31.0	--	**21.5** e	--	--
Magnesium	mg/L	5.9	--	**4.4**	--	--
Potassium	mg/L	2.0	--	**1.3**	--	--
Sodium	mg/L	3.5	**11.6**	**10.6** e	**7.3**	**11.7**
General						
Hardness	mg/L	103	--	**72.0**	--	--

Table 4
Mine Permit Groundwater Quality Monitoring Data
Supplemental Volatile Organic Compounds Monitoring Results
QAL061A (TDRSA-CWB) (Annual Only)
Eagle Mine

Parameter	Unit	Q2 2020 05/07/20[T]	Q2 2021 05/10/21[T]	Q2 2022 06/08/22[T]	Q2 2023 05/15/23[T]	Q2 2024 05/06/24[T]
Volatile Organic Compounds						
1,1,1-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
2-Hexanone	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
Acetone	ug/L	<10	<10	<10	<10	<10 e
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Tetrachloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
Dibromochloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	ug/L	<1.0	<1.0 e	<1.0	<1.0	<1.0
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Acetate	ug/L	<5.0 e	<5.0	<5.0	<25.0	<25.0 e
Methyl tert-Butyl Ether	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methylcyclohexane	ug/L	<5.0 e	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 e
Vinyl Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	ug/L	<3.0	<3.0	<3.0	<3.0	<3.0 e

Table 4
Mine Permit Groundwater Quality Monitoring Data
Supplemental Volatile Organic Compounds Monitoring Results
QAL062A (TDRSA-CWB) (Annual Only)
Eagle Mine

Parameter	Unit	Q2 2020 05/07/20[T]	Q2 2021 05/11/21[T]	Q2 2022 06/08/22[T]	Q2 2023 05/15/23[T]	Q2 2024 05/06/24[T]
Volatile Organic Compounds						
1,1,1-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
2-Hexanone	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
Acetone	ug/L	<10	<10	<10	<10	<10 e
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Tetrachloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
Dibromochloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	ug/L	<1.0	<1.0 e	<1.0	<1.0	<1.0
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Acetate	ug/L	<5.0 e	<5.0	<5.0	<25.0	<25.0 e
Methyl tert-Butyl Ether	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methylcyclohexane	ug/L	<5.0 e	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 e
Vinyl Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	ug/L	<3.0	<3.0	<3.0	<3.0	<3.0 e

Table 4
Mine Permit Groundwater Quality Monitoring Data
Supplemental Volatile Organic Compounds Monitoring Results
QAL067A (TDRSA-CWB) (Annual Only)
Eagle Mine

Parameter	Unit	Q2 2020 05/07/20[T]	Q2 2021 05/11/21[T]	Q2 2022 06/08/22[T]	Q2 2023 05/15/23[T]	Q2 2024 05/06/24[T]
Volatile Organic Compounds						
1,1,1-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
2-Hexanone	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
Acetone	ug/L	<10	<10	<10	<10	<10 e
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Tetrachloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 e
Dibromochloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	ug/L	<1.0	<1.0 e	<1.0	<1.0	<1.0
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Acetate	ug/L	<5.0 e	<5.0	<5.0	<25.0	<25.0 e
Methyl tert-Butyl Ether	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Methylcyclohexane	ug/L	<5.0 e	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 e
Vinyl Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	ug/L	<3.0	<3.0	<3.0	<3.0	<3.0 e

Table 1
Groundwater Quality Data
Mine Permit Monitoring
Explanation of Abbreviations and Data Qualifiers
Eagle Project

Abbreviation or Data Qualifier	Explanation
[1]	Many D.O. values are elevated due to well screen configuration and aquifer characteristics and the low-flow sampling method. Super-saturated DO values are rejected (see R data qualifier) as not being representative of true conditions.
a	Estimated value. Duplicate precision for this parameter exceeded quality control limit.
b	Estimated value. Sample received after EPA established hold time expired.
BP	Below pump. Maximum water elevation is shown.
CWB	Contact Water Basin
D	Sample for metal and major cation parameters was filtered and values are dissolved concentrations.
e	Estimated value. The laboratory statement of data qualifications indicates that a quality control limit for this parameter was exceeded.
f	Value should be considered an estimate because field stabilization was not achieved of at least one parameter.
i	Insufficient water for collection of field parameters and/or sample.
J	Estimated value. Reported concentration is between the method detection limit and reporting limit. Used for iron since some benchmarks are below current 100 ug/L RL.
NM	Not measured.
p	Pending. Some parameters/locations require additional baseline data to calculate a benchmark.
Q	Quarter.
R	Measured value was rejected based on quality control procedures.
RL	Laboratory reporting limit.
s	Potential false positive value. Compound present in blank sample.
t	Trending. Benchmarks are not proposed for baseline datasets that appear to be trending (using samples collected through Q4 2012) because the data do not represent a random distribution about the baseline mean. Trend analysis is recommended in place of benchmark screening for parameters that appear to be trending.
T	Sample was not filtered and all values are total concentrations.
TDRSA	Temporary Development Rock Storage Area
UMB	Underground Mine Boundary
	Value is equal to or above site-specific benchmark at a compliance monitoring location. An exceedance occurs if there are 2 consecutive sampling events with a value equal to or greater than the benchmark. Color also indicates compliance monitoring location when applied to column headers.

Appendix H

Eagle Mine

Groundwater Monitoring Well Results
Trend Analysis Summary
& Trending Charts

Mine Permit Groundwater Trend Analysis
2024
Eagle Mine

Location	Classi-fication	Parameter	Unit	# Samples	# NDs	Non-detects handling	# used in Runs Test	Min	Max	Mean	St. Dev.	# Above Mean	# Below Mean	# Equal Mean	# Runs	Critical value	Sig level	Trend?	Remarks
QAL023B	Compliance	Calcium	mg/L	13	0	No NDs	13	12.0	16.6	14	1.57	7	6	0	4	4	0.05	Y	Non-unique RL in data
QAL023B	Compliance	Magnesium	mg/L	13	0	No NDs	13	2.8	4.0	3.4	0.33	7	6	0	4	4	0.05	Y*	Non-unique RL in data
QAL023B	Compliance	Sodium	mg/L	24	0	No NDs	24	2.7	9.0	5.0	1.40	12	12	0	4	8	0.05	Y	
QAL024A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	26.0	45.8	36	6.66	11	13	0	8	8	0.05	Y*	
QAL024A	Compliance	Sodium	mg/L	24	0	No NDs	24	11.8	53.7	27	12.20	10	14	0	7	8	0.05	Y*	
QAL025A	Background	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	16.9	51.0	35	6.86	12	12	0	8	8	0.05	Y	
QAL025B	Background	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	26.7	37.9	31	2.92	10	14	0	8	8	0.05	Y	
QAL025B	Background	Sodium	mg/L	24	0	No NDs	24	1.0	1.6	1.3	0.15	12	12	0	6	8	0.05	Y	
QAL025D	Background	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	39.5	50.4	44	3.16	10	14	0	8	8	0.05	Y	
QAL025D	Background	Calcium	mg/L	14	0	No NDs	14	10.0	14.6	12	1.42	6	8	0	2	4	0.05	Y	Non-unique RL in data
QAL025D	Background	Chloride	mg/L	24	5	Included as RL	24	1.0	4.7	2.8	1.40	12	12	0	2	8	0.05	Y	
QAL025D	Background	Magnesium	mg/L	14	0	No NDs	14	2.4	3.3	2.8	0.27	7	7	0	4	4	0.05	Y	Non-unique RL in data
QAL025D	Background	pH	SU	23	0	No NDs	23	7.7	9.2	8.7	0.31	14	9	0	7	7	0.05	Y	
QAL025D	Background	Sodium	mg/L	24	0	No NDs	24	2.3	3.8	2.9	0.38	11	13	0	2	8	0.05	Y	
QAL026D	Background	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	2.0	41.0	32	7.19	13	11	0	6	8	0.05	Y	
QAL026D	Background	Calcium	mg/L	13	0	No NDs	13	8.2	13.2	11	1.31	6	7	0	4	4	0.05	Y	Non-unique RL in data
QAL026D	Background	Chloride	mg/L	24	14	Included as RL	24	1.0	2.5	1.3	0.44	8	16	0	2	7	0.05	Y	
QAL026D	Background	pH	SU	25	0	No NDs	25	7.9	9.8	8.9	0.39	13	12	0	7	9	0.05	Y	
QAL026E	Background	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	52.4	64.0	56	3.06	9	15	0	8	8	0.05	Y	
QAL026E	Background	Potassium	mg/L	13	0	No NDs	13	1.6	2.0	1.8	0.11	8	5	0	2	3	0.05	Y	
QAL026E	Background	Sulfate	mg/L	24	0	No NDs	24	6.7	8.2	7.8	0.30	11	13	0	7	8	0.05	Y	
QAL044B	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	18.3	57.0	40	11.80	11	13	0	6	8	0.05	Y	
QAL044B	Compliance	Alkalinity, Carbonate	mg/L	24	11	Included as RL	24	2.0	10.4	3.7	2.47	9	15	0	7	8	0.05	Y	
QAL044B	Compliance	Magnesium	mg/L	13	2	Included as RL	13	0.79	3.5	1.9	0.82	6	7	0	3	4	0.05	Y	Non-unique RL in data (NDs included as RL)
QAL044B	Compliance	Potassium	mg/L	13	3	Included as RL	13	0.50	1.8	1.0	0.46	8	5	0	2	3	0.05	Y	
QAL044B	Compliance	Sodium	mg/L	24	0	No NDs	24	2.1	3.7	2.6	0.45	13	11	0	2	8	0.05	Y	
QAL060A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	42.1	74.0	54	9.27	8	16	0	4	7	0.05	Y*	
QAL060A	Compliance	Arsenic	ug/L	24	1	Included as RL	24	2.0	4.2	3.0	0.59	13	11	0	4	8	0.05	Y	
QAL060A	Compliance	Calcium	mg/L	15	0	No NDs	15	10.0	20.2	14	2.81	9	6	0	3	4	0.05	Y	Non-unique RL in data
QAL060A	Compliance	Chloride	mg/L	24	15	Included as RL	24	1.0	1.5	1.1	0.16	8	16	0	4	7	0.05	Y	
QAL060A	Compliance	Magnesium	mg/L	15	0	No NDs	15	2.4	4.2	3.1	0.53	9	6	0	3	4	0.05	Y	Non-unique RL in data
QAL060A	Compliance	pH	SU	24	0	No NDs	24	8.0	9.0	8.6	0.27	12	12	0	7	8	0.05	Y	
QAL060A	Compliance	Potassium	mg/L	15	0	No NDs	15	0.69	1.1	0.90	0.13	5	10	0	4	4	0.05	Y	
QAL060A	Compliance	Sulfate	mg/L	24	11	Included as RL	24	2.0	3.9	2.3	0.50	6	18	0	3	6	0.05	Y	
QAL061A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	47.4	120	76	21.14	12	12	0	2	8	0.05	Y*	
QAL061A	Compliance	Calcium	mg/L	15	0	No NDs	15	11.0	34.0	17	7.81	6	9	0	4	4	0.05	Y*	Non-unique RL in data
QAL061A	Compliance	Magnesium	mg/L	15	0	No NDs	15	1.9	6.3	3.1	1.40	6	9	0	4	4	0.05	Y*	Non-unique RL in data
QAL061A	Compliance	pH	SU	24	0	No NDs	24	8.0	8.8	8.5	0.23	15	9	0	4	8	0.05	Y	
QAL061A	Compliance	Potassium	mg/L	15	1	Included as RL	15	0.50	1.1	0.70	0.17	7	8	0	4	4	0.05	Y	
QAL062A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	159	290	223	43.20	12	12	0	2	8	0.05	Y*	
QAL062A	Compliance	Barium	ug/L	15	6	Included as RL	15	20.0	51.3	30	12.40	6	9	0	2	4	0.05	Y	
QAL062A	Compliance	Calcium	mg/L	15	0	No NDs	15	11.0	85.3	46	28.60	8	7	0	2	4	0.05	Y*	Non-unique RL in data
QAL062A	Compliance	Chloride	mg/L	24	0	No NDs	24	24.1	78.8	56	15.90	15	9	0	2	8	0.05	Y*	Non-unique RL in data
QAL062A	Compliance	Magnesium	mg/L	15	0	No NDs	15	2.0	17.8	9.5	6.14	8	7	0	2	4	0.05	Y*	Non-unique RL in data
QAL062A	Compliance	pH	SU	24	0	No NDs	24	7.1	7.8	7.5	0.17	14	10	0	8	8	0.05	Y*	
QAL062A	Compliance	Potassium	mg/L	15	0	No NDs	15	0.70	2.9	1.8	0.87	8	7	0	2	4	0.05	Y*	
QAL062A	Compliance	Sodium	mg/L	24	0	No NDs	24	17.9	36.6	28	4.49	15	9	0	3	8	0.05	Y*	
QAL062A	Compliance	Strontium	ug/L	15	6	Included as RL	15	50.0	123	77	29.10	7	8	0	2	4	0.05	Y	
QAL062A	Compliance	Sulfate	mg/L	24	0	No NDs	24	2.8	5.2	3.9	0.88	13	11	0	2	8	0.05	Y	Non-unique RL in data
QAL063A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	174	290	238	41.30	12	12	0	2	8	0.05	Y*	
QAL063A	Compliance	Barium	ug/L	15	8	Included as RL	15	20.0	56.8	33	15.60	6	9	0	2	4	0.05	Y	
QAL063A	Compliance	Calcium	mg/L	15	0	No NDs	15	11.0	86.0	48	32.90	8	7	0	2	4	0.05	Y*	Non-unique RL in data
QAL063A	Compliance	Chloride	mg/L	24	0	No NDs	24	61.5	117	91	18.42	12	12	0	3	8	0.05	Y*	Non-unique RL in data
QAL063A	Compliance	Magnesium	mg/L	15	0	No NDs	15	1.9	18.2	9.3	6.84	8	7	0	2	4	0.05	Y*	Non-unique RL in data
QAL063A	Compliance	pH	SU	24	0	No NDs	24	6.7	7.6	7.4	0.24	14	10	0	6	8	0.05	Y*	
QAL063A	Compliance	Potassium	mg/L	15	0	No NDs	15	0.62	3.4	1.8	1.11	7	8	0	2	4	0.05	Y*	

Mine Permit Groundwater Trend Analysis
2024
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Location	Classi-fication	Parameter	Unit	# Samples	# NDs	Non-detects handling	# used in Runs Test	Min	Max	Mean	St. Dev.	# Above Mean	# Below Mean	# Equal Mean	# Runs	Critical value	Sig level	Trend?	Remarks
QAL063A	Compliance	Sodium	mg/L	24	0	No NDs	24	19.5	53.9	41	9.03	15	9	0	3	8	0.05	Y*	
QAL063A	Compliance	Strontium	ug/L	15	7	Included as RL	15	50.0	127	80	32.26	7	8	0	2	4	0.05	Y	
QAL063A	Compliance	Sulfate	mg/L	24	0	No NDs	24	2.5	7.6	4.9	1.80	11	13	0	2	8	0.05	Y	Non-unique RL in data
QAL064D	Compliance	Alkalinity, Carbonate	mg/L	24	22	Included as RL	24	2.0	2.5	2.0	0.10	2	22	0	2	2	0.05	Y	
QAL064D	Compliance	Chloride	mg/L	24	0	No NDs	24	1.5	2.8	2.3	0.36	14	10	0	5	8	0.05	Y	
QAL065D	Compliance	Alkalinity, Bicarbonate	mg/L	24	1	Included as RL	24	2.0	82.7	74	15.80	18	6	0	5	6	0.05	Y	
QAL065D	Compliance	Arsenic	ug/L	24	1	Included as RL	24	2.0	4.7	4.1	0.56	15	9	0	8	8	0.05	Y	
QAL065D	Compliance	Calcium	mg/L	14	0	No NDs	14	12.0	15.6	13	1.14	6	8	0	2	4	0.05	Y*	Non-unique RL in data
QAL065D	Compliance	Magnesium	mg/L	14	0	No NDs	14	4.1	4.9	4.5	0.23	8	6	0	4	4	0.05	Y	Non-unique RL in data
QAL065D	Compliance	Sodium	mg/L	24	0	No NDs	24	4.6	10.9	9.2	1.20	14	10	0	4	8	0.05	Y	
QAL066D	Compliance	Arsenic	ug/L	24	0	No NDs	24	6.0	11.2	9.1	1.18	12	12	0	8	8	0.05	Y	
QAL066D	Compliance	Calcium	mg/L	14	0	No NDs	14	10.0	54.0	18	11.00	4	10	0	3	3	0.05	Y	Non-unique RL in data
QAL066D	Compliance	Manganese	ug/L	24	20	Included as RL	24	20.0	33.4	21	3.65	3	21	0	3	3	0.05	Y	
QAL066D	Compliance	pH	SU	24	0	No NDs	24	8.2	9.1	8.7	0.29	11	12	1	6	8	0.05	Y*	
QAL066D	Compliance	Sodium	mg/L	24	0	No NDs	24	5.8	23.5	17	5.59	14	10	0	4	8	0.05	Y*	
QAL066D	Compliance	Strontium	ug/L	14	3	Included as RL	14	50.0	340	80	75.61	2	12	0	2	2	0.05	Y	Non-unique RL in data (NDs included as RL)
QAL066D	Compliance	Sulfate	mg/L	24	0	No NDs	24	6.2	8.6	7.7	0.64	15	9	0	6	8	0.05	Y	
QAL067A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	56.0	110	79	15.64	12	12	0	3	8	0.05	Y*	
QAL067A	Compliance	Calcium	mg/L	16	0	No NDs	16	4.1	110	24	26.67	6	10	0	5	5	0.05	Y*	Non-unique RL in data
QAL067A	Compliance	Chloride	mg/L	24	0	No NDs	24	23.5	158	74	41.06	9	15	0	3	8	0.05	Y*	Non-unique RL in data
QAL067A	Compliance	Mercury	ng/L	24	2	Included as RL	24	0.50	2.22	1.1	0.46	7	17	0	6	7	0.05	Y	
QAL067A	Compliance	pH	SU	24	0	No NDs	24	6.1	6.7	6.4	0.21	13	11	0	8	8	0.05	Y	
QAL067A	Compliance	Sodium	mg/L	24	0	No NDs	24	20.2	78.5	48	17.10	11	13	0	5	8	0.05	Y*	
QAL067A	Compliance	Sulfate	mg/L	24	0	No NDs	24	2.7	22.3	12	4.85	9	15	0	5	8	0.05	Y*	Non-unique RL in data
QAL068A	Background	Calcium	mg/L	14	0	No NDs	14	4.0	6.5	5.3	0.72	8	6	0	4	4	0.05	Y	Non-unique RL in data
QAL068B	Background	Sulfate	mg/L	24	8	Included as RL	24	2.0	2.4	2.1	0.13	8	16	0	6	7	0.05	Y	
QAL068D	Background	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	48.7	66.0	57	3.52	10	14	0	8	8	0.05	Y	
QAL068D	Background	Arsenic	ug/L	24	0	No NDs	24	5.7	7.8	6.8	0.64	10	13	1	4	8	0.05	Y	
QAL068D	Background	Calcium	mg/L	14	0	No NDs	14	13.0	15.1	14	0.70	6	8	0	4	4	0.05	Y	Non-unique RL in data
QAL068D	Background	Magnesium	mg/L	14	0	No NDs	14	3.3	4.1	3.7	0.21	9	5	0	4	4	0.05	Y	Non-unique RL in data
QAL068D	Background	pH	SU	24	0	No NDs	24	8.0	8.9	8.5	0.27	13	11	0	6	8	0.05	Y	
QAL068D	Background	Potassium	mg/L	14	0	No NDs	14	1.2	1.7	1.4	0.14	7	7	0	3	4	0.05	Y	
QAL068D	Background	Sodium	mg/L	24	0	No NDs	24	3.1	4.7	3.9	0.40	11	13	0	8	8	0.05	Y	
QAL068D	Background	Sulfate	mg/L	24	0	No NDs	24	4.1	5.5	4.9	0.33	14	10	0	6	8	0.05	Y	
QAL069A	Background	Chloride	mg/L	24	1	Included as RL	24	1.0	122	29	25.89	11	13	0	6	8	0.05	Y	Non-unique RL in data (NDs included as RL)
QAL069A	Background	Chromium	ug/L	14	11	Included as RL	14	5.0	12.0	5.7	1.88	3	11	0	3	3	0.05	Y	
QAL069A	Background	Magnesium	mg/L	14	0	No NDs	14	5.4	24.0	14	5.97	6	8	0	3	4	0.05	Y	Non-unique RL in data
QAL069A	Background	Mercury	ng/L	24	9	Included as RL	24	0.50	4.84	1.2	1.33	7	17	0	2	7	0.05	Y	
QAL069A	Background	Sodium	mg/L	24	0	No NDs	24	2.3	49.0	18	10.90	12	12	0	6	8	0.05	Y	
QAL070A	Compliance	Alkalinity, Bicarbonate	mg/L	6	0	No NDs	6	75.1	110	92	13.71	3	3	0	2	2	0.1	Y*	
QAL070A	Compliance	Barium	ug/L	14	6	Included as RL	14	20.0	30.2	24	4.09	6	8	0	3	4	0.05	Y	
QAL070A	Compliance	Calcium	mg/L	14	0	No NDs	14	8.5	51.9	33	15.90	8	6	0	4	4	0.05	Y*	Non-unique RL in data
QAL070A	Compliance	Chloride	mg/L	6	0	No NDs	6	63.8	107	90	18.25	4	2	0	2	2	0.25	Y*	
QAL070A	Compliance	Magnesium	mg/L	14	0	No NDs	14	2.1	9.9	6.3	2.79	9	5	0	4	4	0.05	Y*	Non-unique RL in data
QAL070A	Compliance	Potassium	mg/L	14	0	No NDs	14	0.54	2.2	1.5	0.63	9	5	0	2	4	0.05	Y	
QAL070A	Compliance	Strontium	ug/L	14	5	Included as RL	14	50.0	92.2	66	14.90	8	6	0	4	4	0.05	Y	
QAL071A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	78.0	157	118	23.10	15	9	0	4	8	0.05	Y*	
QAL071A	Compliance	Barium	ug/L	15	5	Included as RL	15	20.0	39.0	26	7.38	5	10	0	3	4	0.05	Y	
QAL071A	Compliance	Calcium	mg/L	16	0	No NDs	16	11.0	94.9	53	27.50	10	6	0	4	5	0.05	Y*	Non-unique RL in data
QAL071A	Compliance	Chloride	mg/L	24	0	No NDs	24	5.9	24.0	14	4.61	10	14	0	8	8	0.05	Y*	Non-unique RL in data
QAL071A	Compliance	Copper	ug/L	24	0	No NDs	24	5.2	28.6	11	5.62	10	14	0	5	8	0.05	Y	
QAL071A	Compliance	Magnesium	mg/L	16	0	No NDs	16	1.4	15.0	7.6	4.26	8	8	0	3	5	0.05	Y*	Non-unique RL in data
QAL071A	Compliance	pH	SU	24	0	No NDs	24	7.6	8.3	7.9	0.18	14	10	0	6	8	0.05	Y*	
QAL071A	Compliance	Potassium	mg/L	16	0	No NDs	16	0.70	1.8	1.3	0.43	9	7	0	4	5	0.05	Y	
QAL071A	Compliance	Strontium	ug/L	14	4	Included as RL	14	50.0	105	70	20.00	6	8	0	3	4	0.05	Y	
QAL071A	Compliance	Sulfate	mg/L	24	0	No NDs	24	5.8	12.6	8.5	1.92	11	13	0	7	8	0.05	Y*	Non-unique RL in data

Mine Permit Groundwater Trend Analysis
2024
Eagle Mine

Location	Classi-fication	Parameter	Unit	# Samples	# NDs	Non-detects handling	# used in Runs Test	Min	Max	Mean	St. Dev.	# Above Mean	# Below Mean	# Equal Mean	# Runs	Critical value	Sig level	Trend?	Remarks
QAL073A	Compliance	Calcium	mg/L	14	0	No NDs	14	5.6	34.0	22	8.94	7	7	0	3	4	0.05	Y*	Non-unique RL in data
QAL073A	Compliance	Iron	ug/L	6	0	No NDs	6	78.7	196	121	44.42	2	4	0	2	2	0.25	Y*	Non-unique RL in data
QAL073A	Compliance	Magnesium	mg/L	14	0	No NDs	14	1.1	7.5	4.7	2.00	7	7	0	3	4	0.05	Y*	Non-unique RL in data
QAL073A	Compliance	Mercury	ng/L	6	2	Included as RL	6	0.50	1.48	0.86	0.44	2	4	0	2	2	0.25	Y	
QAL073A	Compliance	Sulfate	mg/L	6	1	Included as RL	6	2.0	7.5	5.1	2.00	2	4	0	2	2	0.25	Y	
QAL074A	Compliance	Alkalinity, Bicarbonate	mg/L	24	0	No NDs	24	72.0	110	92	10.86	12	12	0	5	8	0.05	Y*	
QAL074A	Compliance	Calcium	mg/L	13	0	No NDs	13	9.1	43.3	28	10.60	7	6	0	3	4	0.05	Y	Non-unique RL in data
QAL074A	Compliance	Chloride	mg/L	24	0	No NDs	24	2.3	66.4	37	19.90	15	9	0	3	8	0.05	Y*	Non-unique RL in data
QAL074A	Compliance	Magnesium	mg/L	13	0	No NDs	13	1.7	8.3	5.5	2.10	7	6	0	3	4	0.05	Y	Non-unique RL in data
QAL074A	Compliance	pH	SU	24	0	No NDs	24	7.7	8.9	8.3	0.26	9	15	0	2	8	0.05	Y	
QAL074A	Compliance	Potassium	mg/L	13	0	No NDs	13	0.59	1.7	1.2	0.36	8	5	0	2	3	0.05	Y	
QAL074A	Compliance	Sodium	mg/L	24	0	No NDs	24	7.3	27.8	20	6.55	15	9	0	2	8	0.05	Y*	
QAL074A	Compliance	Sulfate	mg/L	24	0	No NDs	24	3.4	8.5	6.3	1.60	14	10	0	3	8	0.05	Y	Non-unique RL in data

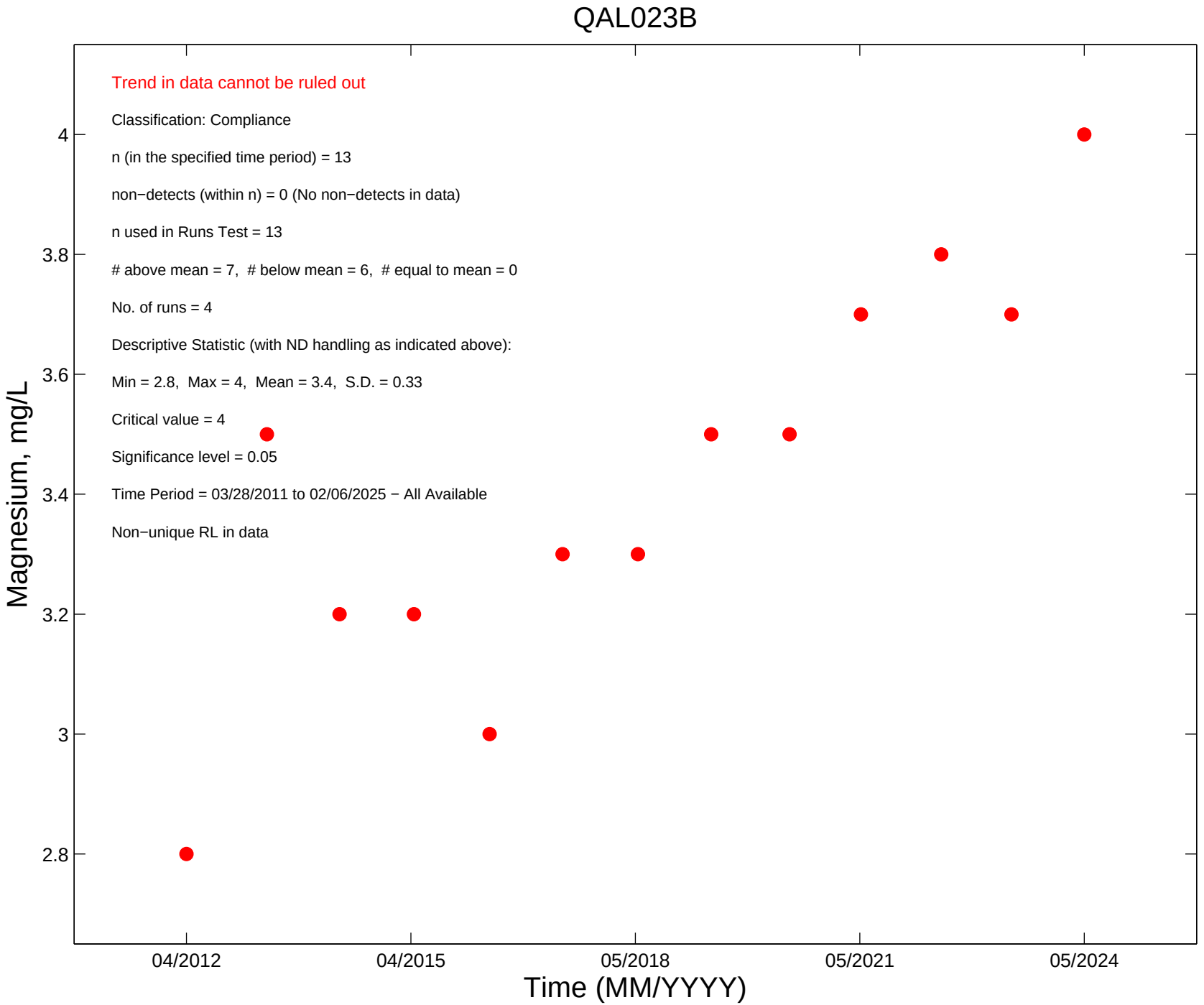
Mine Permit Groundwater Trend Analysis
Notes and Abbreviations Used in Statistical Summary Tables
Eagle Mine

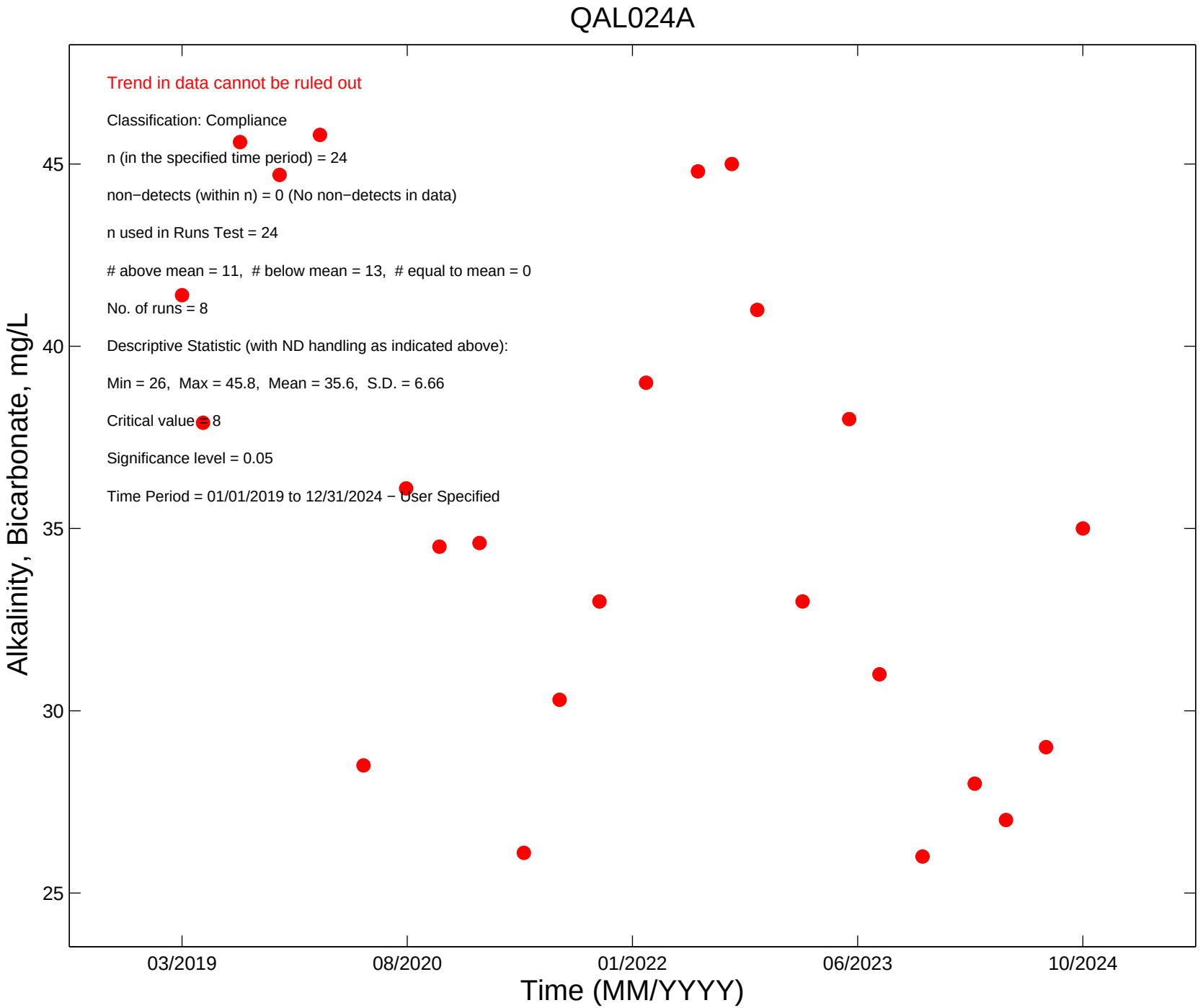
Abbreviation	Explanation
Y	Null Hypothesis that the sequence was produced in a random manner cannot be accepted at the indicated significance level (i.e. a trend in data cannot be ruled out)
Y*	In addition to a trend being identified, the parameter exceeded the limit at least two times in a row at a compliance monitoring location.
RL	Reporting limit

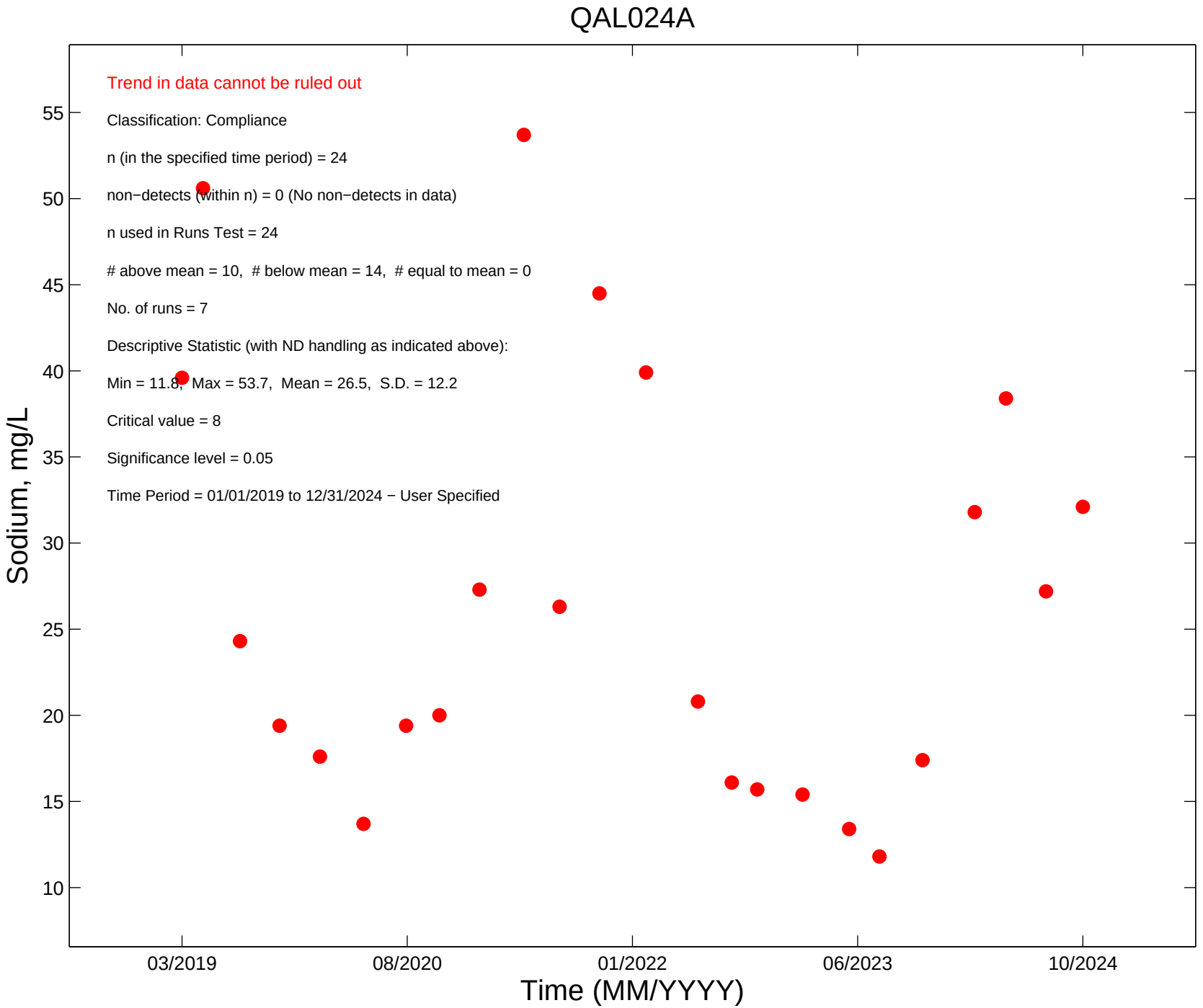
Notes:

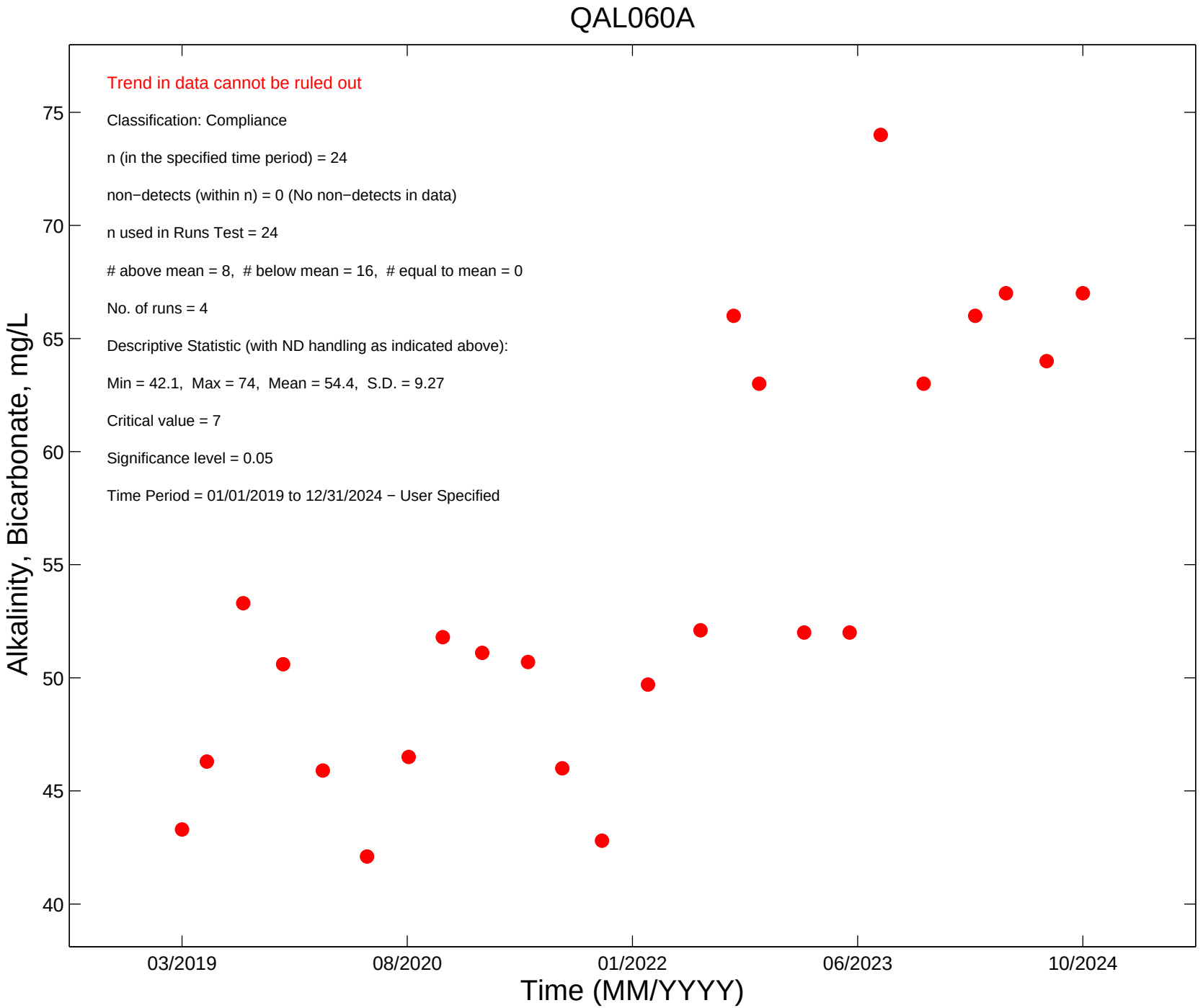
Trend analysis period is baseline (March 2011) through Q4 2024 for parameters sampled annually and Q1 2019 through Q4 2024 for parameters sampled quarterly.

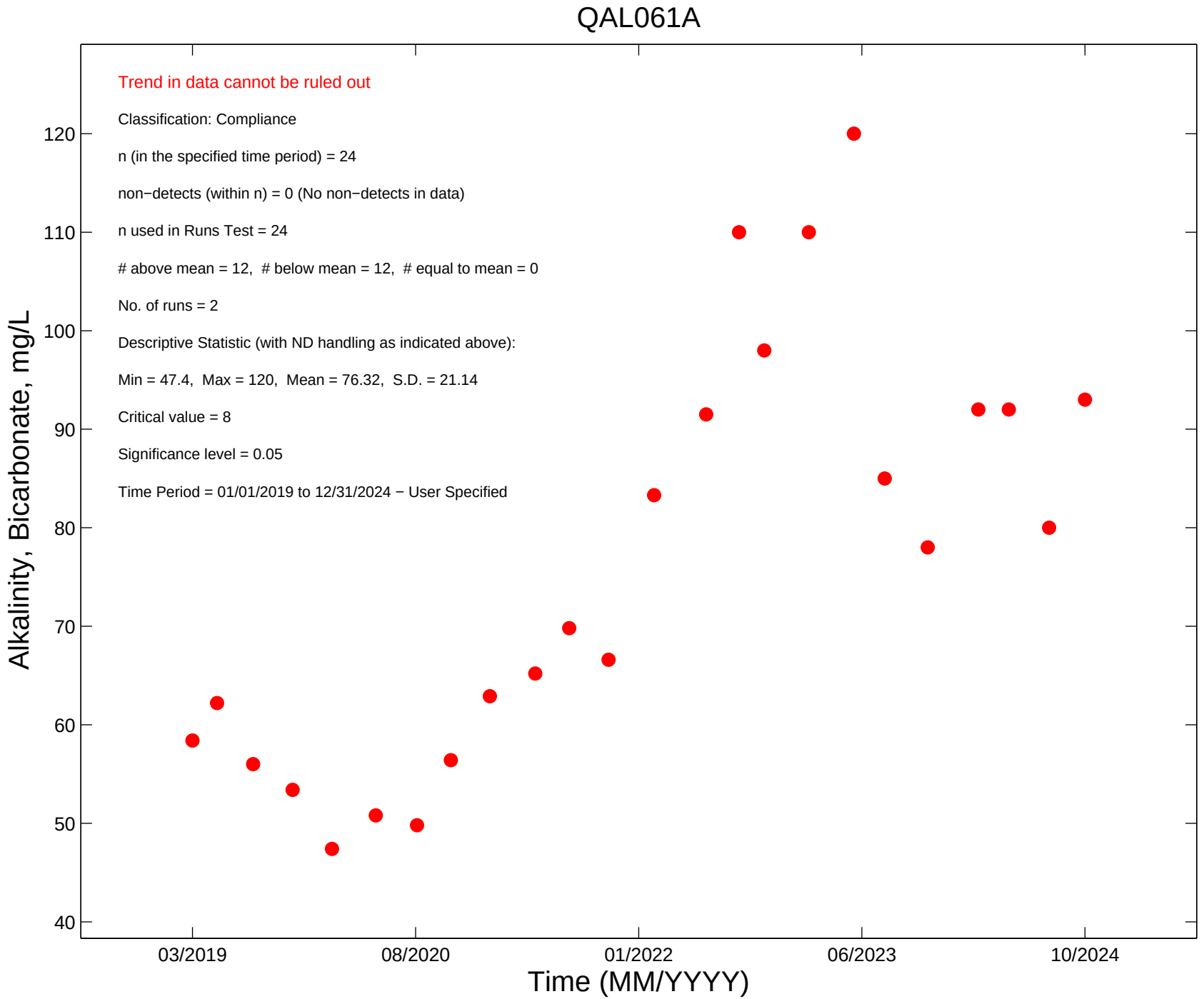
Charts are included for compliance locations with trends that also had two exceedances in a row in 2024.

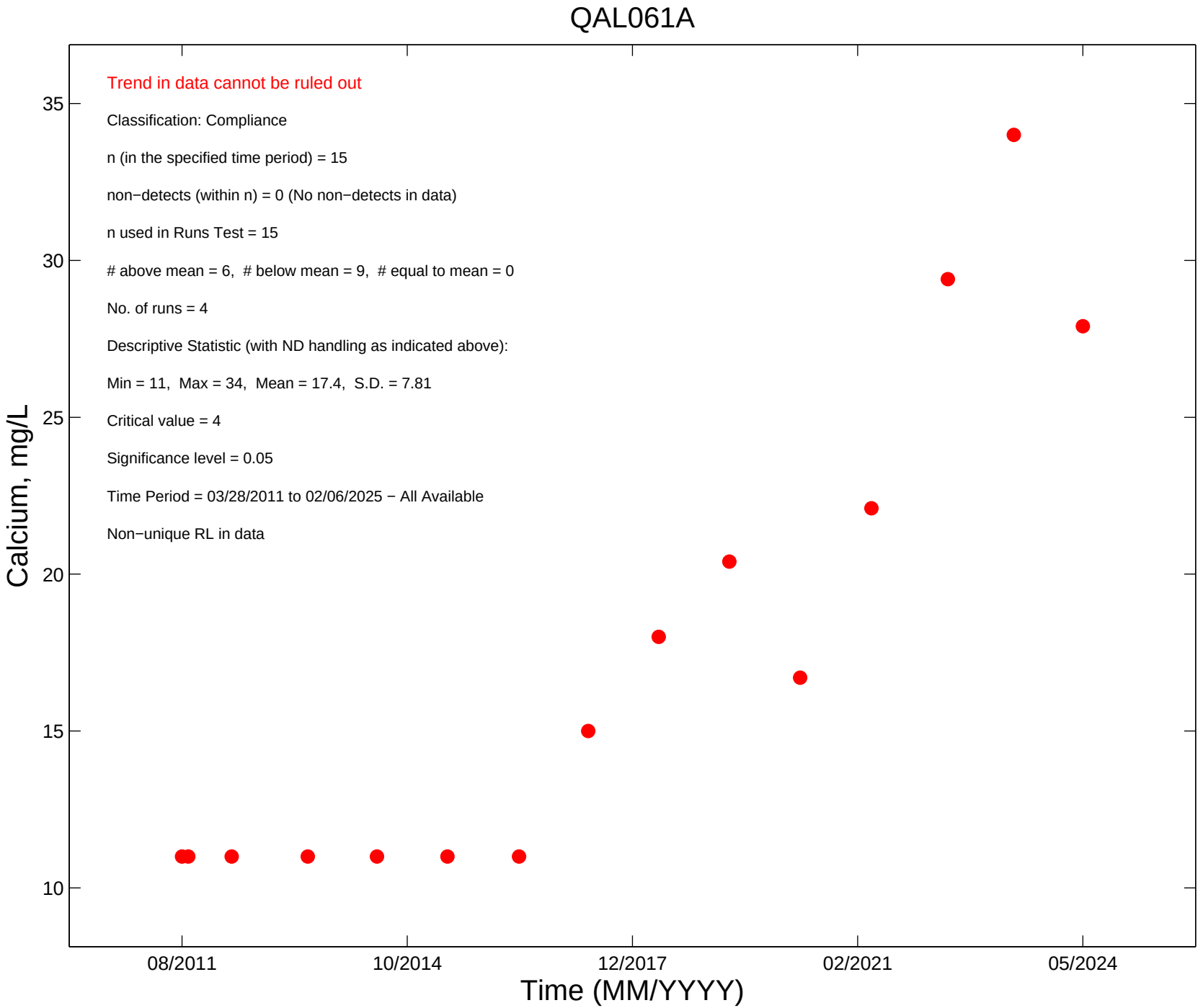

QAL023B
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 7, # below mean = 6, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 2.8, Max = 4, Mean = 3.4, S.D. = 0.33
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Magnesium, mg/L
4
3.8
3.6
3.4
3.2
3
2.8
04/2012
04/2015
05/2018
05/2021
05/2024
Time (MM/YYYY)

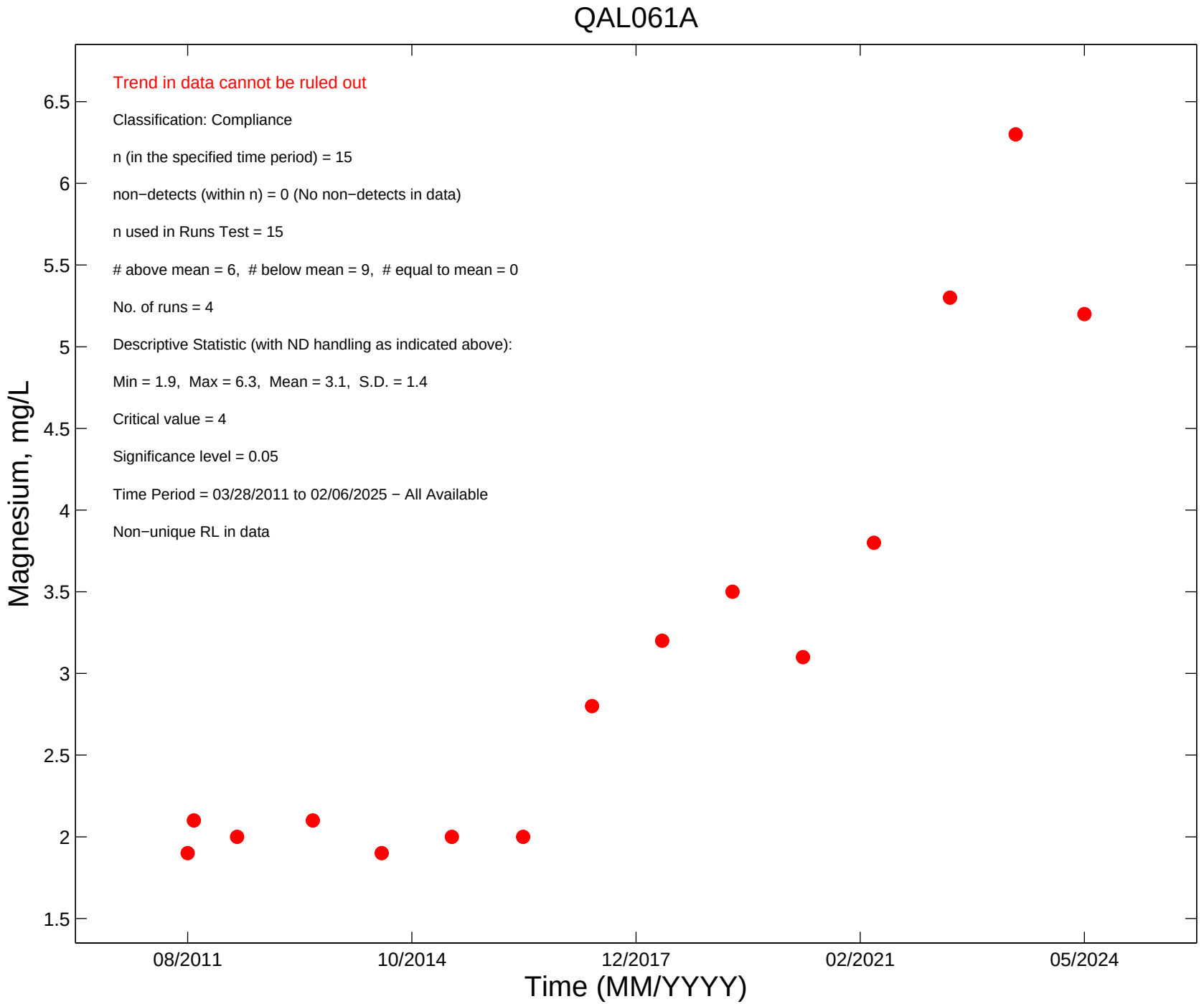

QAL024A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 11, # below mean = 13, # equal to mean = 0
No. of runs = 8
Descriptive Statistic (with ND handling as indicated above):
Min = 26, Max = 45.8, Mean = 35.6, S.D. = 6.66
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
45
40
35
30
25
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

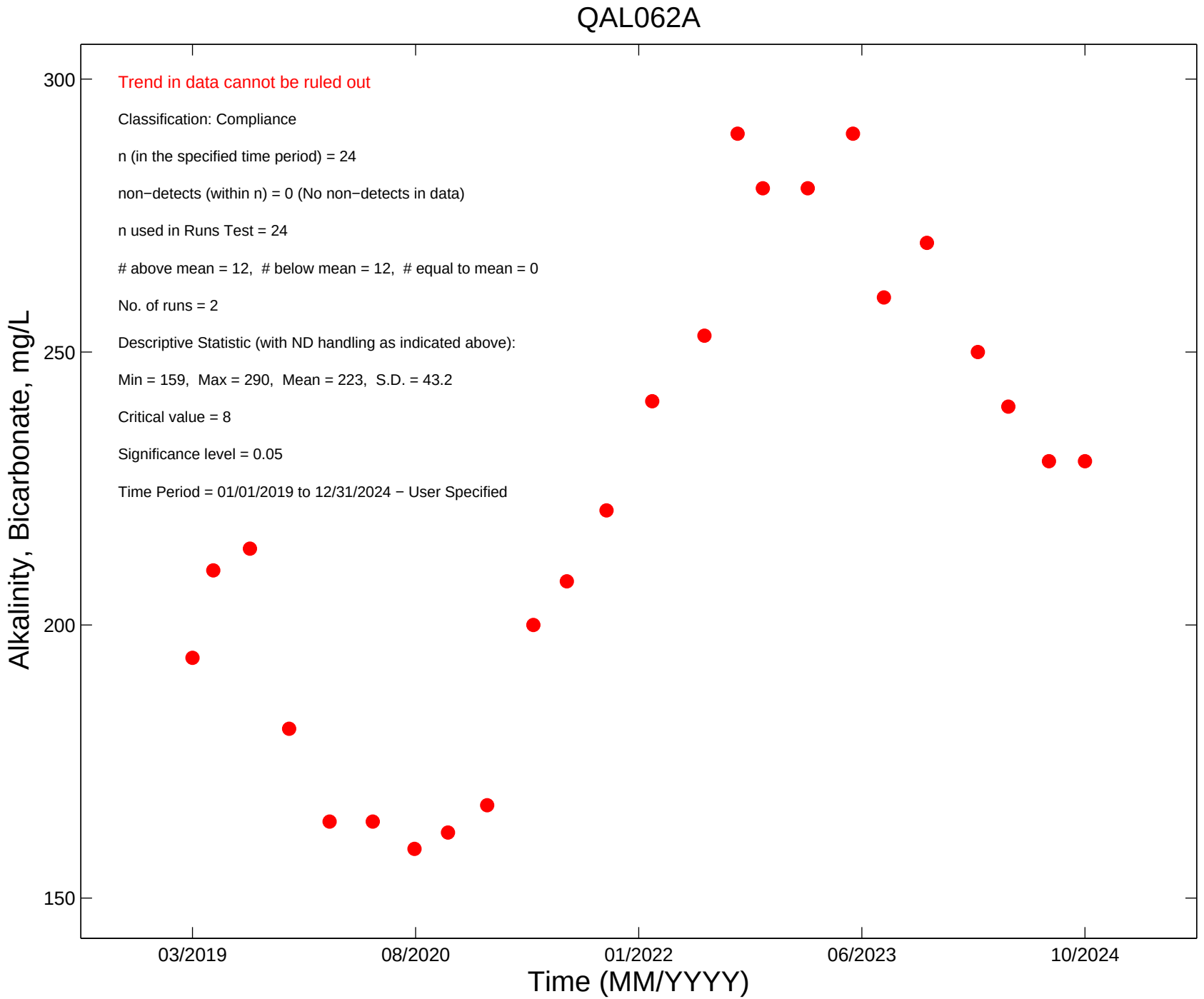

QAL024A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 10, # below mean = 14, # equal to mean = 0
No. of runs = 7
Descriptive Statistic (with ND handling as indicated above):
Min = 11.8, Max = 53.7, Mean = 26.5, S.D. = 12.2
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Sodium, mg/L
55
50
45
40
35
30
25
20
15
10
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

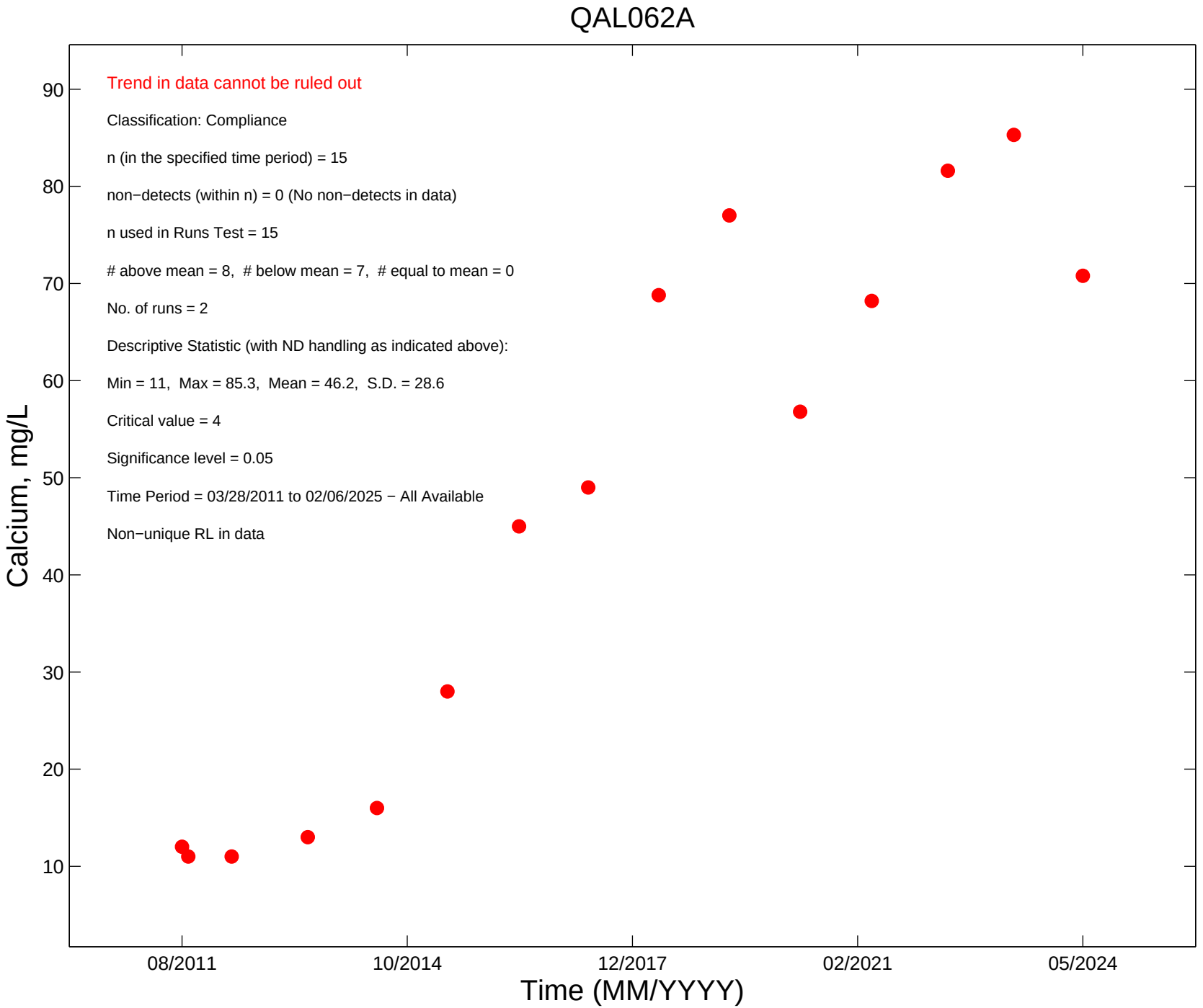

QAL060A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 8, # below mean = 16, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 42.1, Max = 74, Mean = 54.4, S.D. = 9.27
Critical value = 7
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
75
70
65
60
55
50
45
40
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

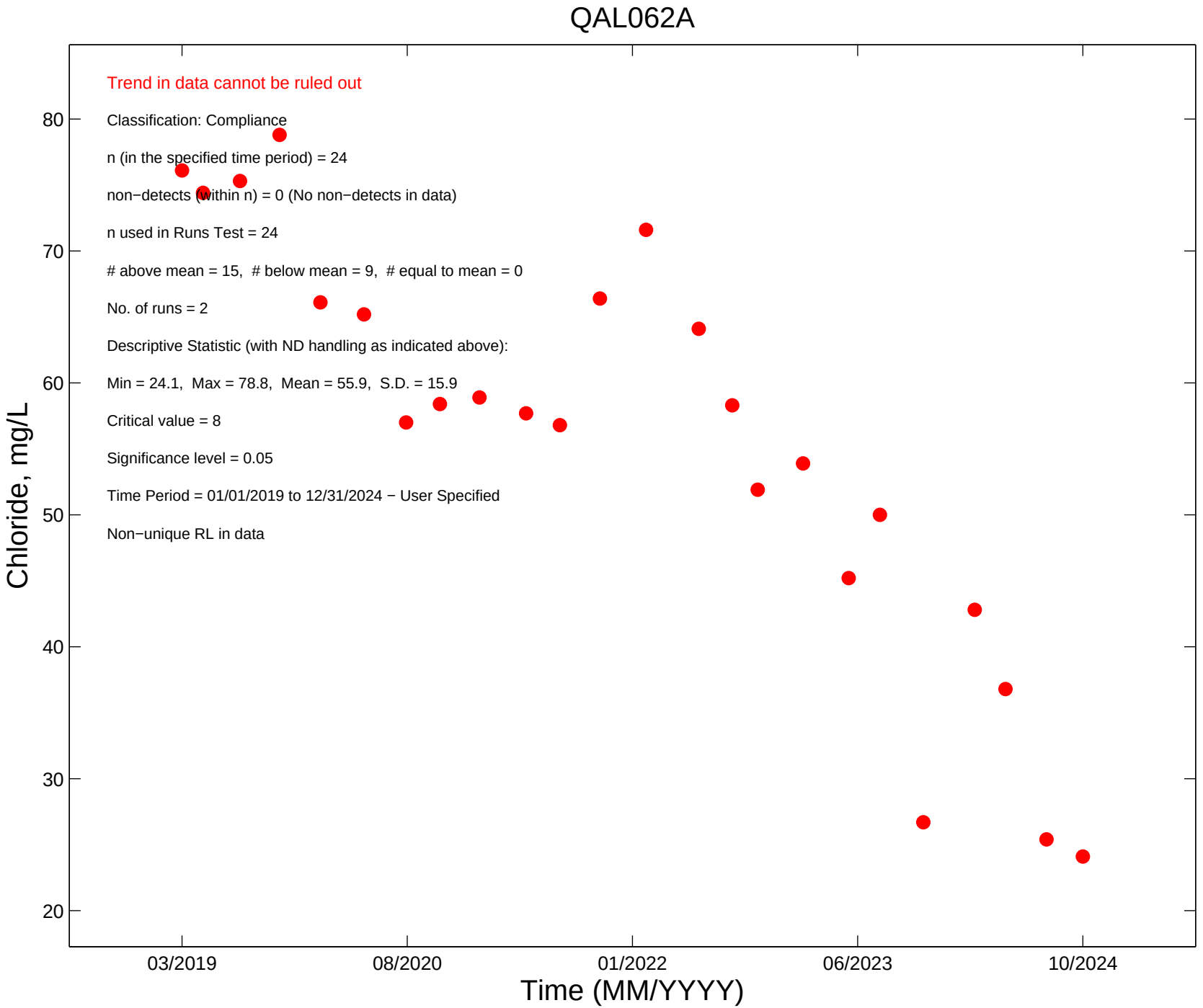

QAL061A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 12, # below mean = 12, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 47.4, Max = 120, Mean = 76.32, S.D. = 21.14
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
120
110
100
90
80
70
60
50
40
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

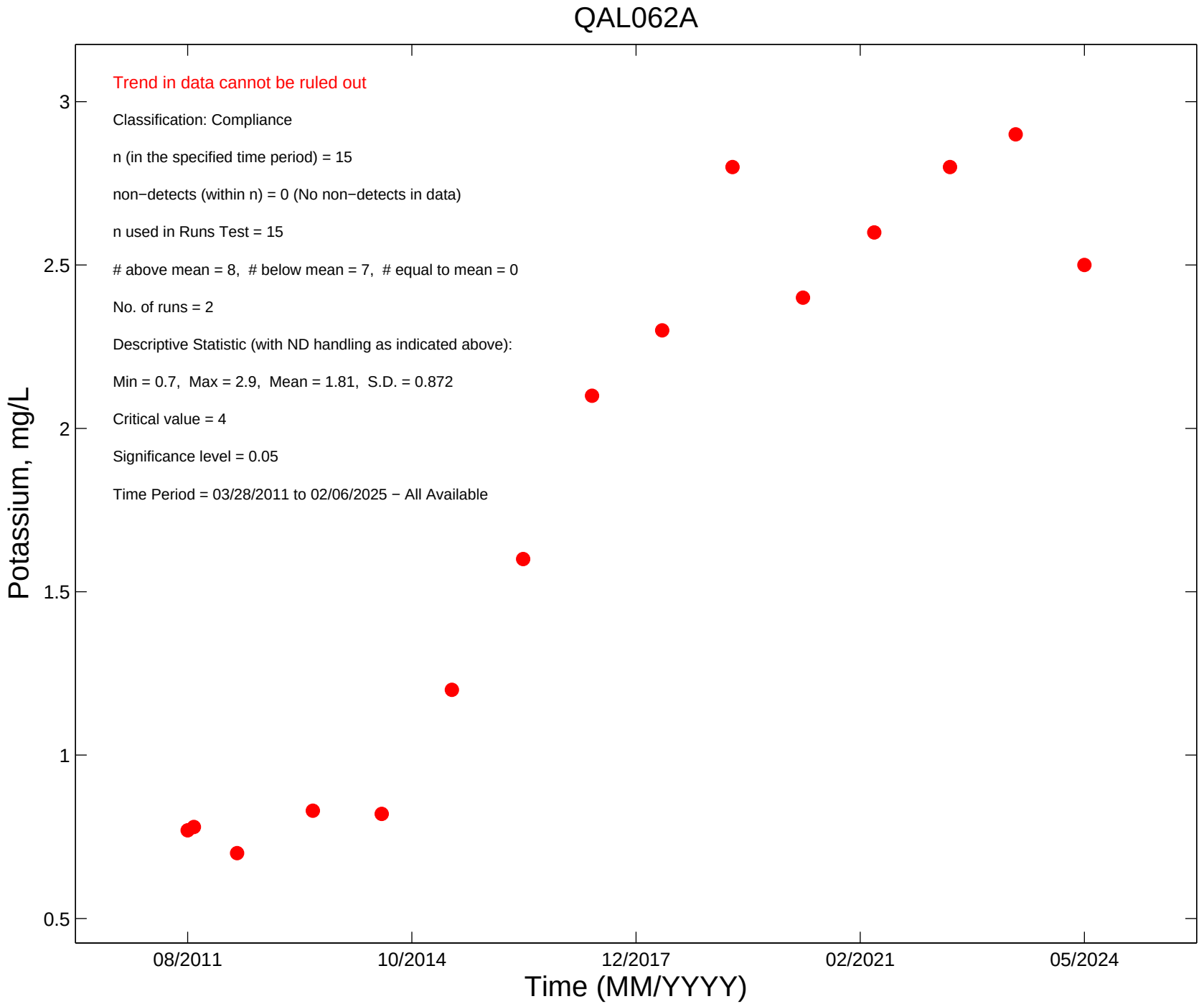

QAL061A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 6, # below mean = 9, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 11, Max = 34, Mean = 17.4, S.D. = 7.81
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
35
30
25
20
15
10
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

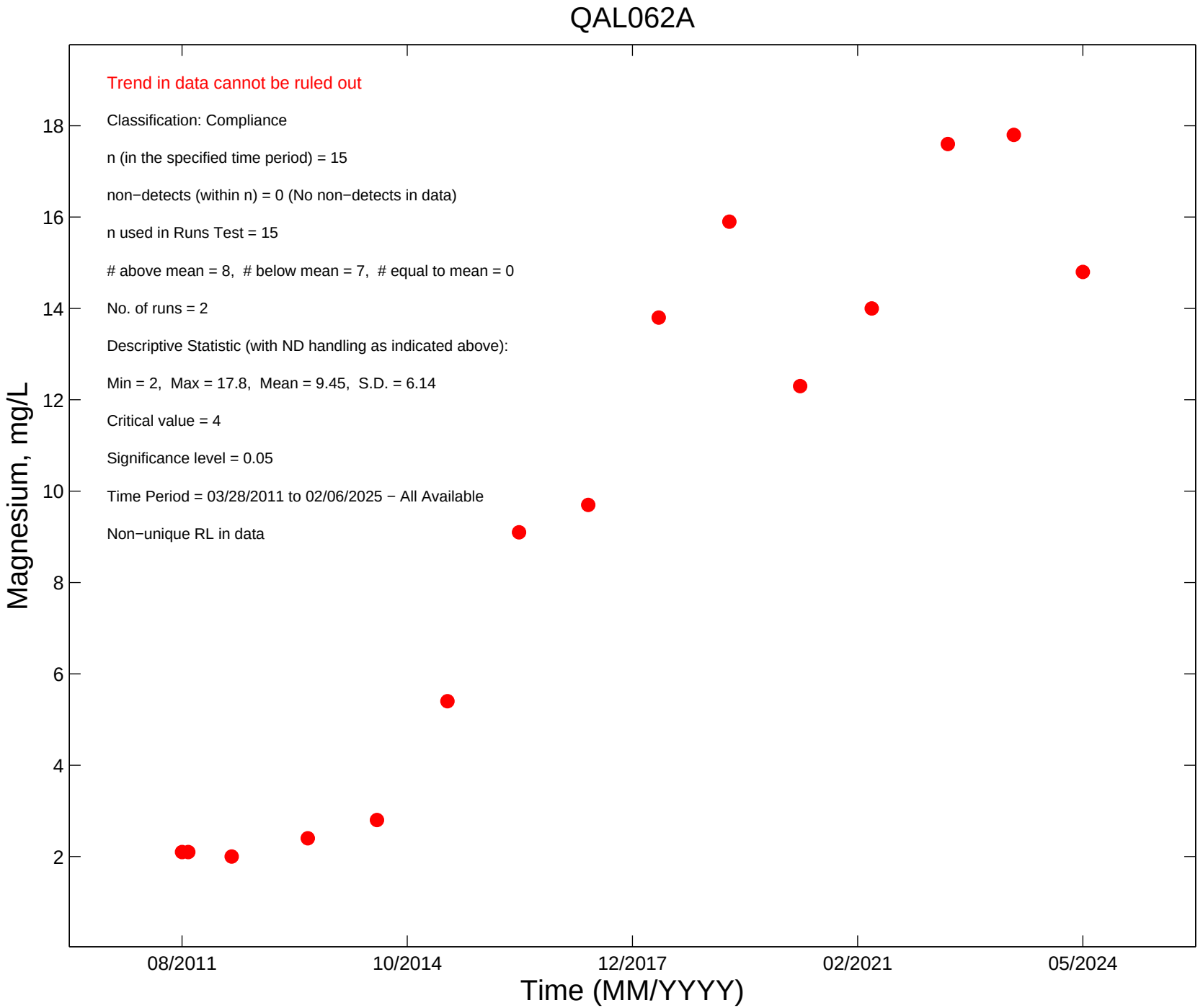

QAL061A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 6, # below mean = 9, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 1.9, Max = 6.3, Mean = 3.1, S.D. = 1.4
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Magnesium, mg/L
6.5
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

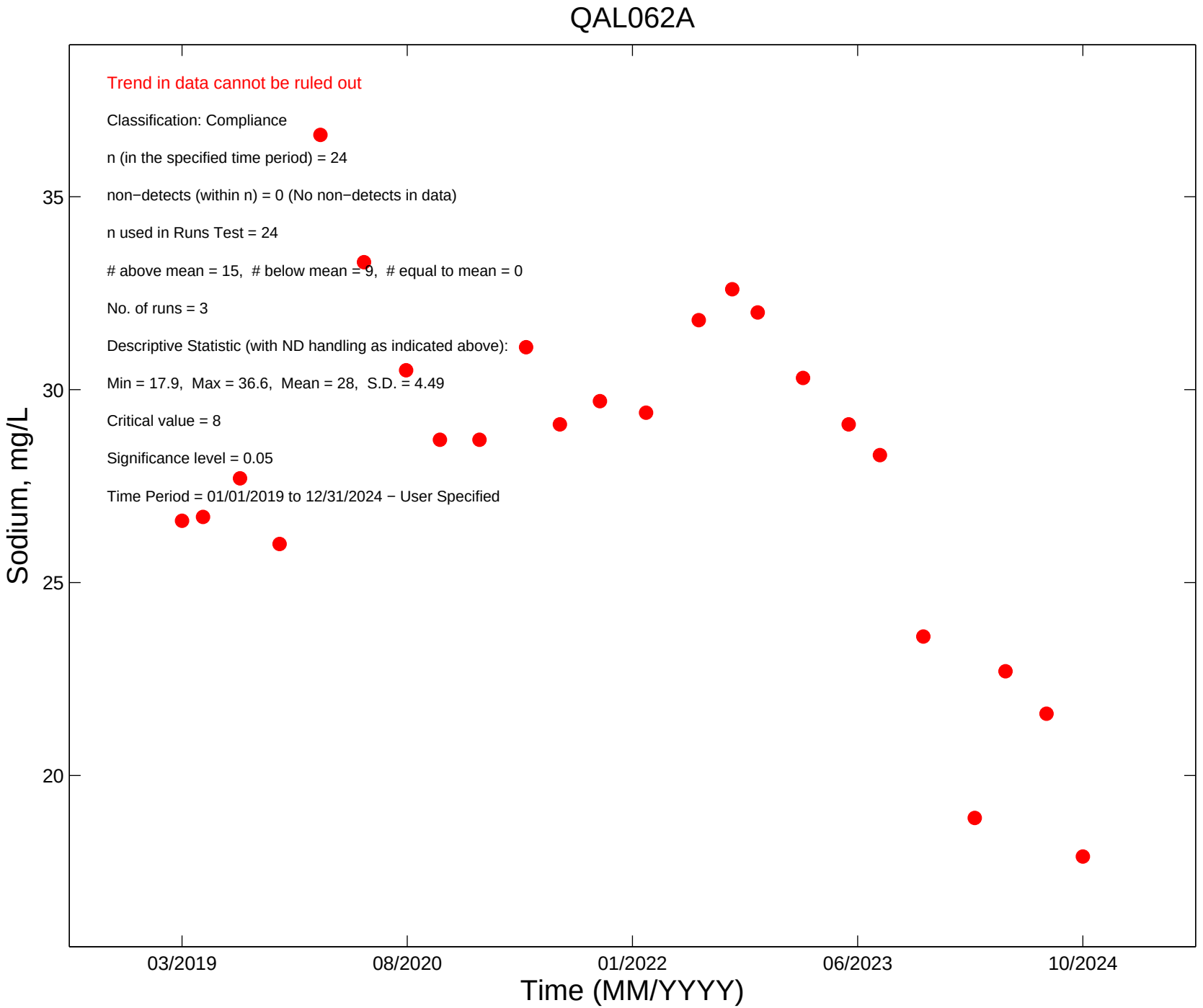

QAL062A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 12, # below mean = 12, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 159, Max = 290, Mean = 223, S.D. = 43.2
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
300
250
200
150
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

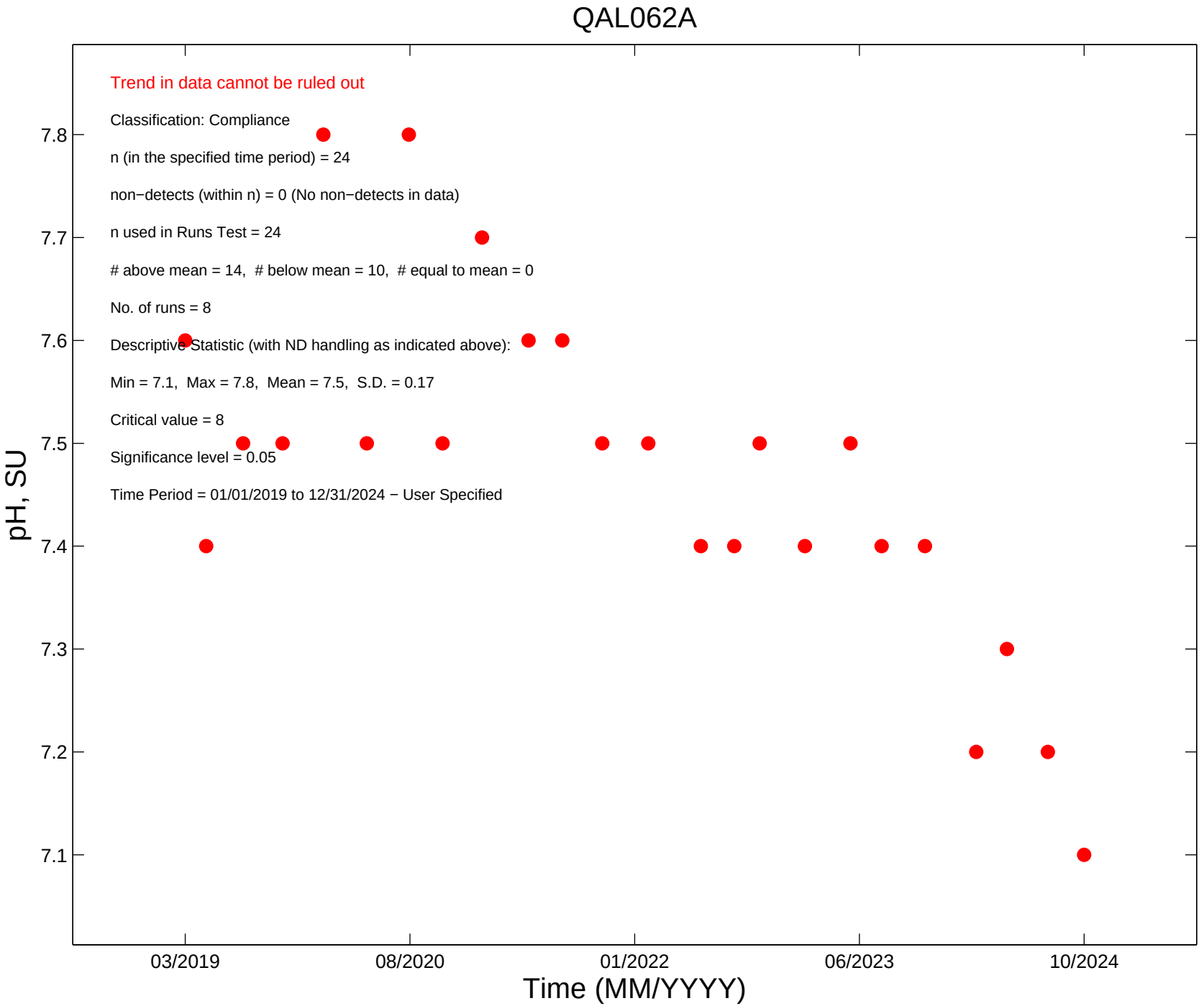

QAL062A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 8, # below mean = 7, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 11, Max = 85.3, Mean = 46.2, S.D. = 28.6
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
90
80
70
60
50
40
30
20
10
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

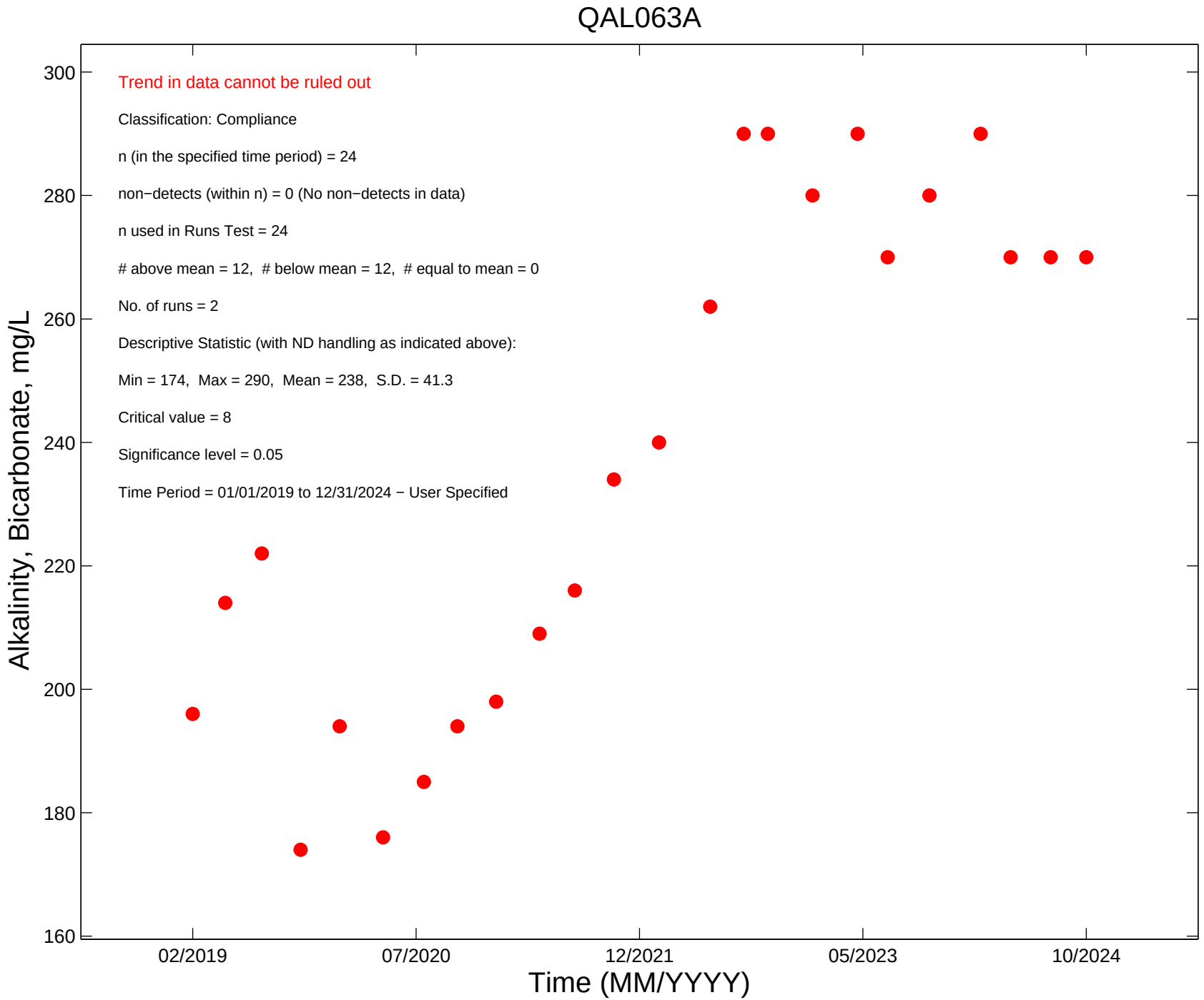

QAL062A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 15, # below mean = 9, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 24.1, Max = 78.8, Mean = 55.9, S.D. = 15.9
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Chloride, mg/L
80
70
60
50
40
30
20
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

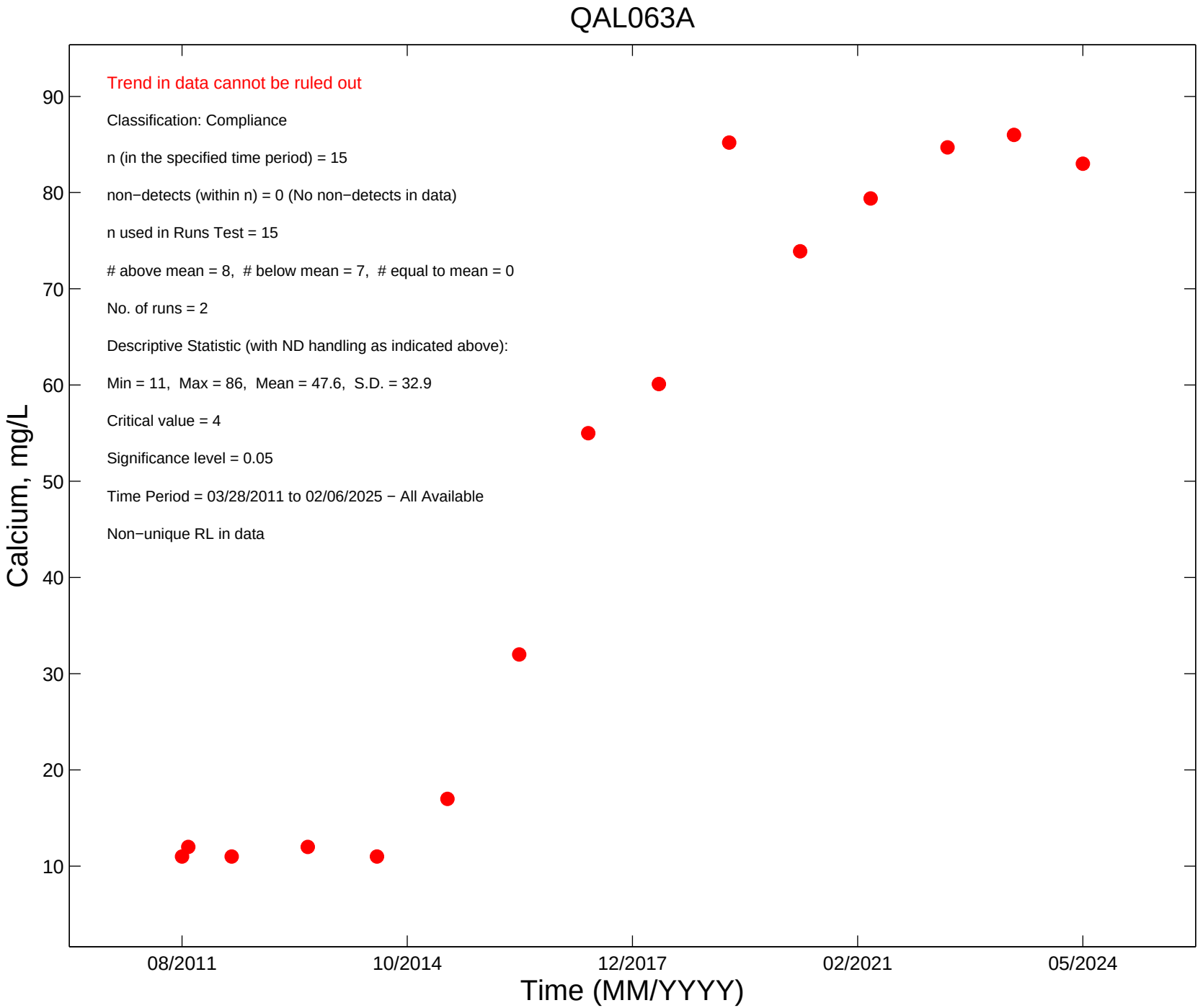

QAL062A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 8, # below mean = 7, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 0.7, Max = 2.9, Mean = 1.81, S.D. = 0.872
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Potassium, mg/L
3
2.5
2
1.5
1
0.5
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

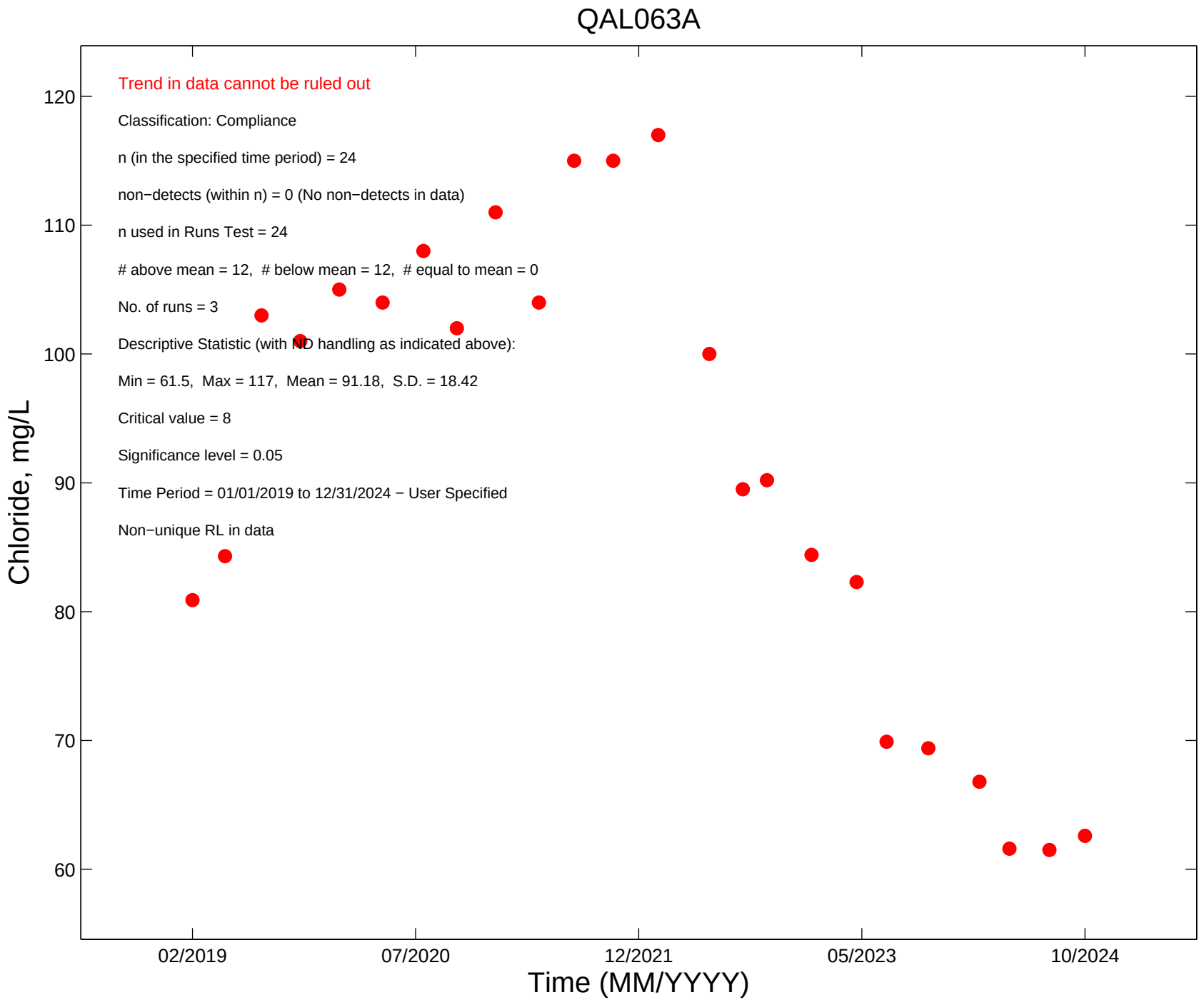

QAL062A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 8, # below mean = 7, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 2, Max = 17.8, Mean = 9.45, S.D. = 6.14
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Magnesium, mg/L
2
4
6
8
10
12
14
16
18
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

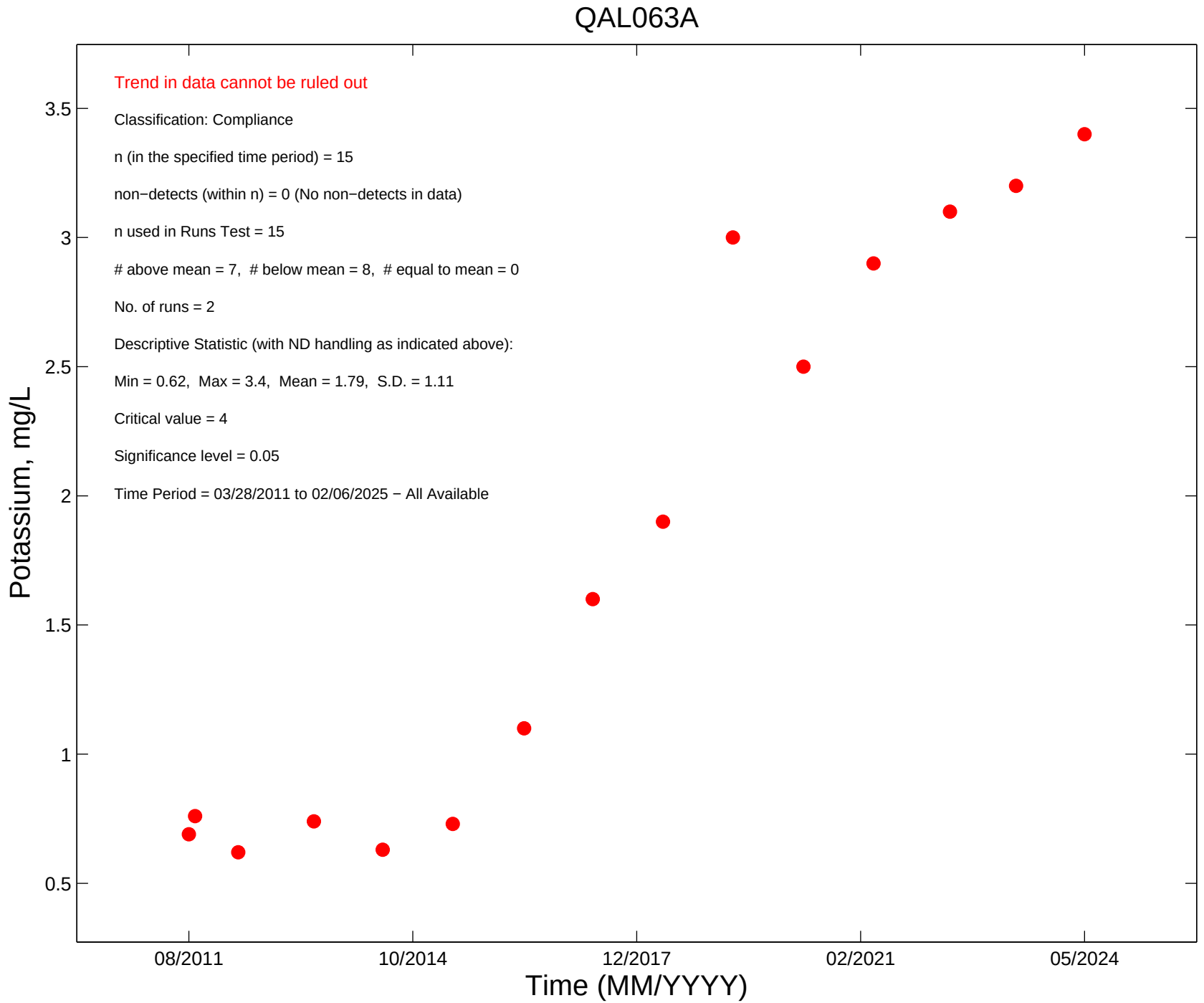

QAL062A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 15, # below mean = 9, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 17.9, Max = 36.6, Mean = 28, S.D. = 4.49
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Sodium, mg/L
35
30
25
20
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

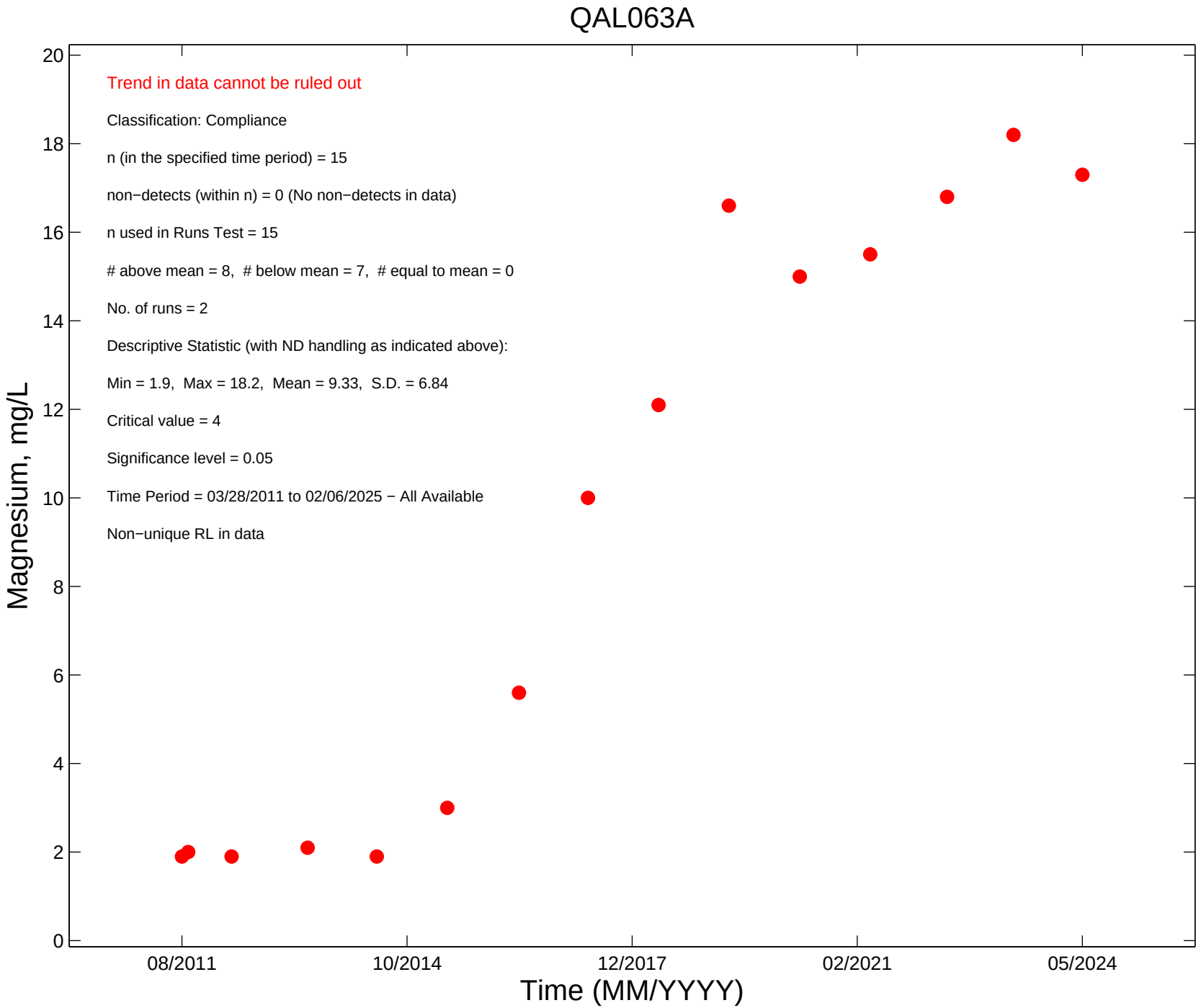

QAL062A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 14, # below mean = 10, # equal to mean = 0
No. of runs = 8
Descriptive Statistic (with ND handling as indicated above):
Min = 7.1, Max = 7.8, Mean = 7.5, S.D. = 0.17
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
pH, SU
7.8
7.7
7.6
7.5
7.4
7.3
7.2
7.1
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

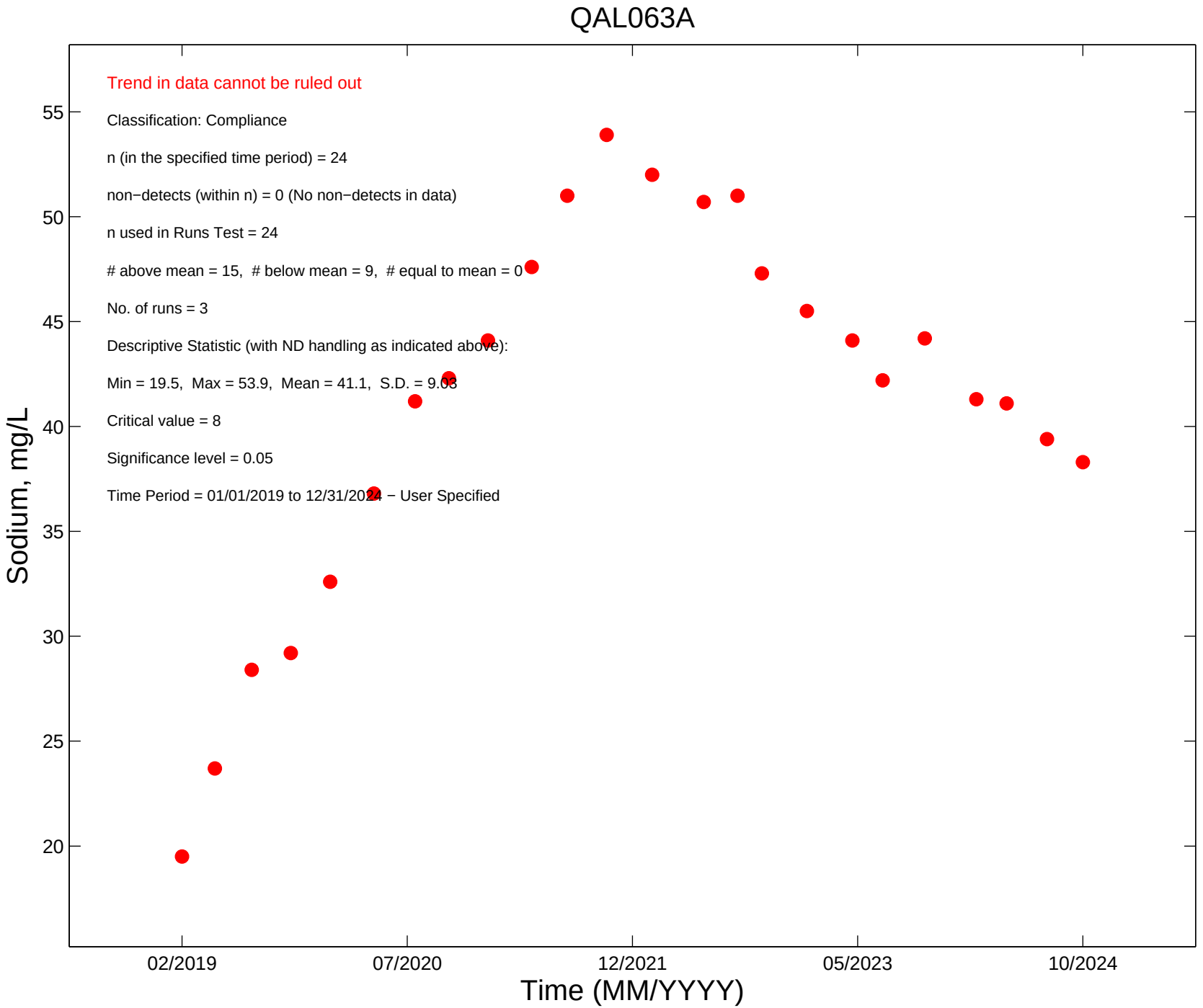

QAL063A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 12, # below mean = 12, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 174, Max = 290, Mean = 238, S.D. = 41.3
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
300
280
260
240
220
200
180
160
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

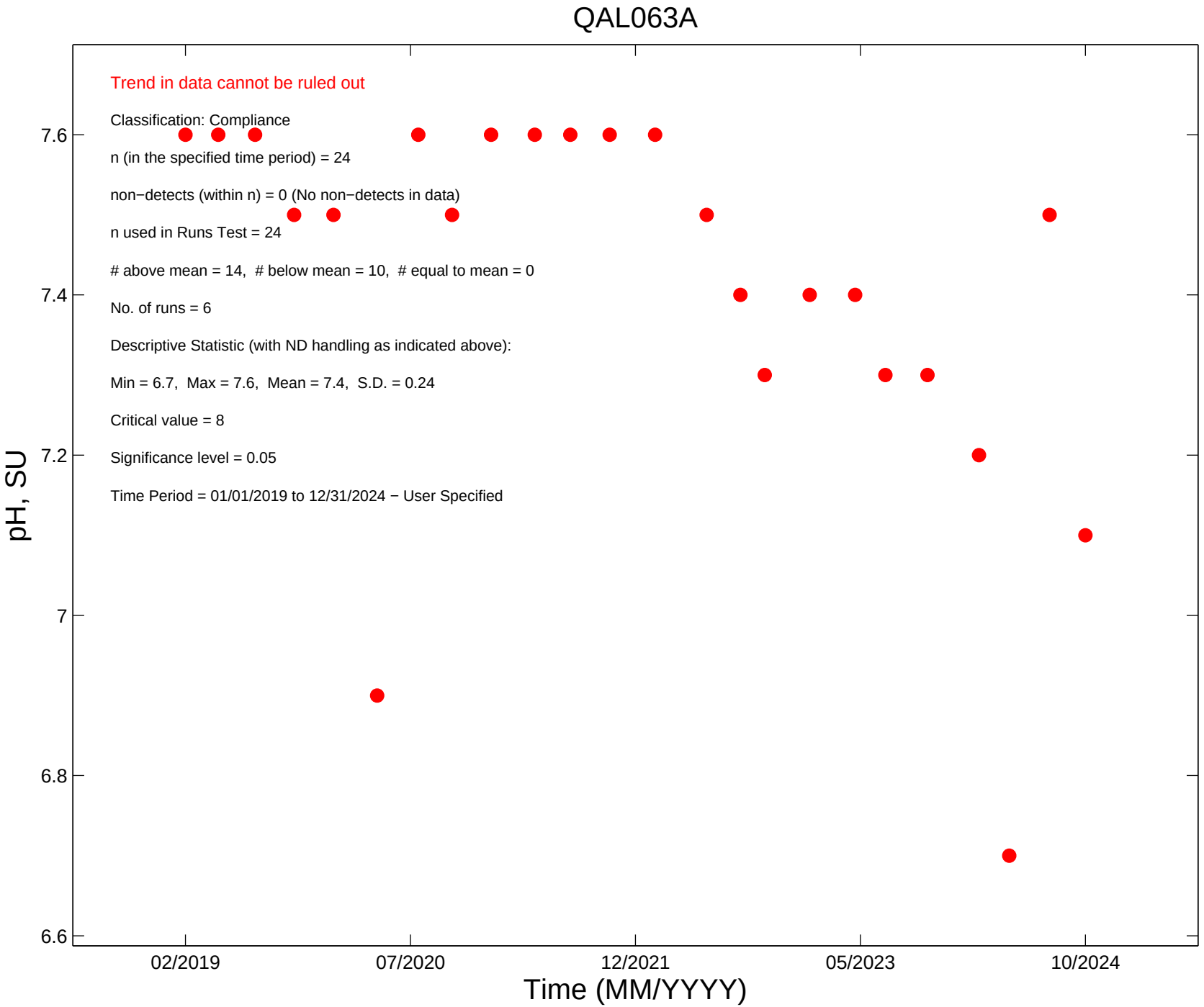

QAL063A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 8, # below mean = 7, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 11, Max = 86, Mean = 47.6, S.D. = 32.9
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
90
80
70
60
50
40
30
20
10
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

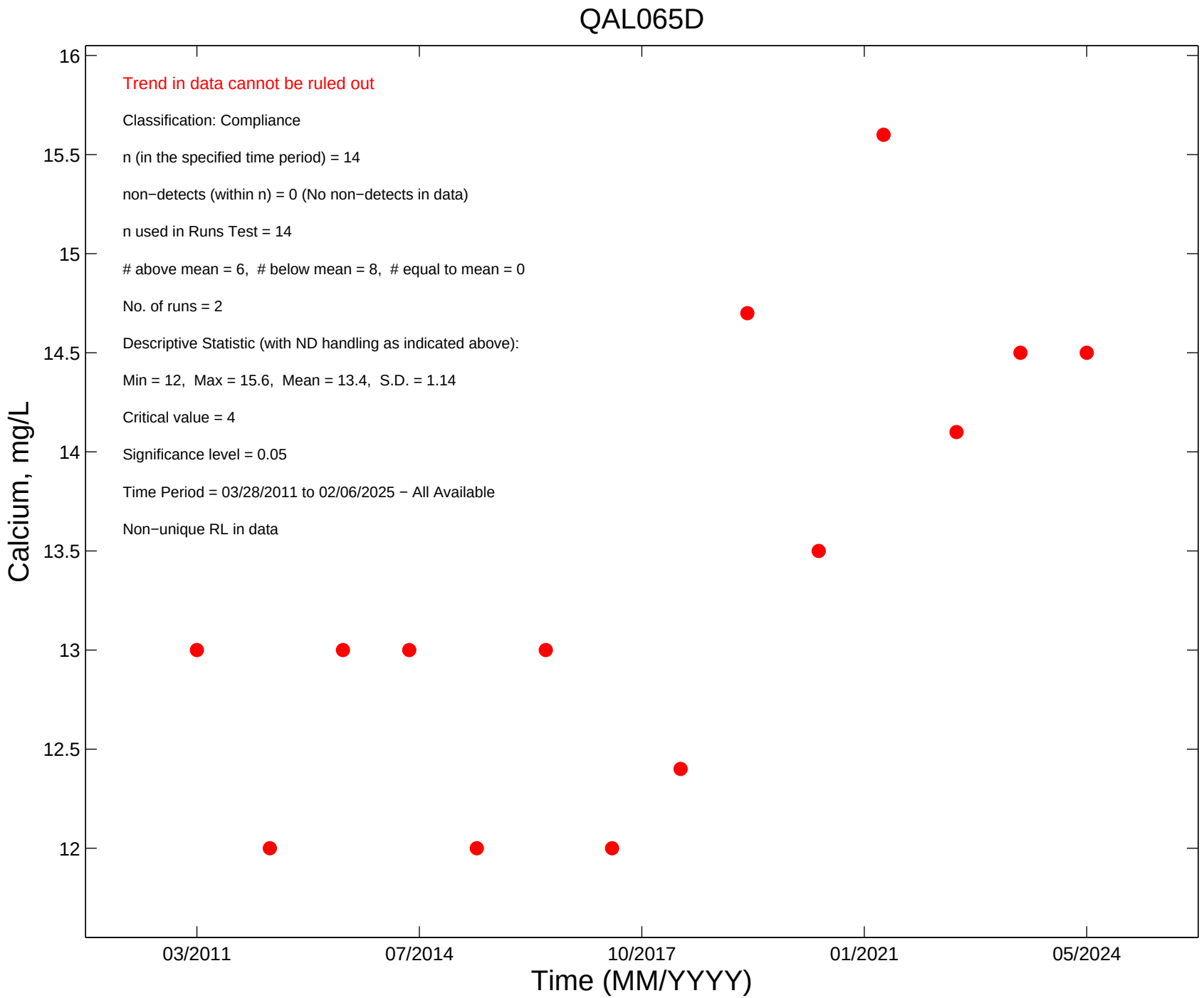

QAL063A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 12, # below mean = 12, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 61.5, Max = 117, Mean = 91.18, S.D. = 18.42
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Chloride, mg/L
120
110
100
90
80
70
60
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

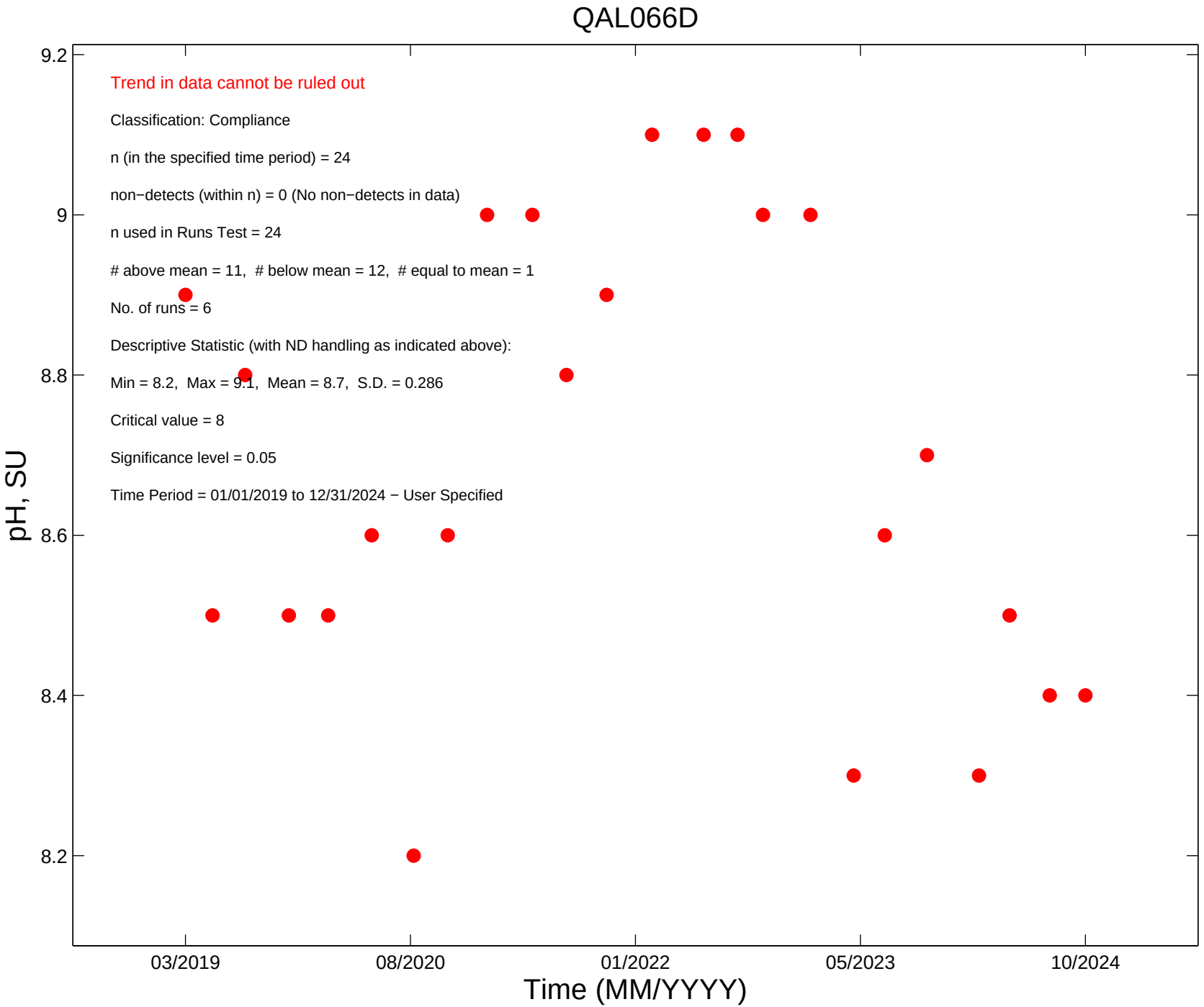

QAL063A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 7, # below mean = 8, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 0.62, Max = 3.4, Mean = 1.79, S.D. = 1.11
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Potassium, mg/L
3.5
3
2.5
2
1.5
1
0.5
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

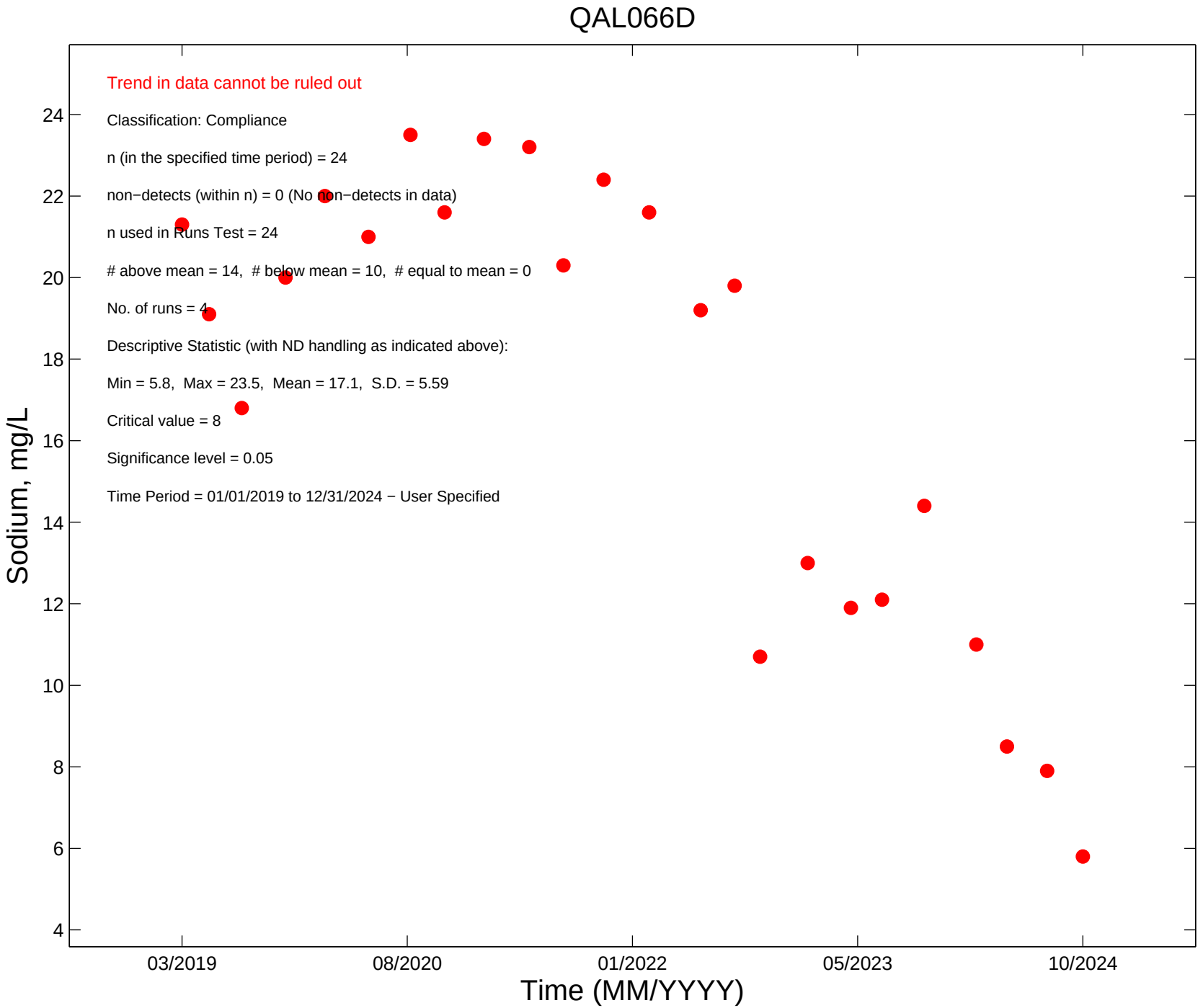

QAL063A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 8, # below mean = 7, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 1.9, Max = 18.2, Mean = 9.33, S.D. = 6.84
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Magnesium, mg/L
0
2
4
6
8
10
12
14
16
18
20
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

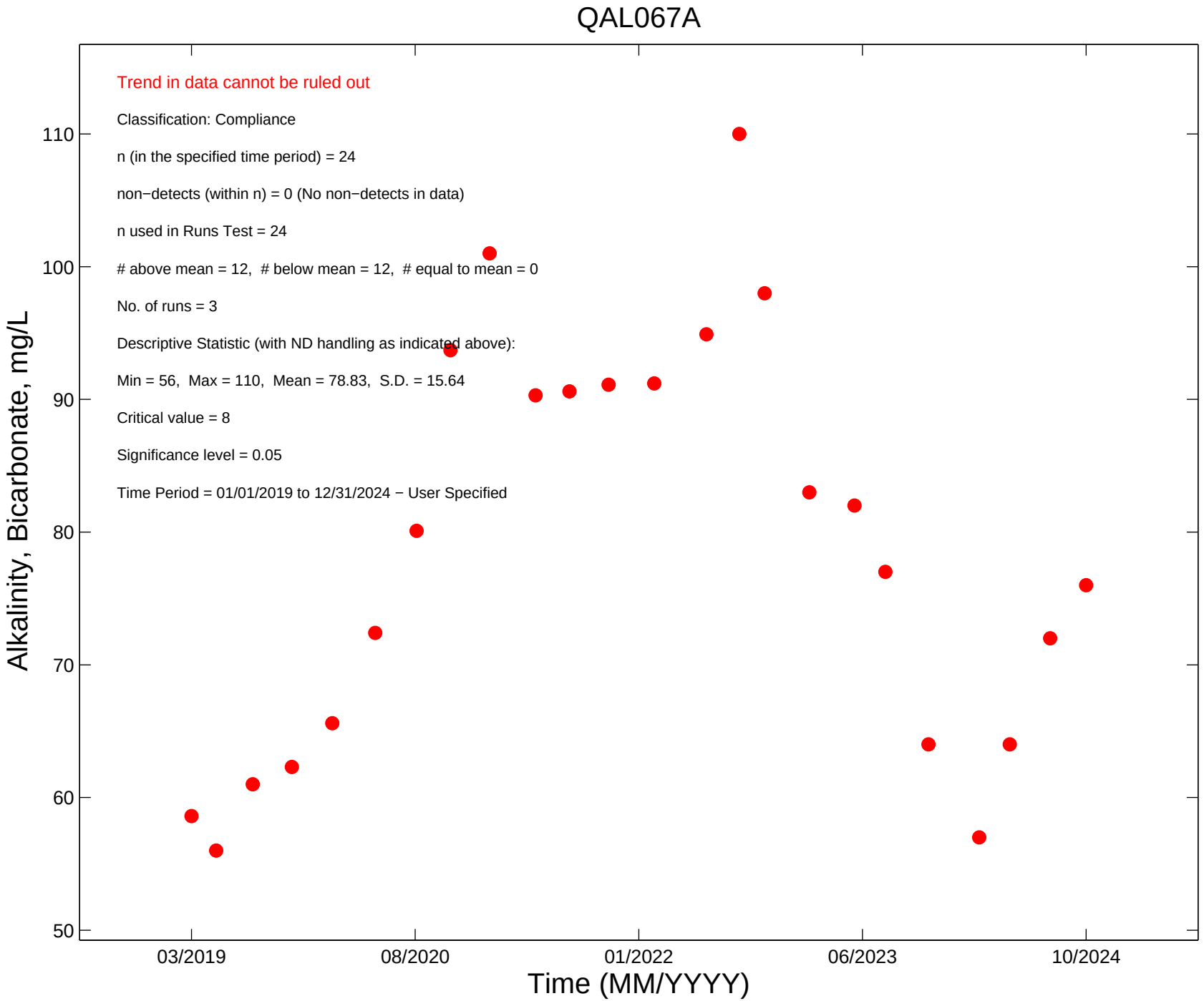

QAL063A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 15, # below mean = 9, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 19.5, Max = 53.9, Mean = 41.1, S.D. = 9.03
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Sodium, mg/L
55
50
45
40
35
30
25
20
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

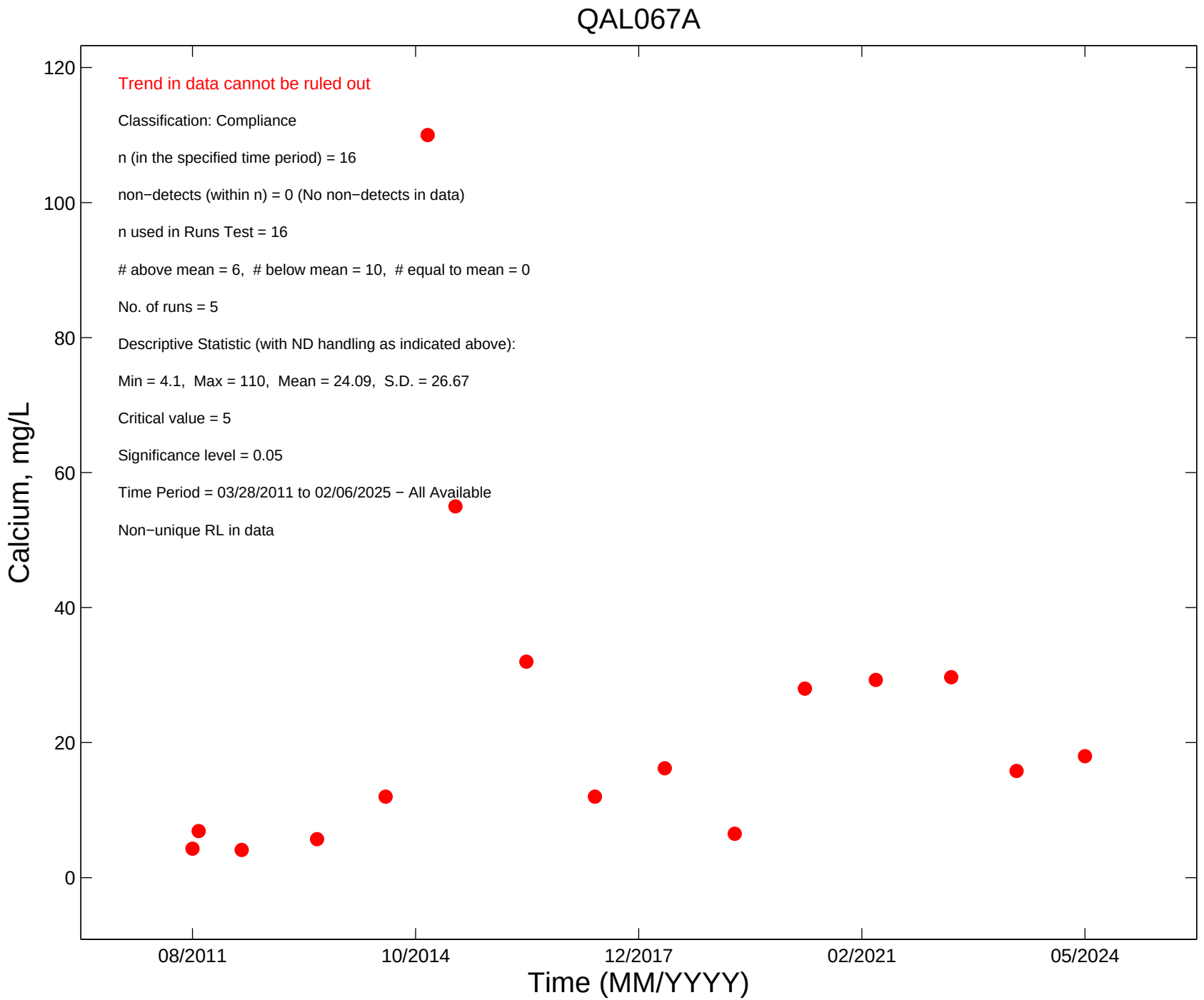

QAL063A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 14, # below mean = 10, # equal to mean = 0
No. of runs = 6
Descriptive Statistic (with ND handling as indicated above):
Min = 6.7, Max = 7.6, Mean = 7.4, S.D. = 0.24
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
pH, SU
7.6
7.4
7.2
7
6.8
6.6
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

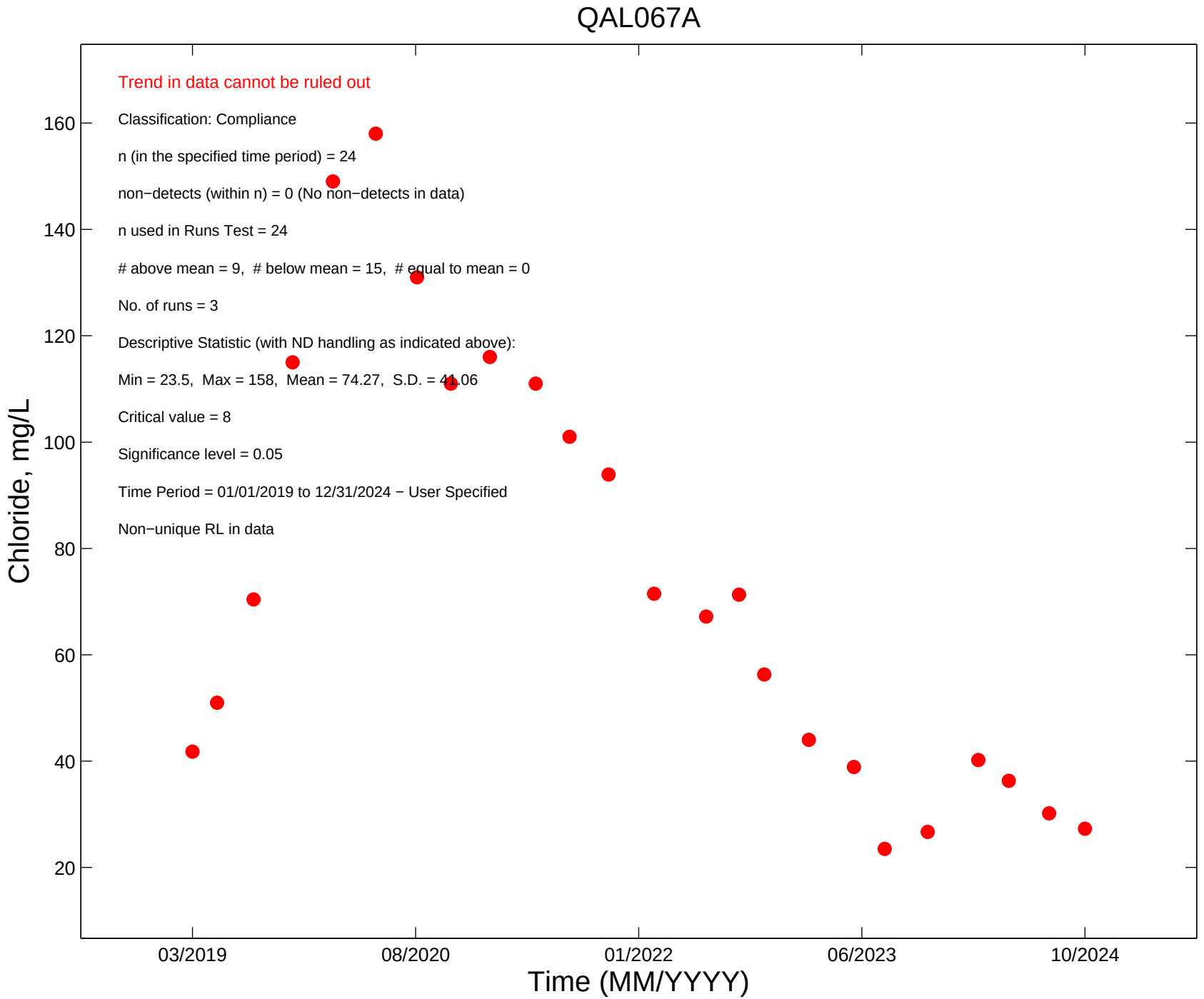

QAL065D
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 14
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 14
above mean = 6, # below mean = 8, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 12, Max = 15.6, Mean = 13.4, S.D. = 1.14
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
16
15.5
15
14.5
14
13.5
13
12.5
12
03/2011
07/2014
10/2017
01/2021
05/2024
Time (MM/YYYY)

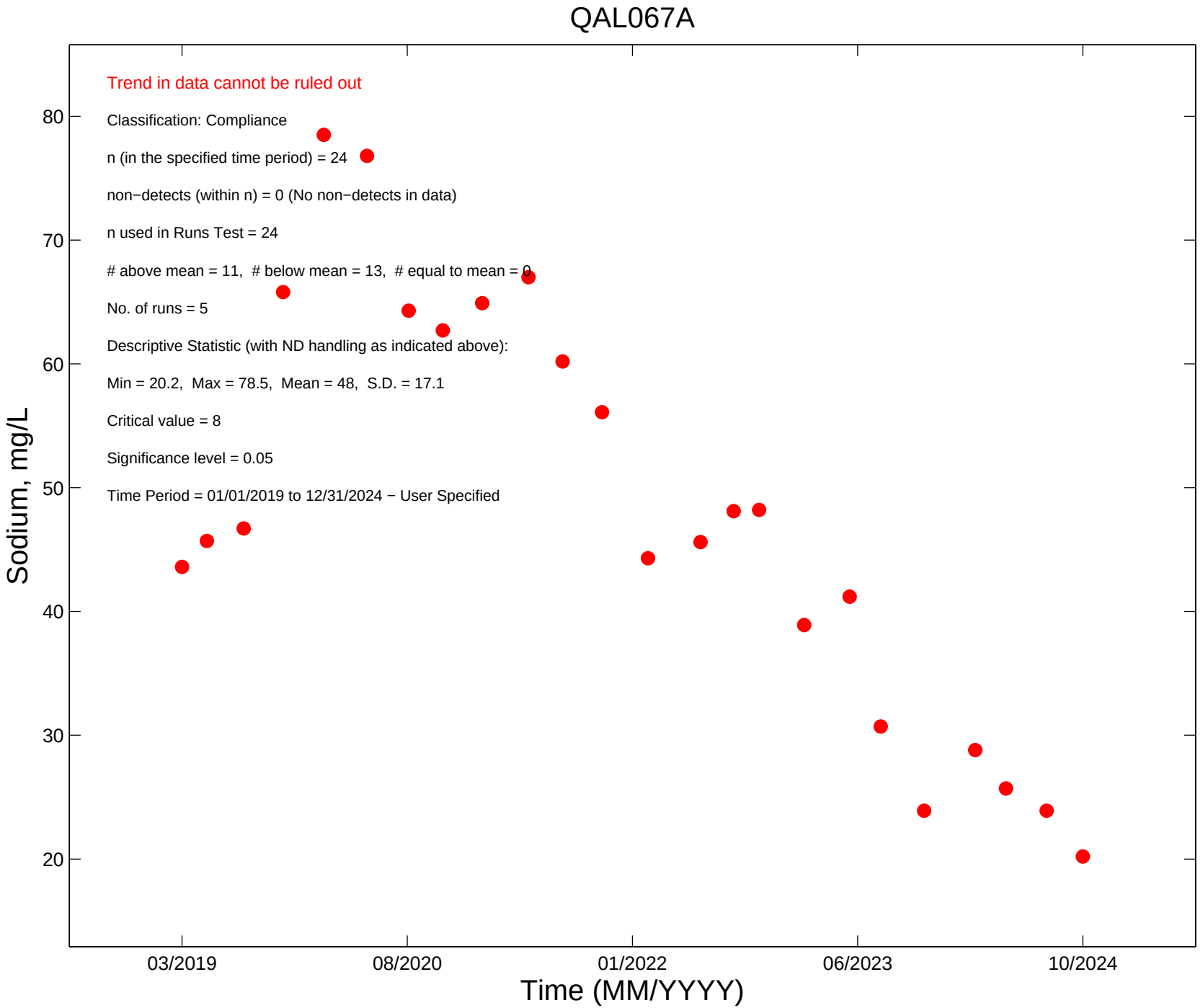

QAL066D
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 11, # below mean = 12, # equal to mean = 1
No. of runs = 6
Descriptive Statistic (with ND handling as indicated above):
Min = 8.2, Max = 9.1, Mean = 8.7, S.D. = 0.286
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
9.2
9
8.8
8.6
8.4
8.2
pH, SU
03/2019
08/2020
01/2022
05/2023
10/2024
Time (MM/YYYY)

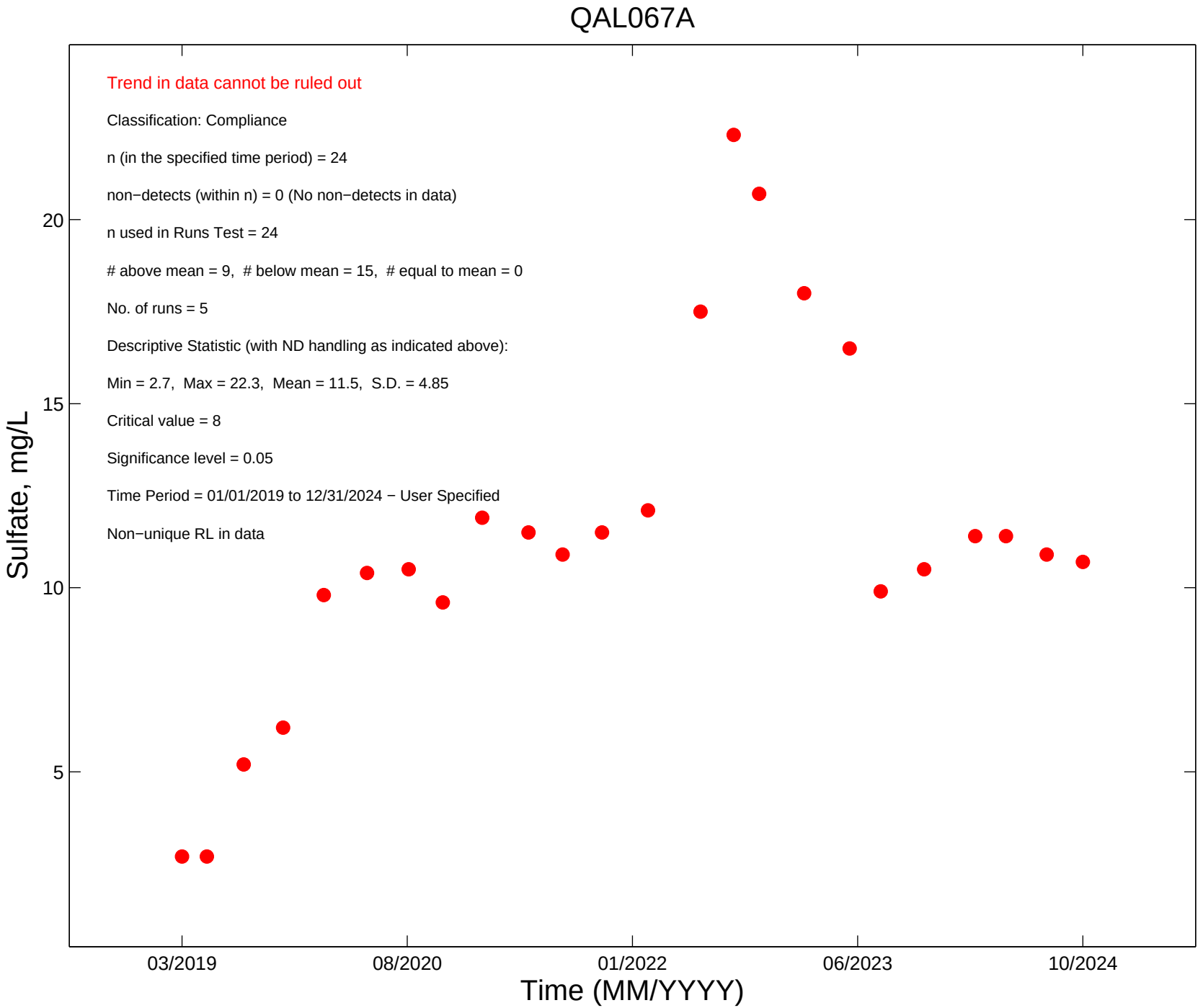

QAL066D
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 14, # below mean = 10, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 5.8, Max = 23.5, Mean = 17.1, S.D. = 5.59
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Sodium, mg/L
24
22
20
18
16
14
12
10
8
6
4
03/2019
08/2020
01/2022
05/2023
10/2024
Time (MM/YYYY)

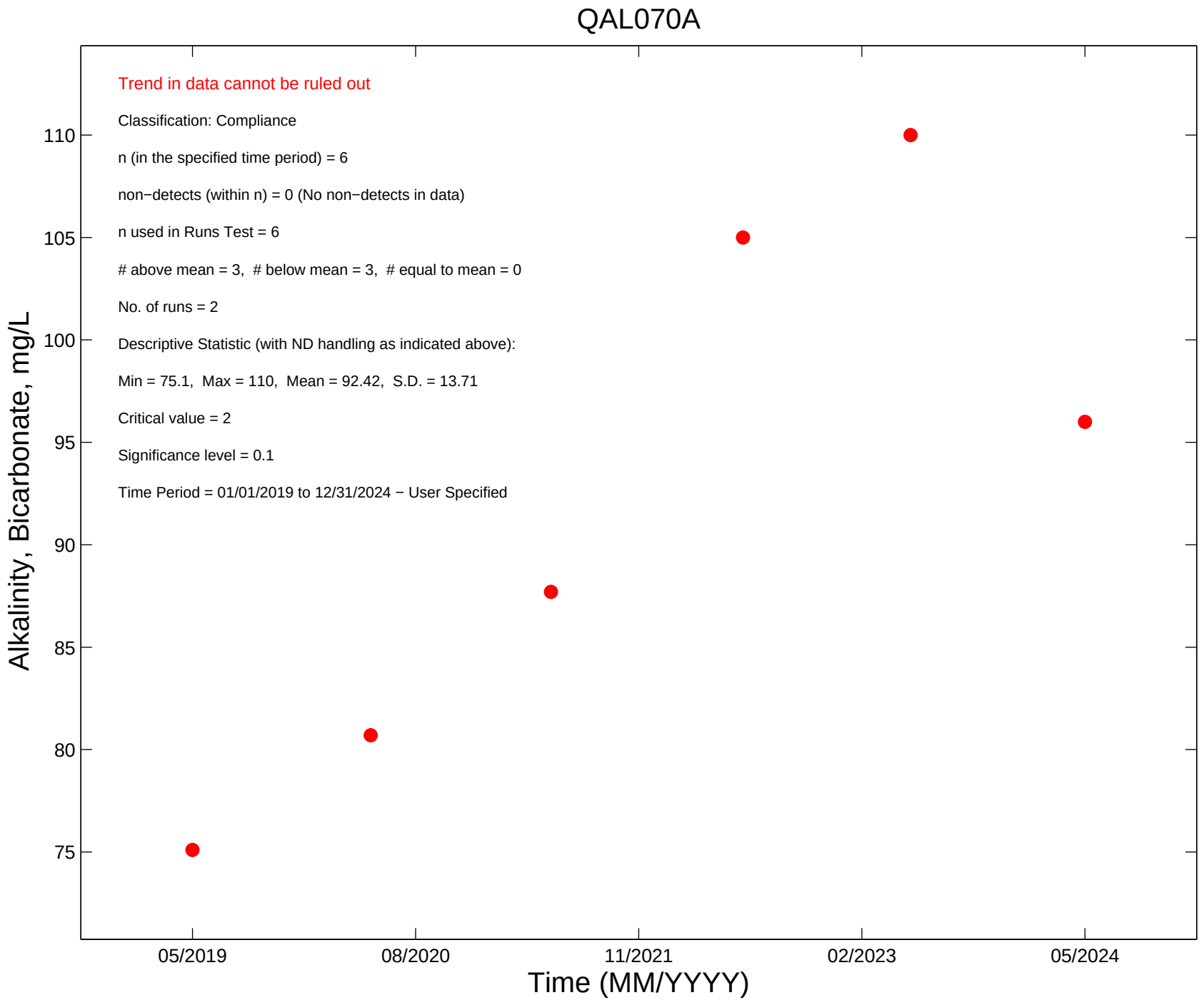

QAL067A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 12, # below mean = 12, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 56, Max = 110, Mean = 78.83, S.D. = 15.64
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
110
100
90
80
70
60
50
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

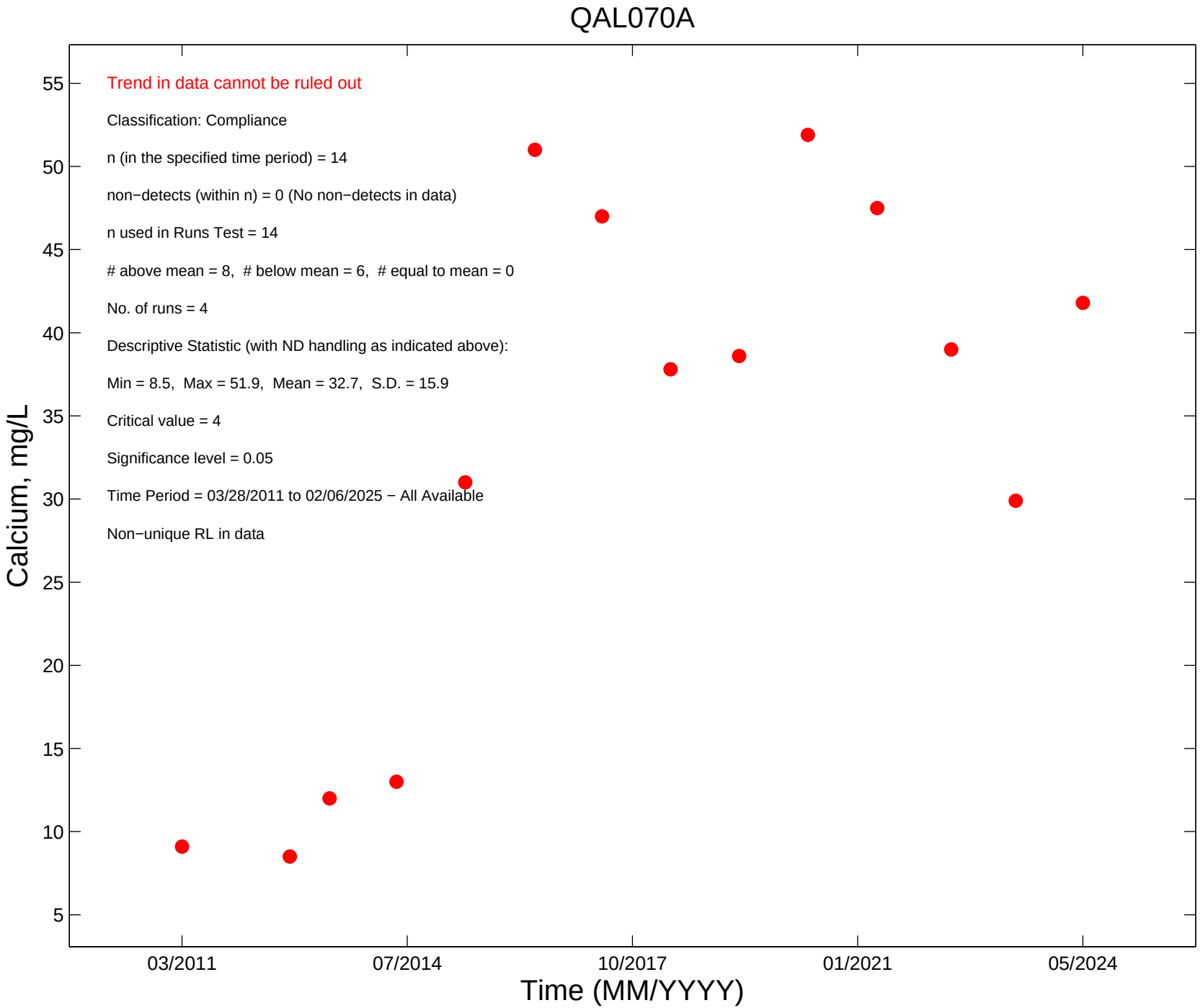

QAL067A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 16
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 16
above mean = 6, # below mean = 10, # equal to mean = 0
No. of runs = 5
Descriptive Statistic (with ND handling as indicated above):
Min = 4.1, Max = 110, Mean = 24.09, S.D. = 26.67
Critical value = 5
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
120
100
80
60
40
20
0
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

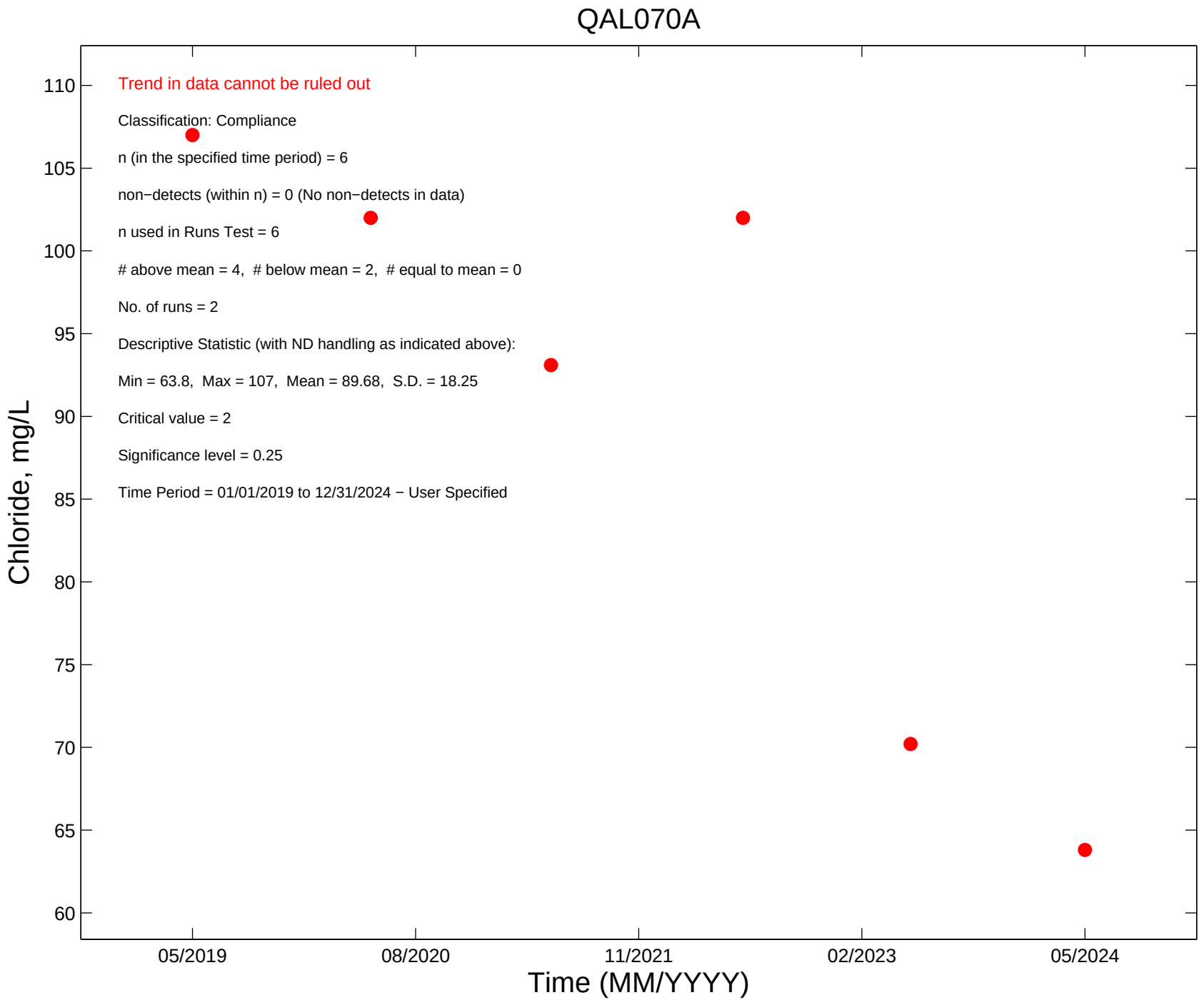

QAL067A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 9, # below mean = 15, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 23.5, Max = 158, Mean = 74.27, S.D. = 41.06
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Chloride, mg/L
160
140
120
100
80
60
40
20
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

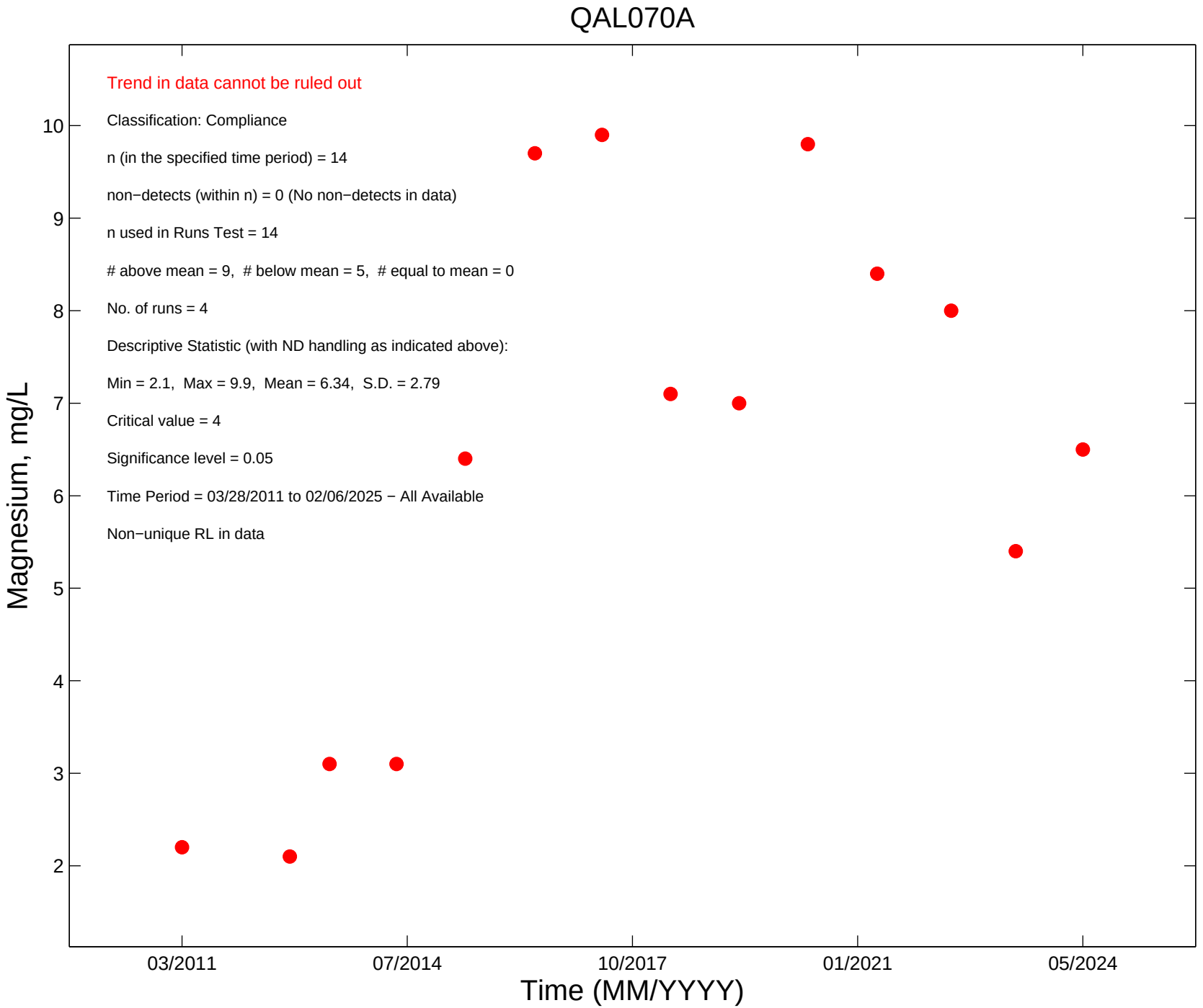

QAL067A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 11, # below mean = 13, # equal to mean = 0
No. of runs = 5
Descriptive Statistic (with ND handling as indicated above):
Min = 20.2, Max = 78.5, Mean = 48, S.D. = 17.1
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Sodium, mg/L
80
70
60
50
40
30
20
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

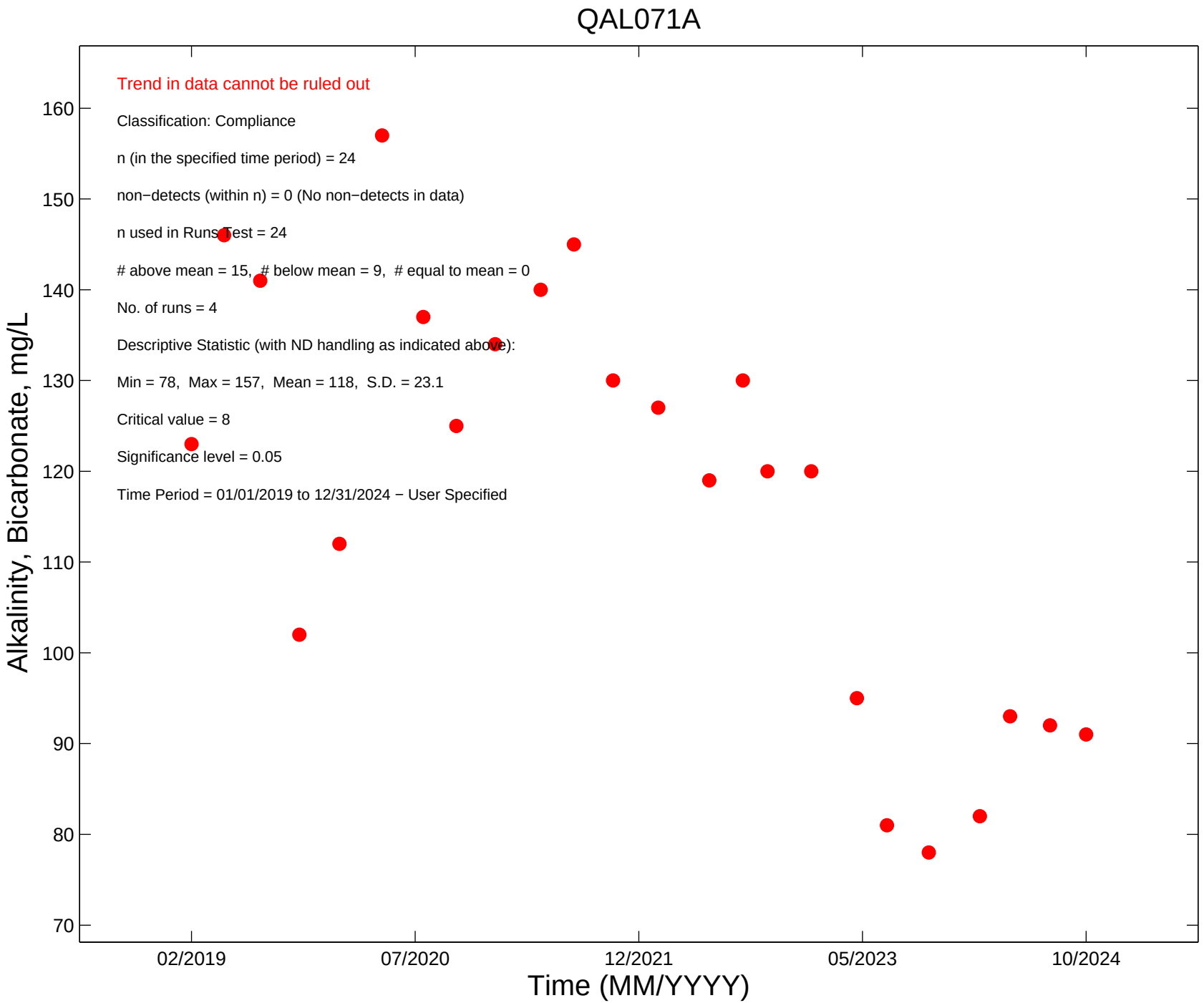

QAL067A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 9, # below mean = 15, # equal to mean = 0
No. of runs = 5
Descriptive Statistic (with ND handling as indicated above):
Min = 2.7, Max = 22.3, Mean = 11.5, S.D. = 4.85
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Sulfate, mg/L
20
15
10
5
03/2019
08/2020
01/2022
06/2023
10/2024
Time (MM/YYYY)

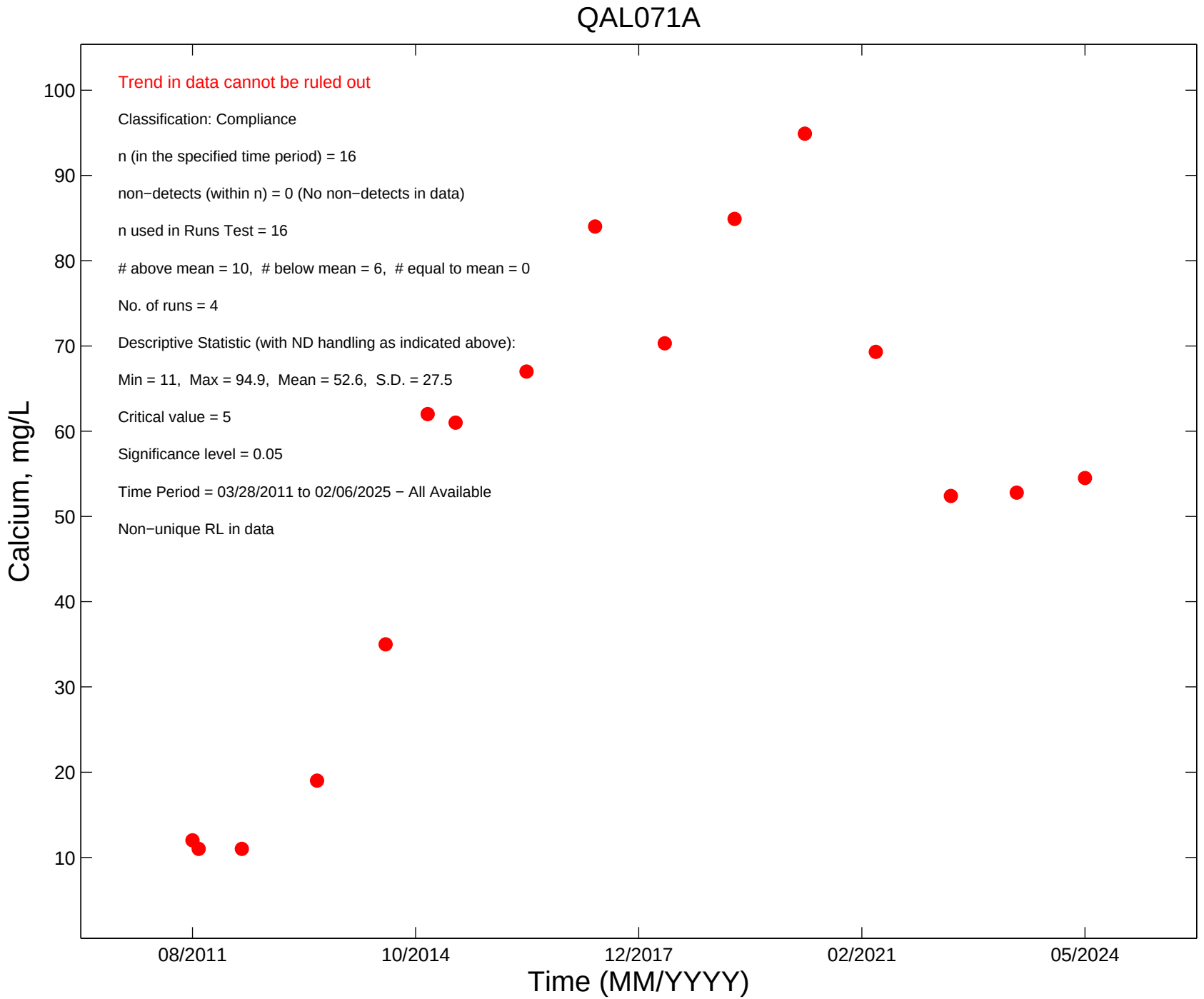

QAL070A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 6
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 6
above mean = 3, # below mean = 3, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 75.1, Max = 110, Mean = 92.42, S.D. = 13.71
Critical value = 2
Significance level = 0.1
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
110
105
100
95
90
85
80
75
05/2019
08/2020
11/2021
02/2023
05/2024
Time (MM/YYYY)

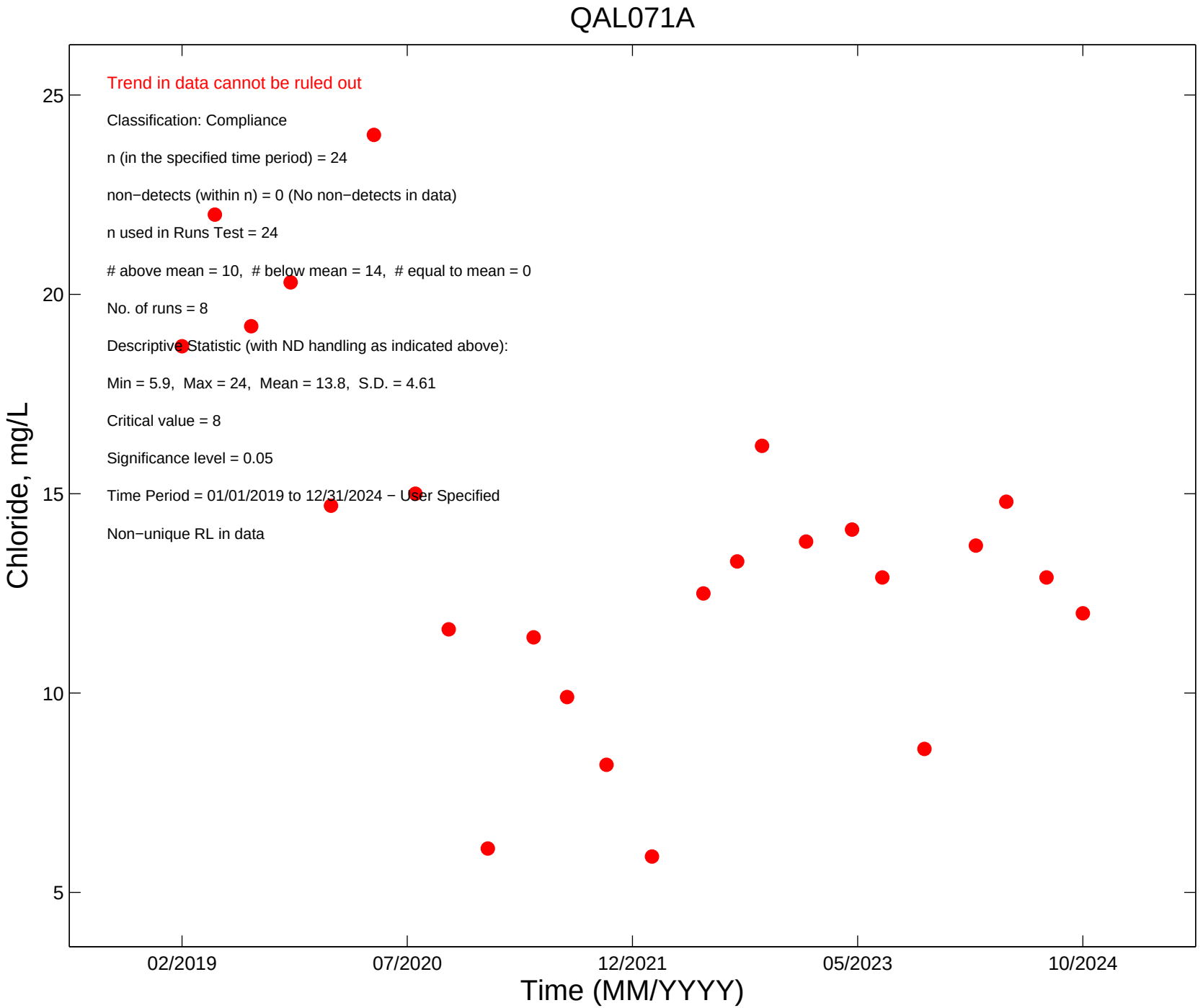

QAL070A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 14
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 14
above mean = 8, # below mean = 6, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 8.5, Max = 51.9, Mean = 32.7, S.D. = 15.9
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
55
50
45
40
35
30
25
20
15
10
5
03/2011
07/2014
10/2017
01/2021
05/2024
Time (MM/YYYY)

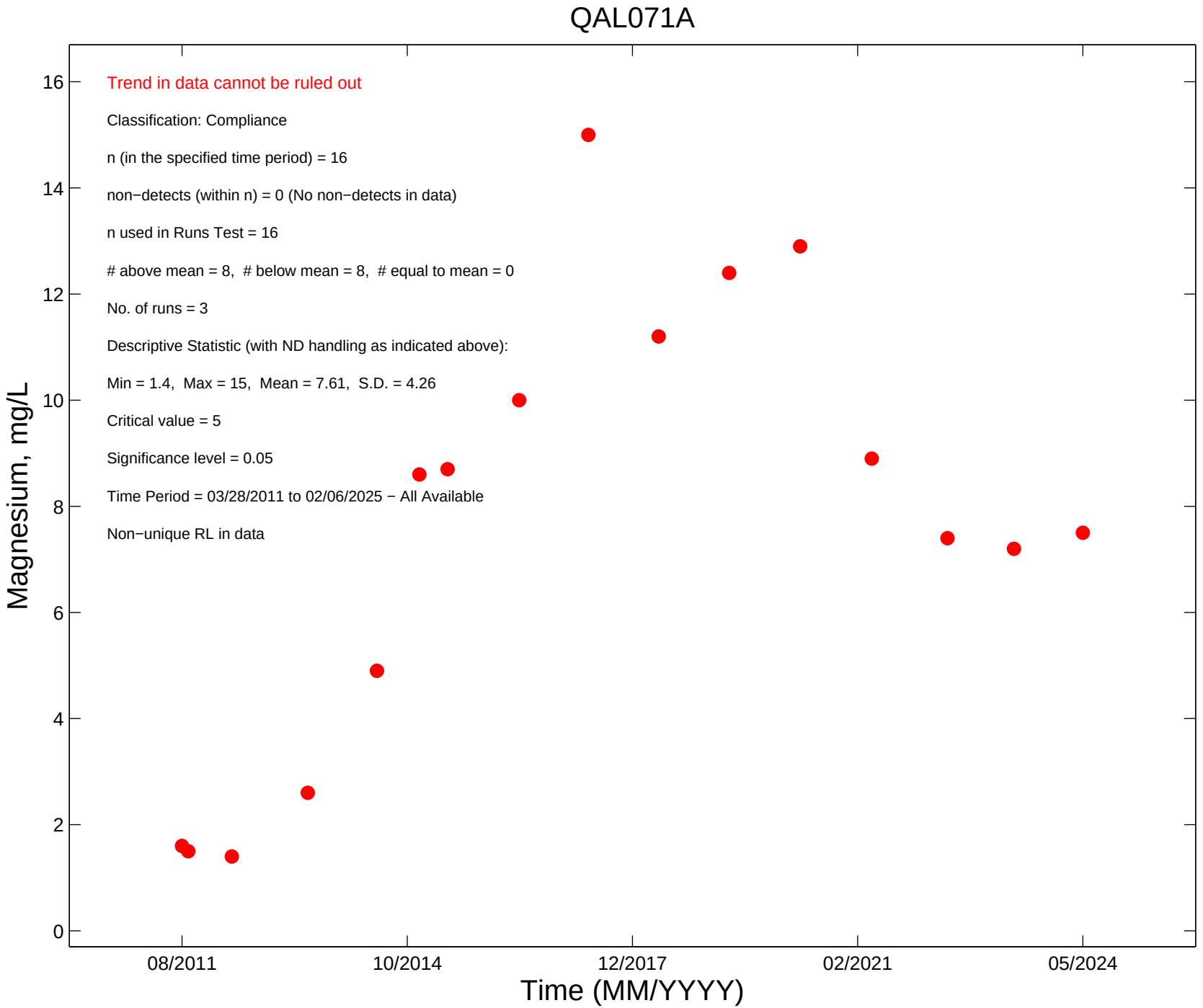

QAL070A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 6
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 6
above mean = 4, # below mean = 2, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 63.8, Max = 107, Mean = 89.68, S.D. = 18.25
Critical value = 2
Significance level = 0.25
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Chloride, mg/L
110
105
100
95
90
85
80
75
70
65
60
05/2019
08/2020
11/2021
02/2023
05/2024
Time (MM/YYYY)

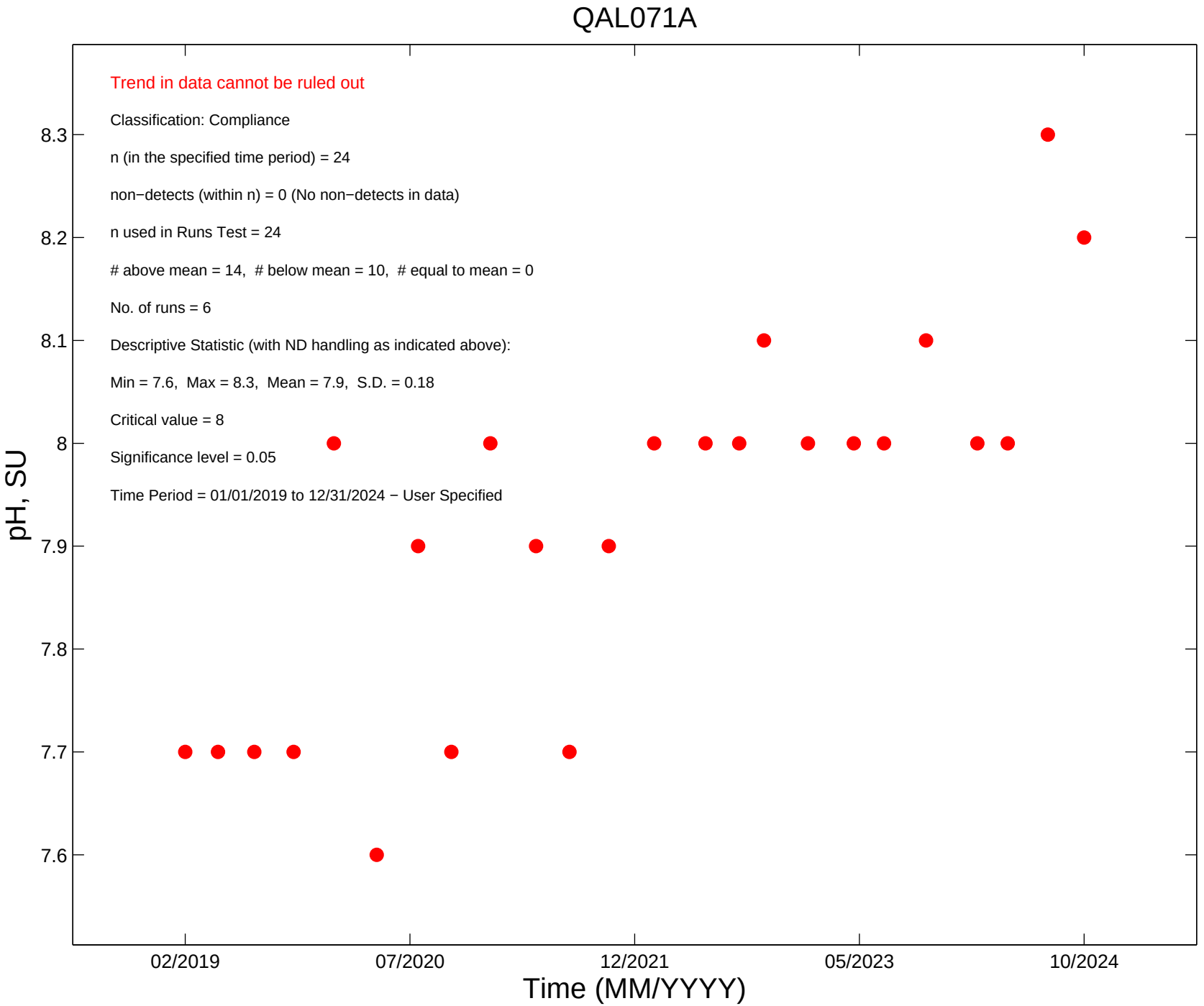

QAL070A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 14
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 14
above mean = 9, # below mean = 5, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 2.1, Max = 9.9, Mean = 6.34, S.D. = 2.79
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Magnesium, mg/L
10
9
8
7
6
5
4
3
2
03/2011
07/2014
10/2017
01/2021
05/2024
Time (MM/YYYY)

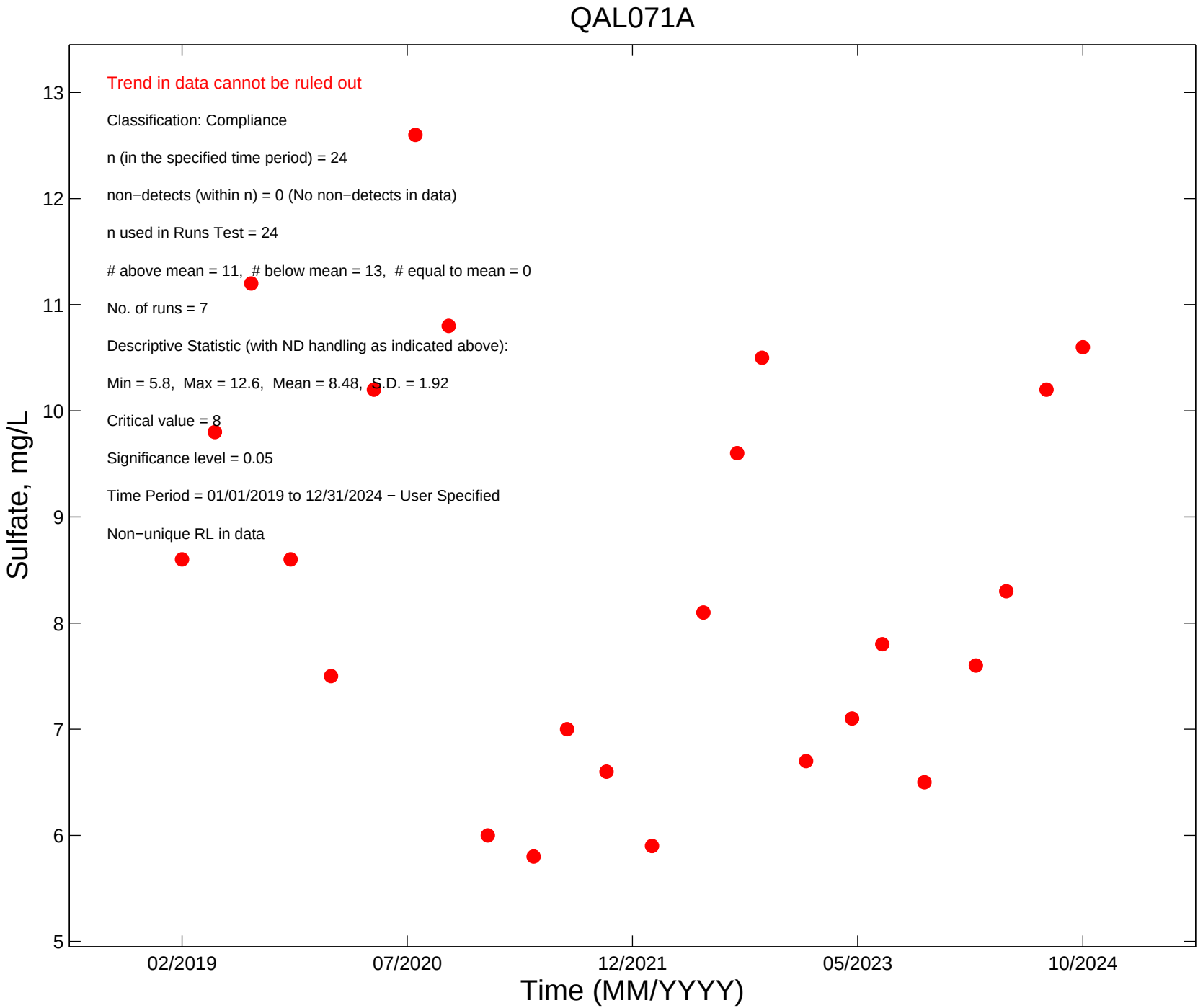

QAL071A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 15, # below mean = 9, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 78, Max = 157, Mean = 118, S.D. = 23.1
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
160
150
140
130
120
110
100
90
80
70
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

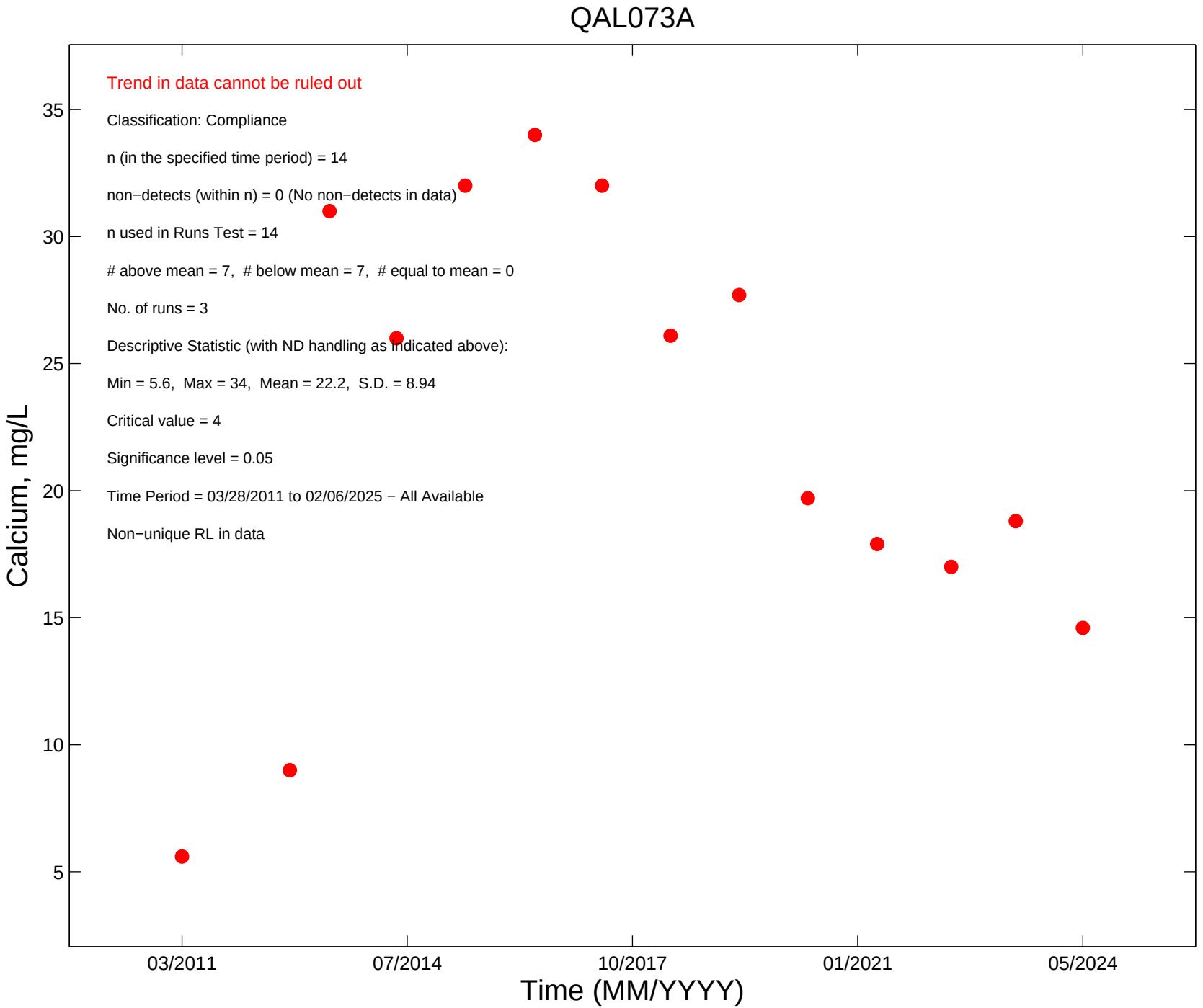

QAL071A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 16
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 16
above mean = 10, # below mean = 6, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 11, Max = 94.9, Mean = 52.6, S.D. = 27.5
Critical value = 5
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
100
90
80
70
60
50
40
30
20
10
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

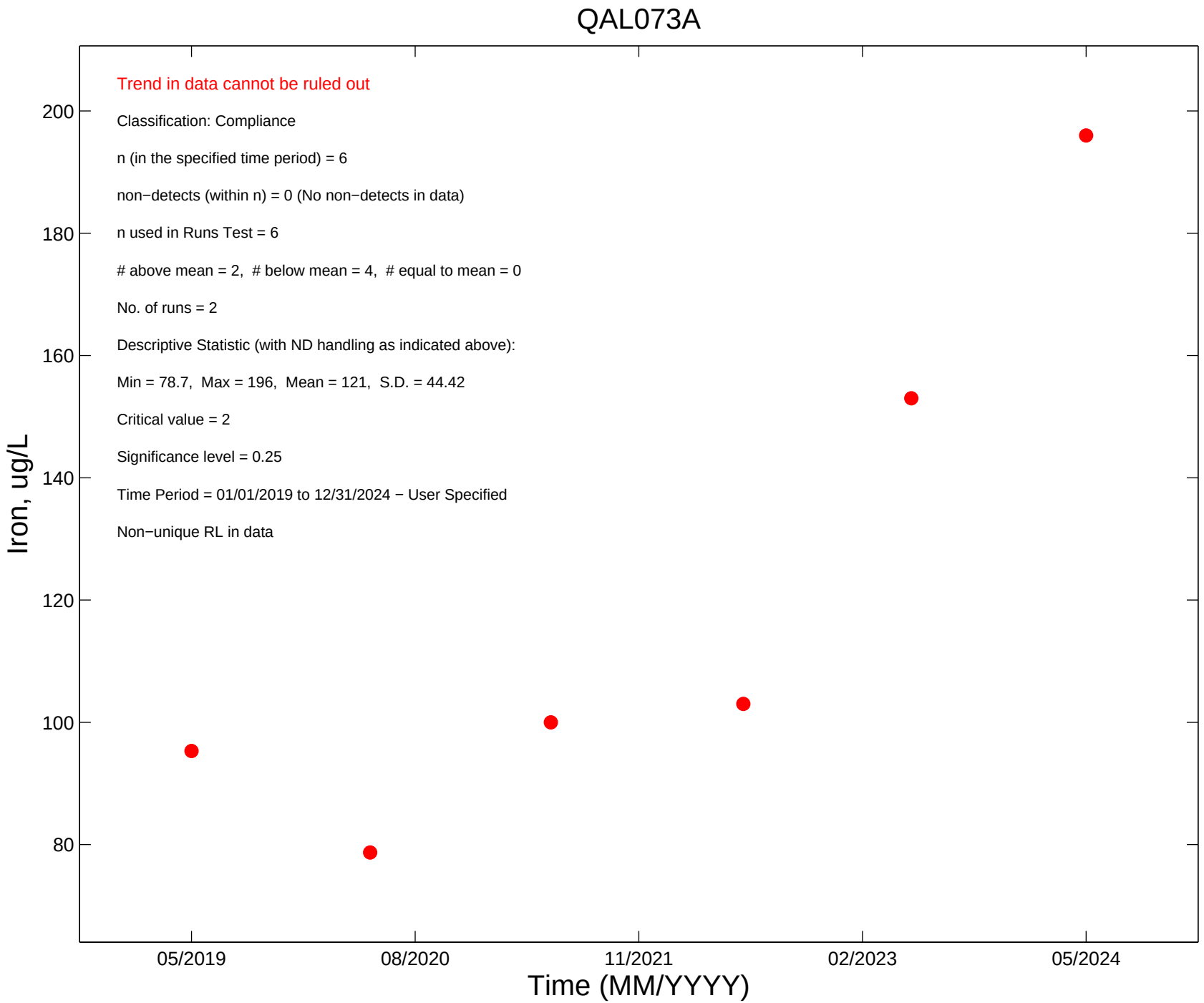

QAL071A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 10, # below mean = 14, # equal to mean = 0
No. of runs = 8
Descriptive Statistic (with ND handling as indicated above):
Min = 5.9, Max = 24, Mean = 13.8, S.D. = 4.61
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Chloride, mg/L
25
20
15
10
5
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

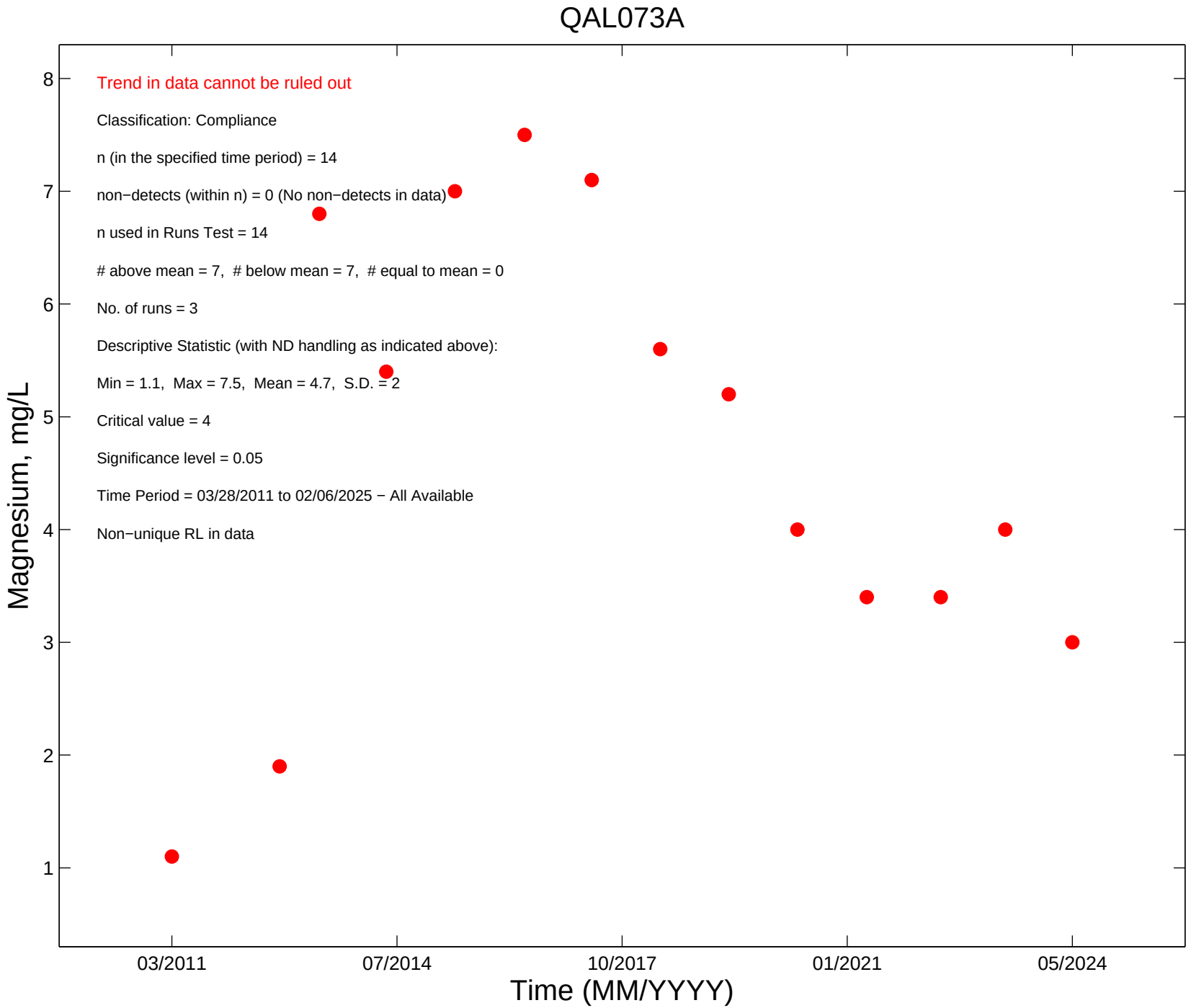

QAL071A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 16
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 16
above mean = 8, # below mean = 8, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 1.4, Max = 15, Mean = 7.61, S.D. = 4.26
Critical value = 5
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Magnesium, mg/L
0
2
4
6
8
10
12
14
16
08/2011
10/2014
12/2017
02/2021
05/2024
Time (MM/YYYY)

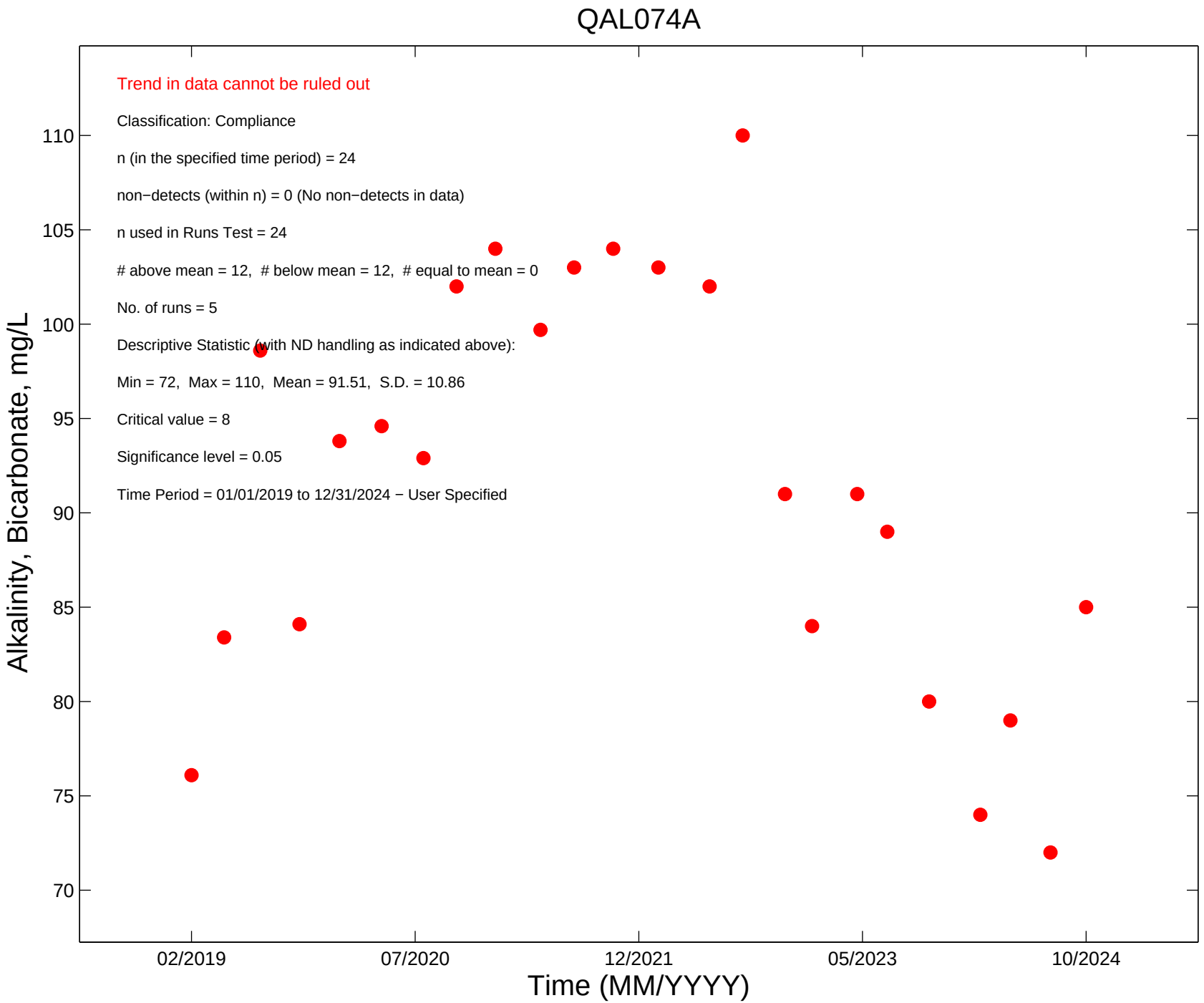

QAL071A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 14, # below mean = 10, # equal to mean = 0
No. of runs = 6
Descriptive Statistic (with ND handling as indicated above):
Min = 7.6, Max = 8.3, Mean = 7.9, S.D. = 0.18
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
pH, SU
8.3
8.2
8.1
8
7.9
7.8
7.7
7.6
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

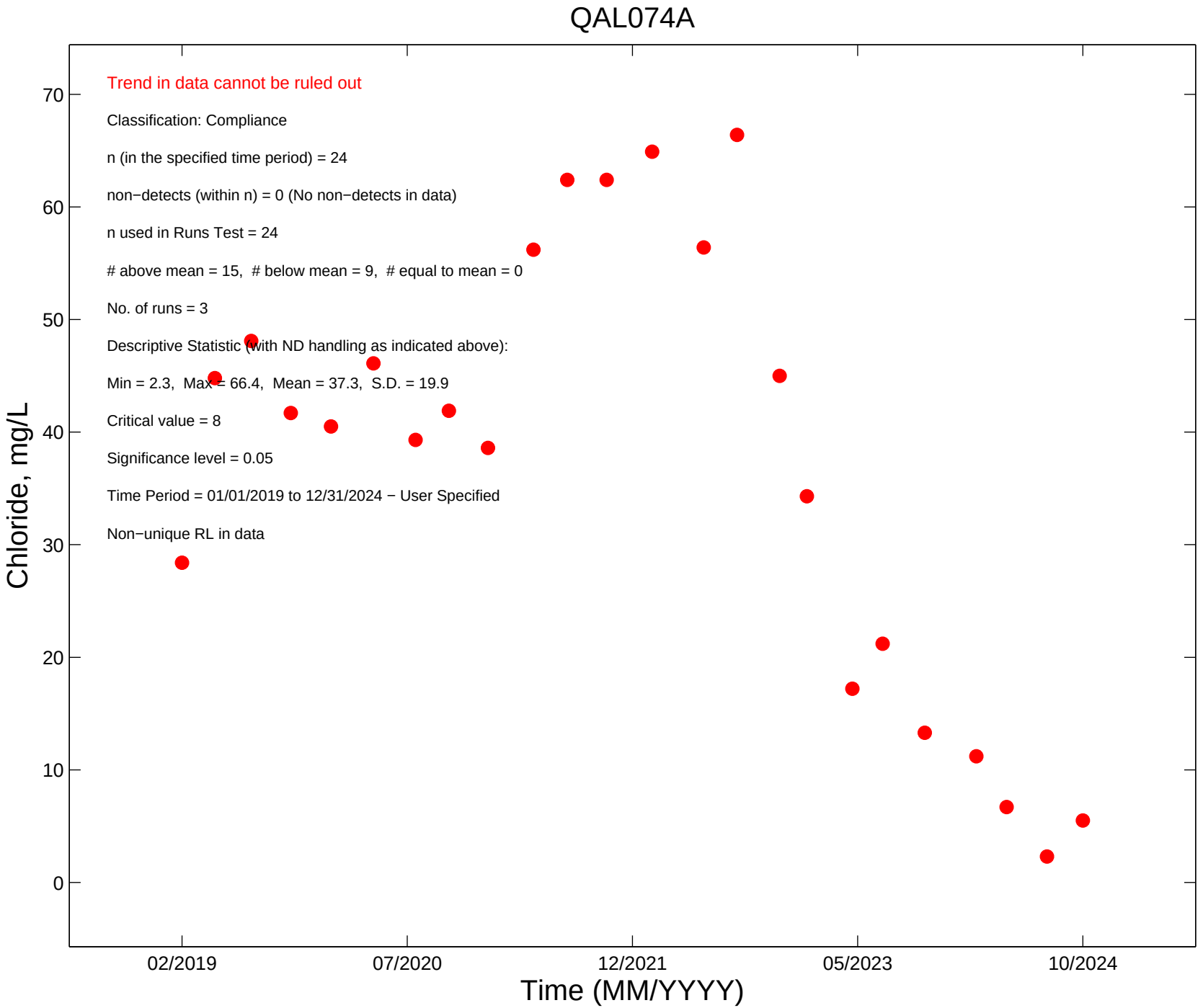

QAL071A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 11, # below mean = 13, # equal to mean = 0
No. of runs = 7
Descriptive Statistic (with ND handling as indicated above):
Min = 5.8, Max = 12.6, Mean = 8.48, S.D. = 1.92
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Sulfate, mg/L
13
12
11
10
9
8
7
6
5
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

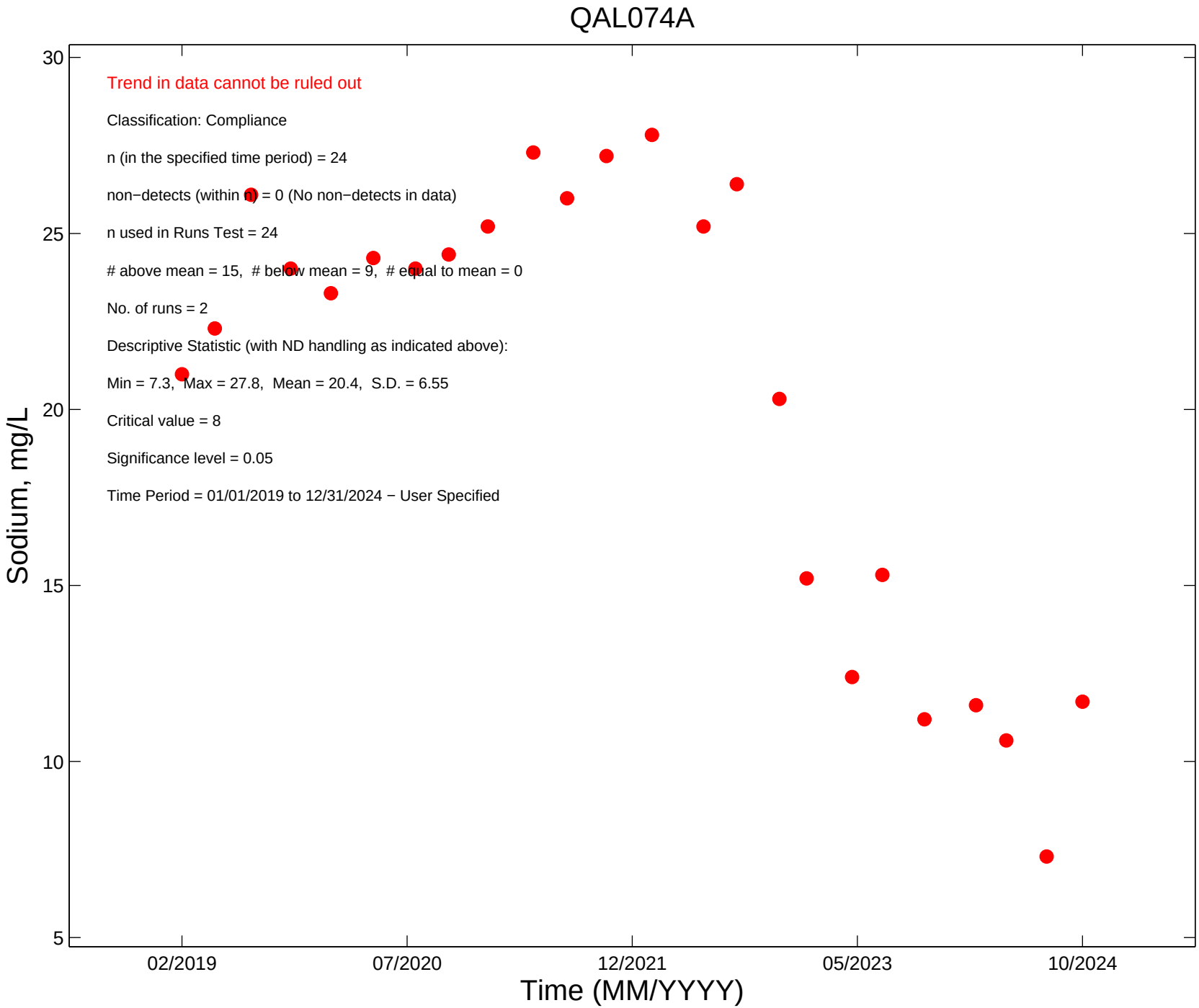

QAL073A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 14
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 14
above mean = 7, # below mean = 7, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 5.6, Max = 34, Mean = 22.2, S.D. = 8.94
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Calcium, mg/L
35
30
25
20
15
10
5
03/2011
07/2014
10/2017
01/2021
05/2024
Time (MM/YYYY)


QAL073A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 6
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 6
above mean = 2, # below mean = 4, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 78.7, Max = 196, Mean = 121, S.D. = 44.42
Critical value = 2
Significance level = 0.25
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Iron, ug/L
200
180
160
140
120
100
80
05/2019
08/2020
11/2021
02/2023
05/2024
Time (MM/YYYY)


QAL073A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 14
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 14
above mean = 7, # below mean = 7, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 1.1, Max = 7.5, Mean = 4.7, S.D. = 2
Critical value = 4
Significance level = 0.05
Time Period = 03/28/2011 to 02/06/2025 − All Available
Non−unique RL in data
Magnesium, mg/L
8
7
6
5
4
3
2
1
03/2011
07/2014
10/2017
01/2021
05/2024
Time (MM/YYYY)


QAL074A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 12, # below mean = 12, # equal to mean = 0
No. of runs = 5
Descriptive Statistic (with ND handling as indicated above):
Min = 72, Max = 110, Mean = 91.51, S.D. = 10.86
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Alkalinity, Bicarbonate, mg/L
110
105
100
95
90
85
80
75
70
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)


QAL074A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 15, # below mean = 9, # equal to mean = 0
No. of runs = 3
Descriptive Statistic (with ND handling as indicated above):
Min = 2.3, Max = 66.4, Mean = 37.3, S.D. = 19.9
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Non−unique RL in data
Chloride, mg/L
0
10
20
30
40
50
60
70
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)


QAL074A
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 24
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 24
above mean = 15, # below mean = 9, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 7.3, Max = 27.8, Mean = 20.4, S.D. = 6.55
Critical value = 8
Significance level = 0.05
Time Period = 01/01/2019 to 12/31/2024 − User Specified
Sodium, mg/L
30
25
20
15
10
5
02/2019
07/2020
12/2021
05/2023
10/2024
Time (MM/YYYY)

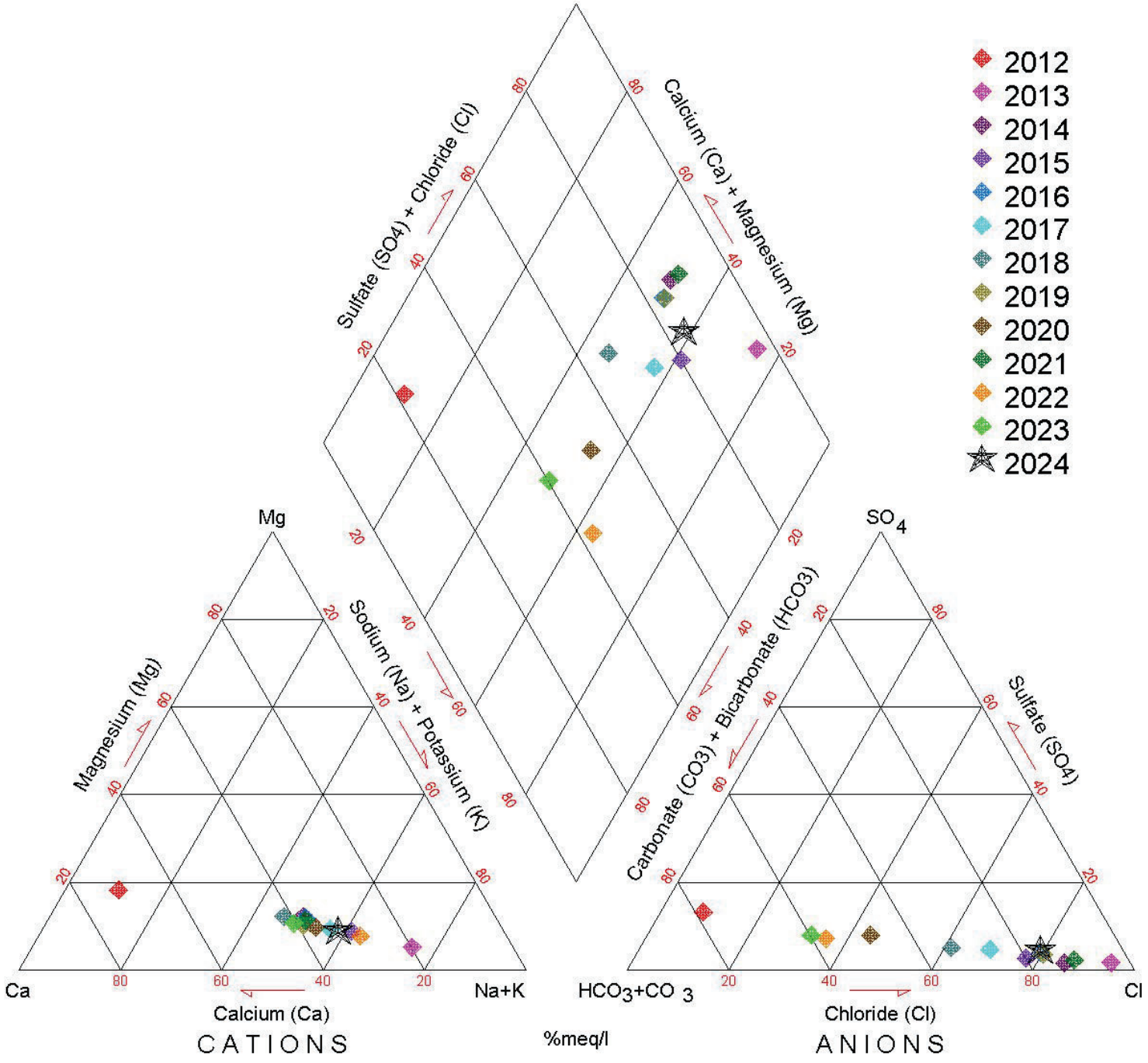
Appendix I

Eagle Mine

Groundwater Piper Diagrams

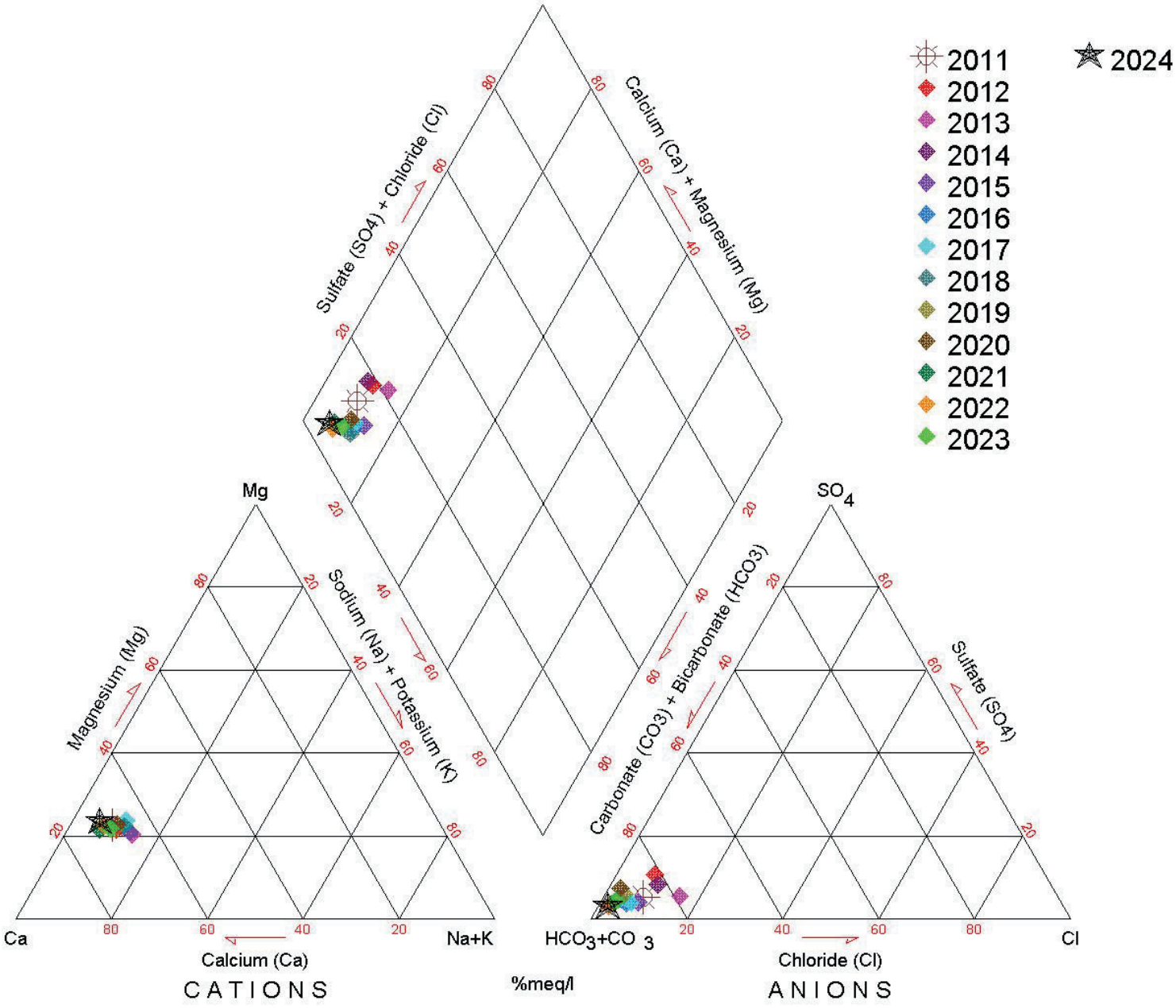
WELL QAL024A

2024 Piper Diagram



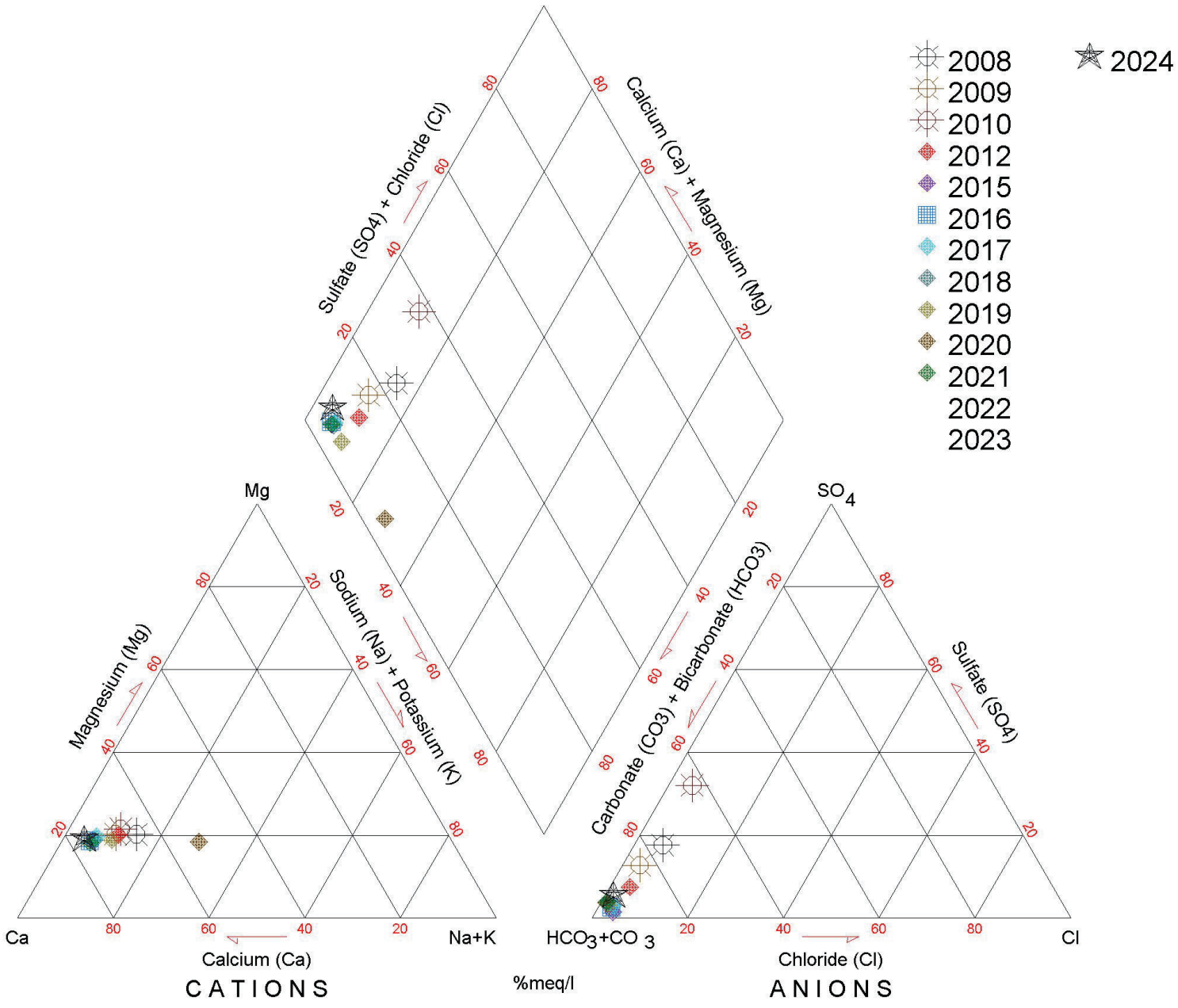
WELL QAL025A

2025 Piper Diagram



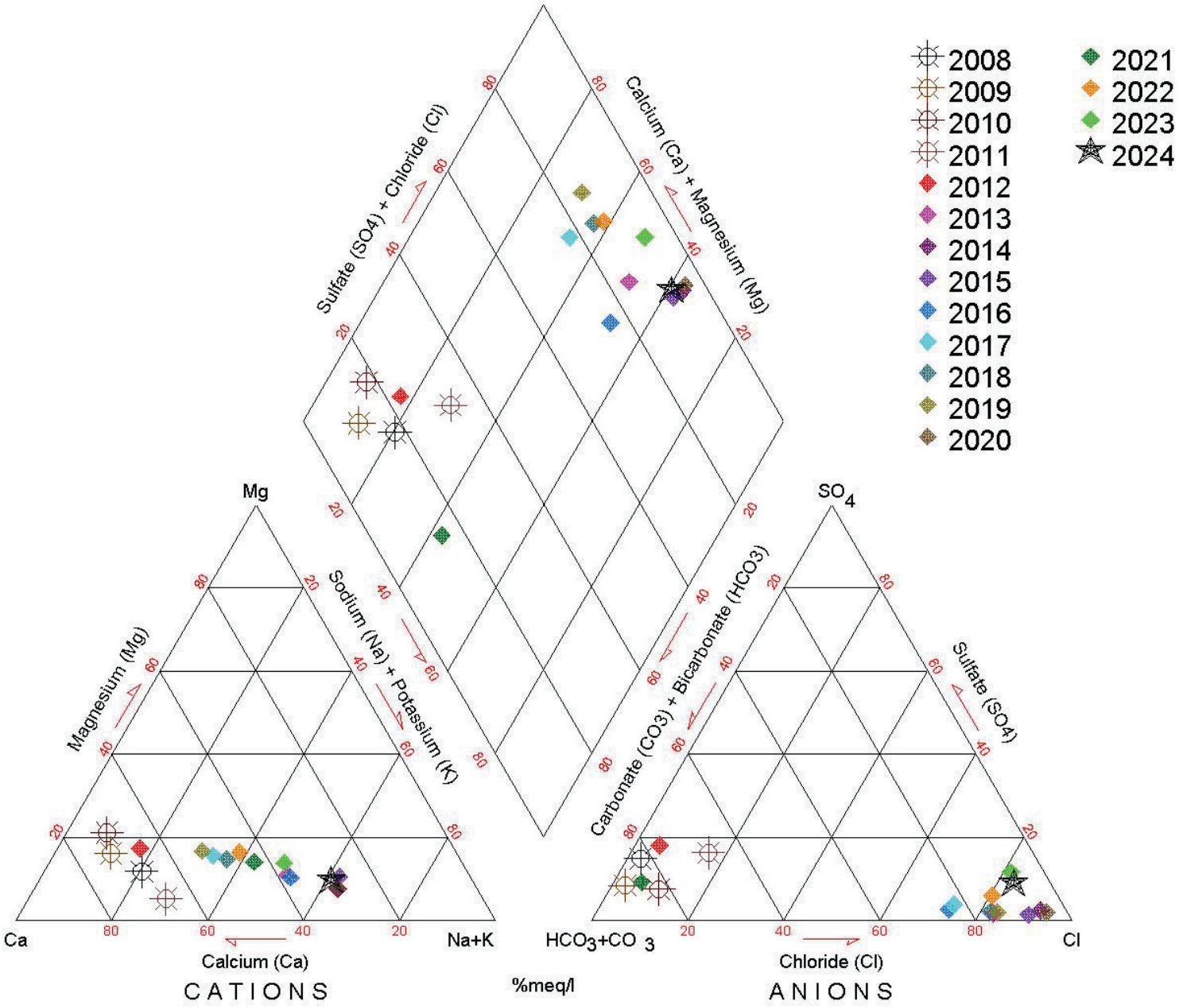
WELL QAL026A

2024 Piper Diagram



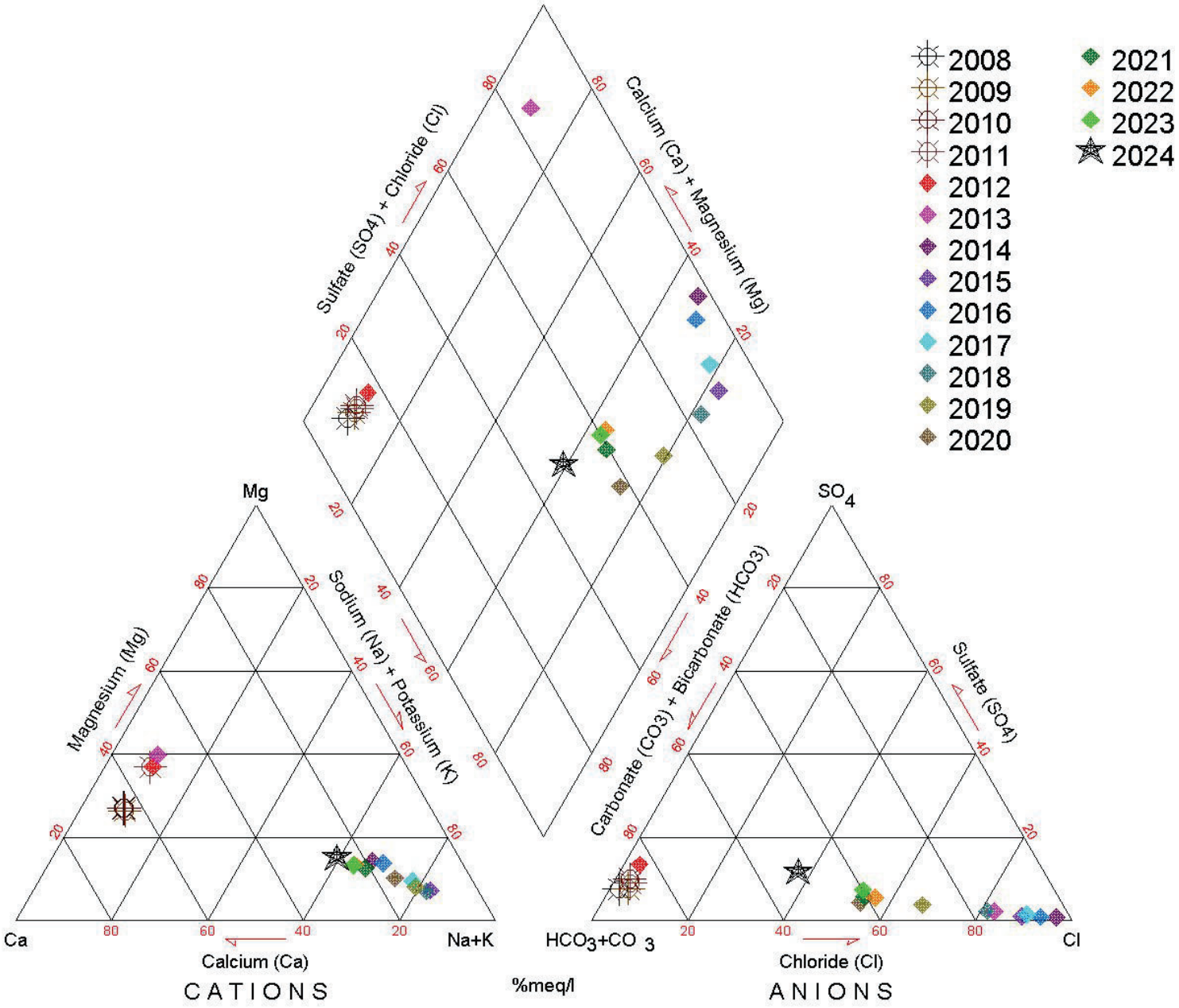
WELL QAL029A

2024 Piper Diagram



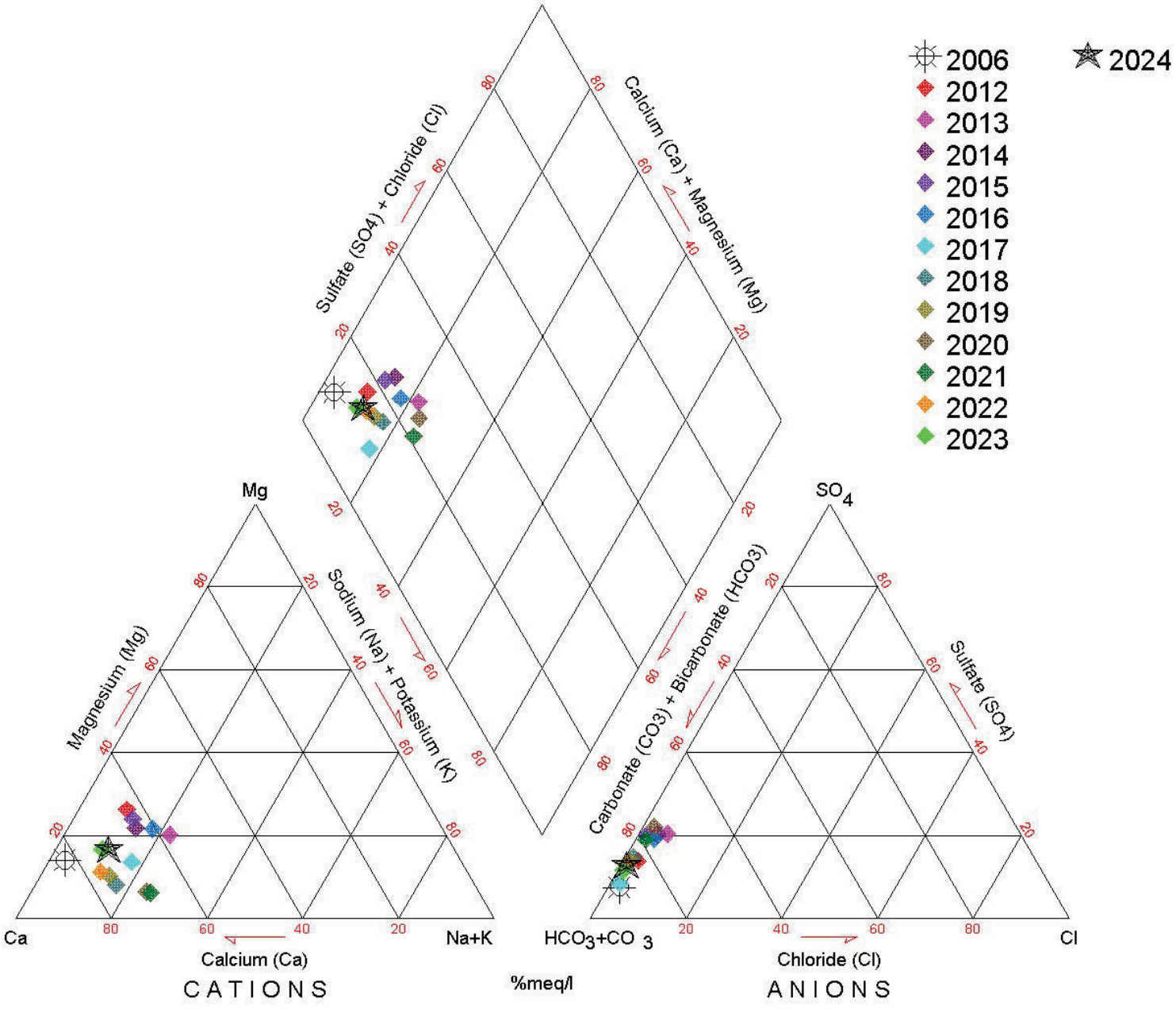
WELL QAL029D

2024 Piper Diagram



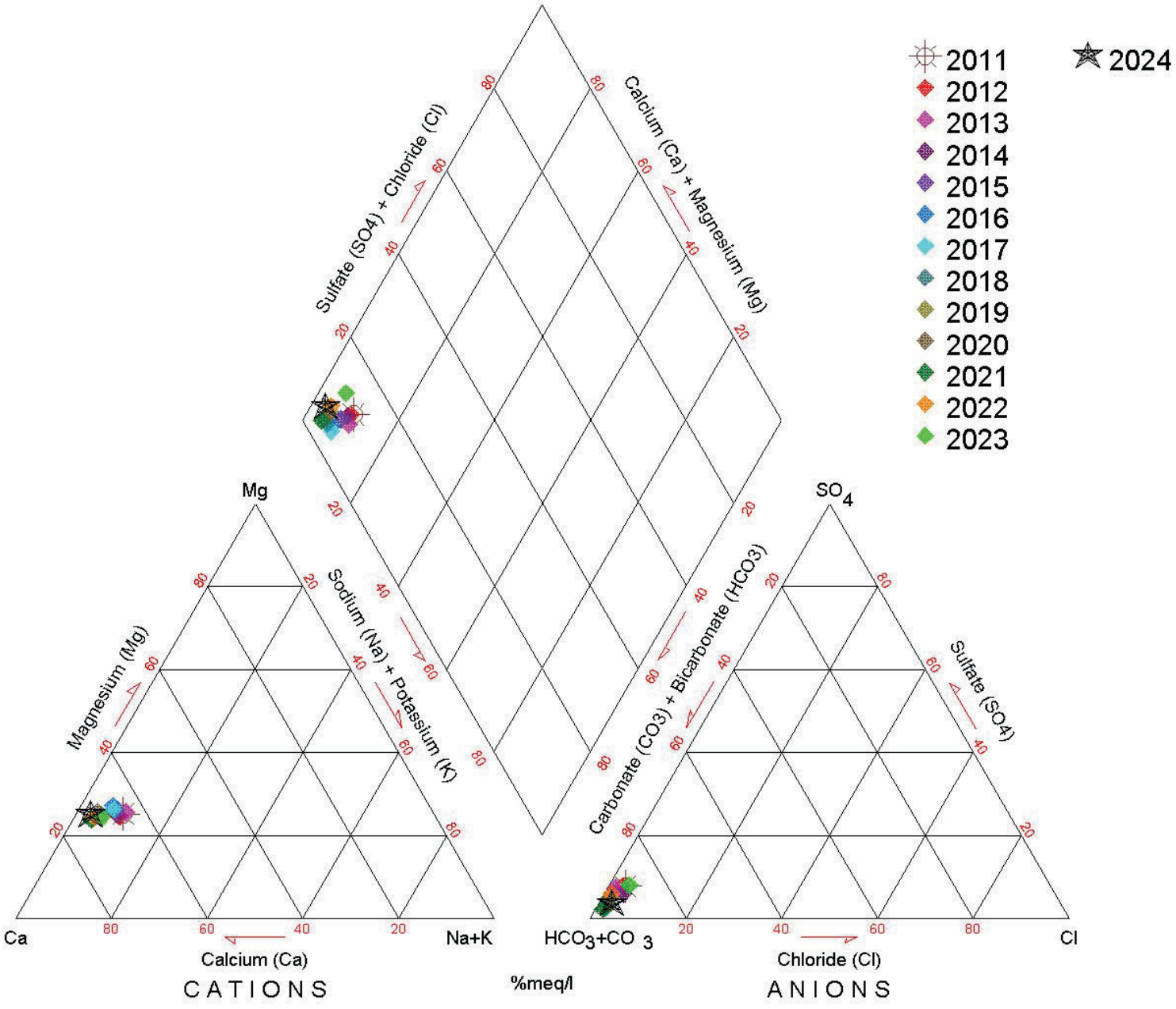
WELL QAL044B

2024 Piper Diagram



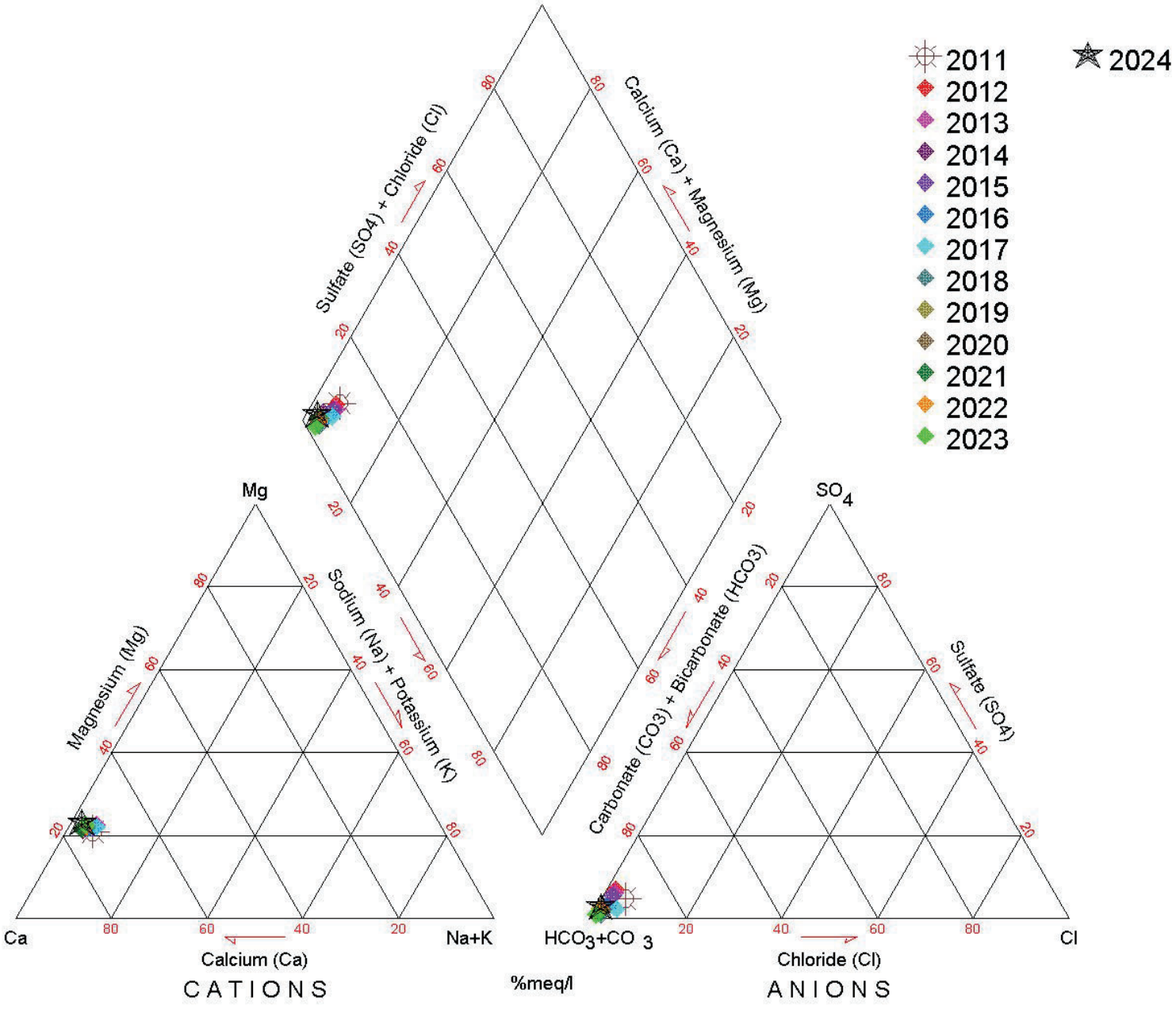
WELL QAL060A

2024 Piper Diagram



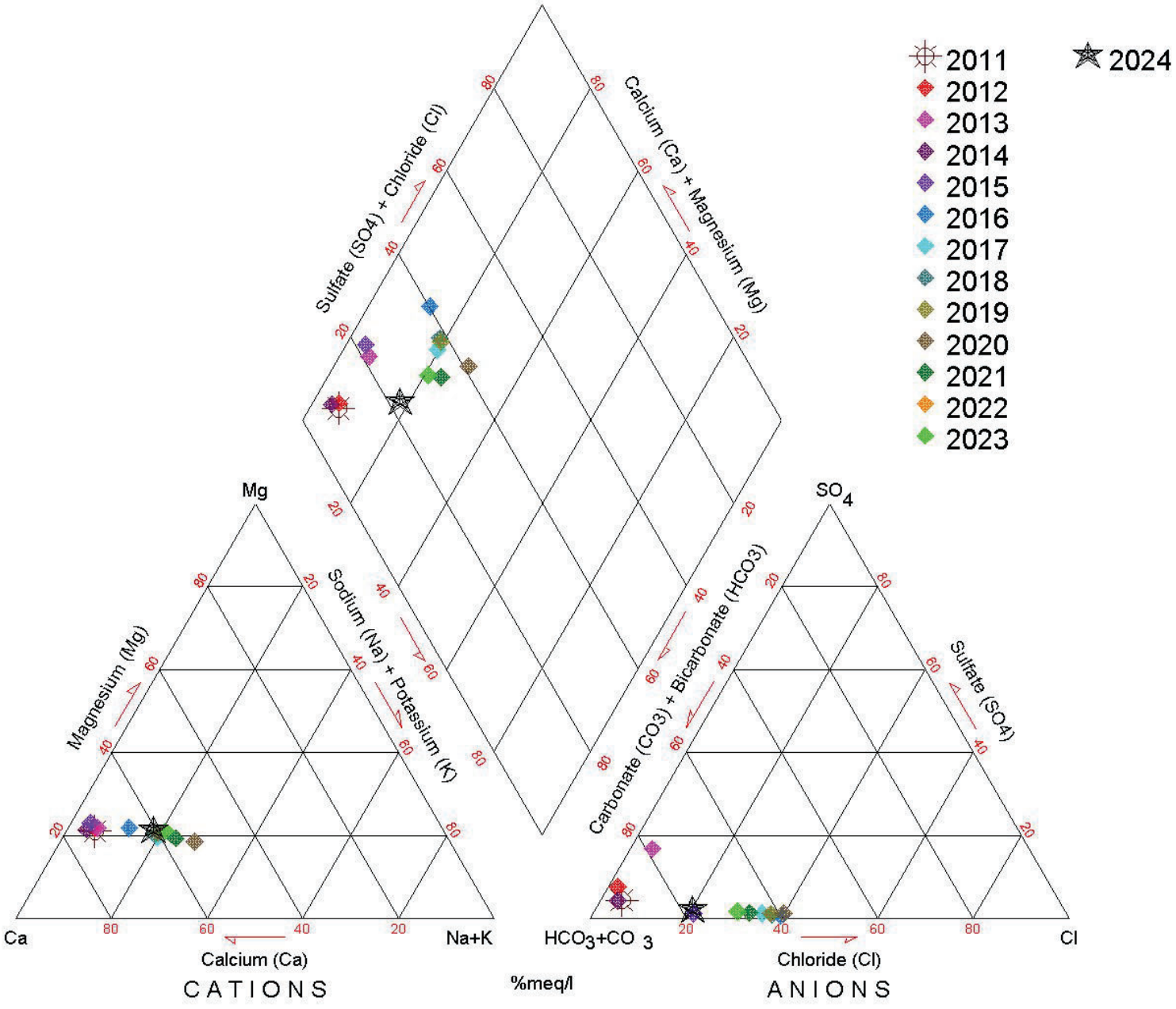
WELL QAL061A

2024 Piper Diagram



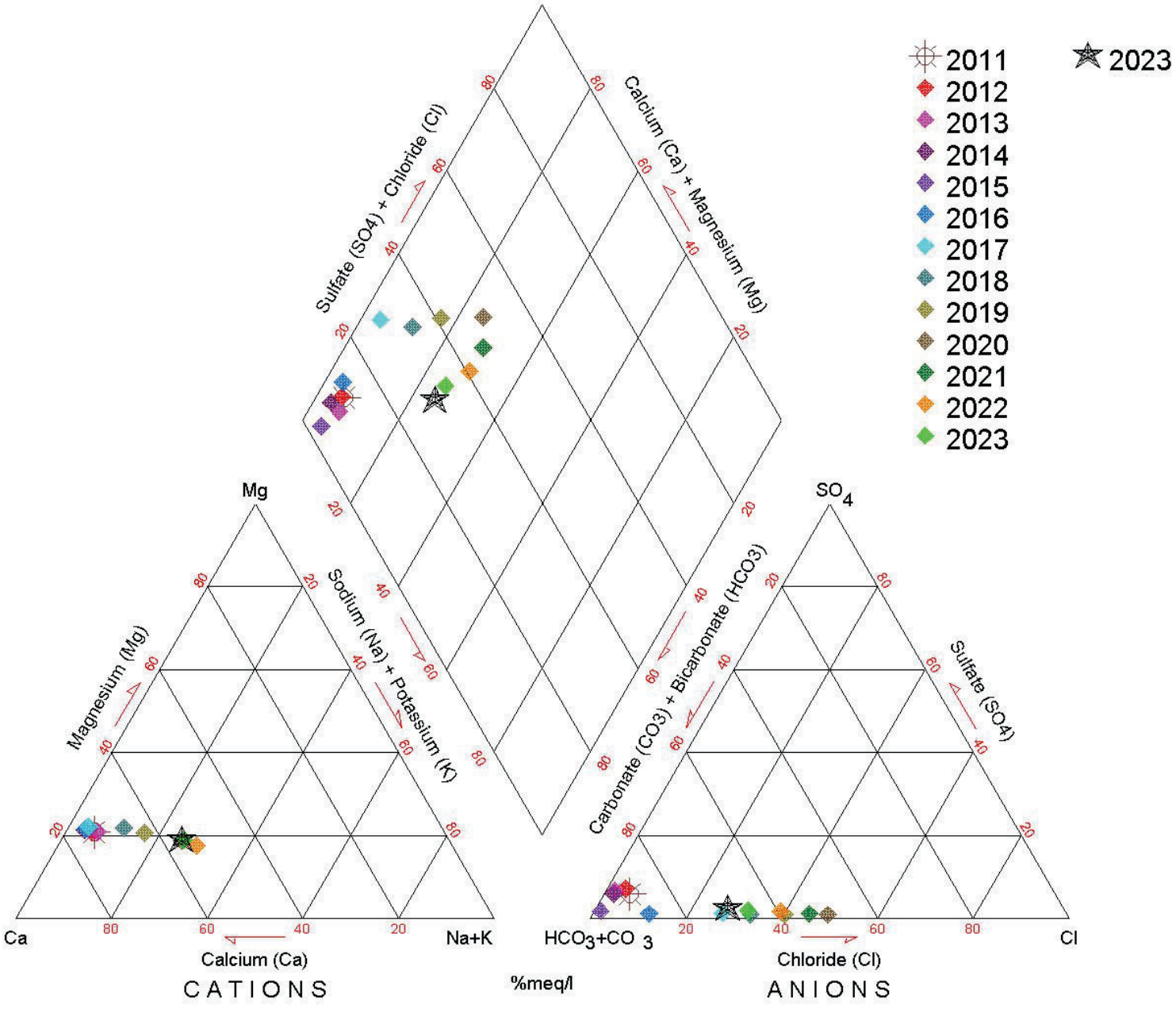
WELL QAL062A

2024 Piper Diagram



WELL QAL063A

2024 Piper Diagram



WELL QAL064D

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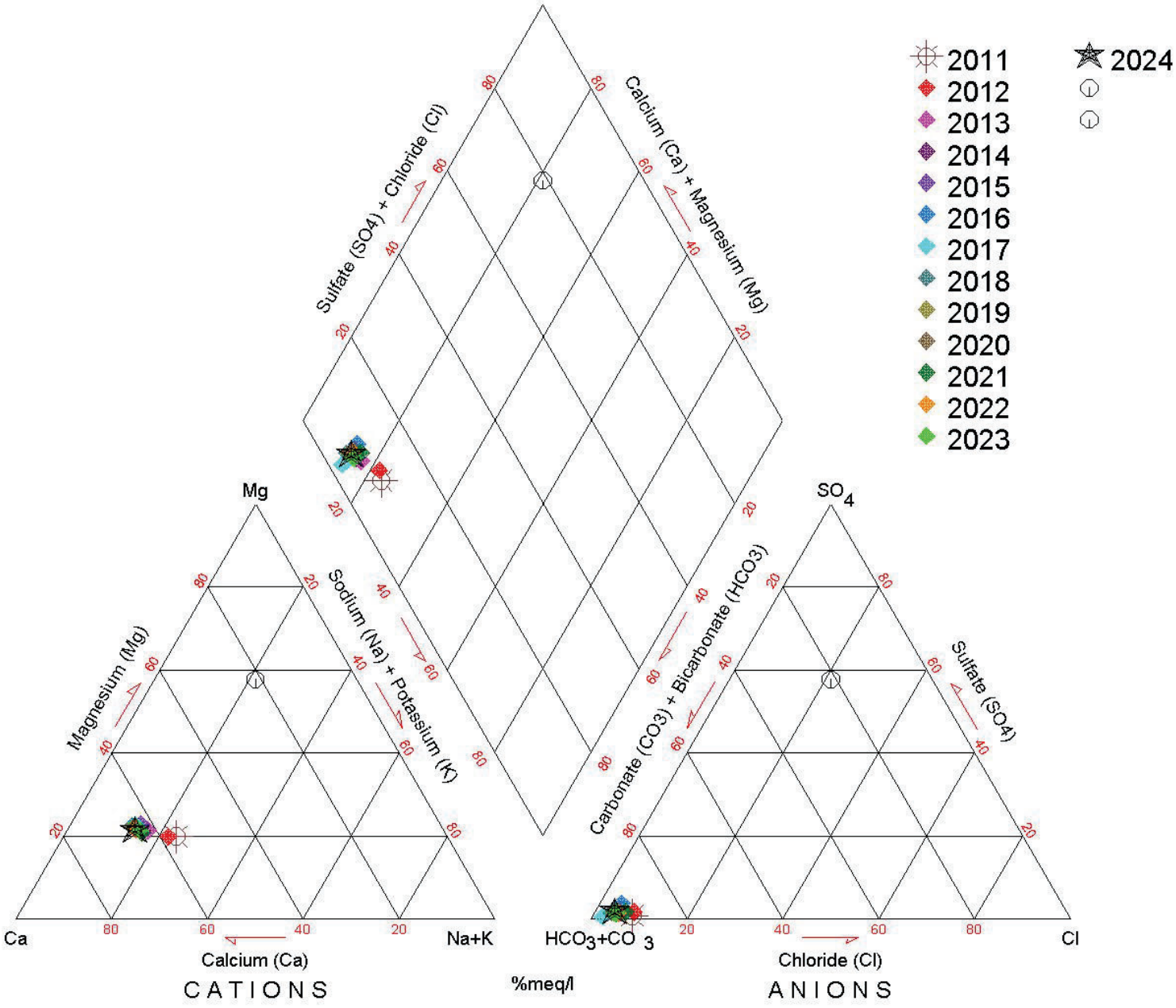
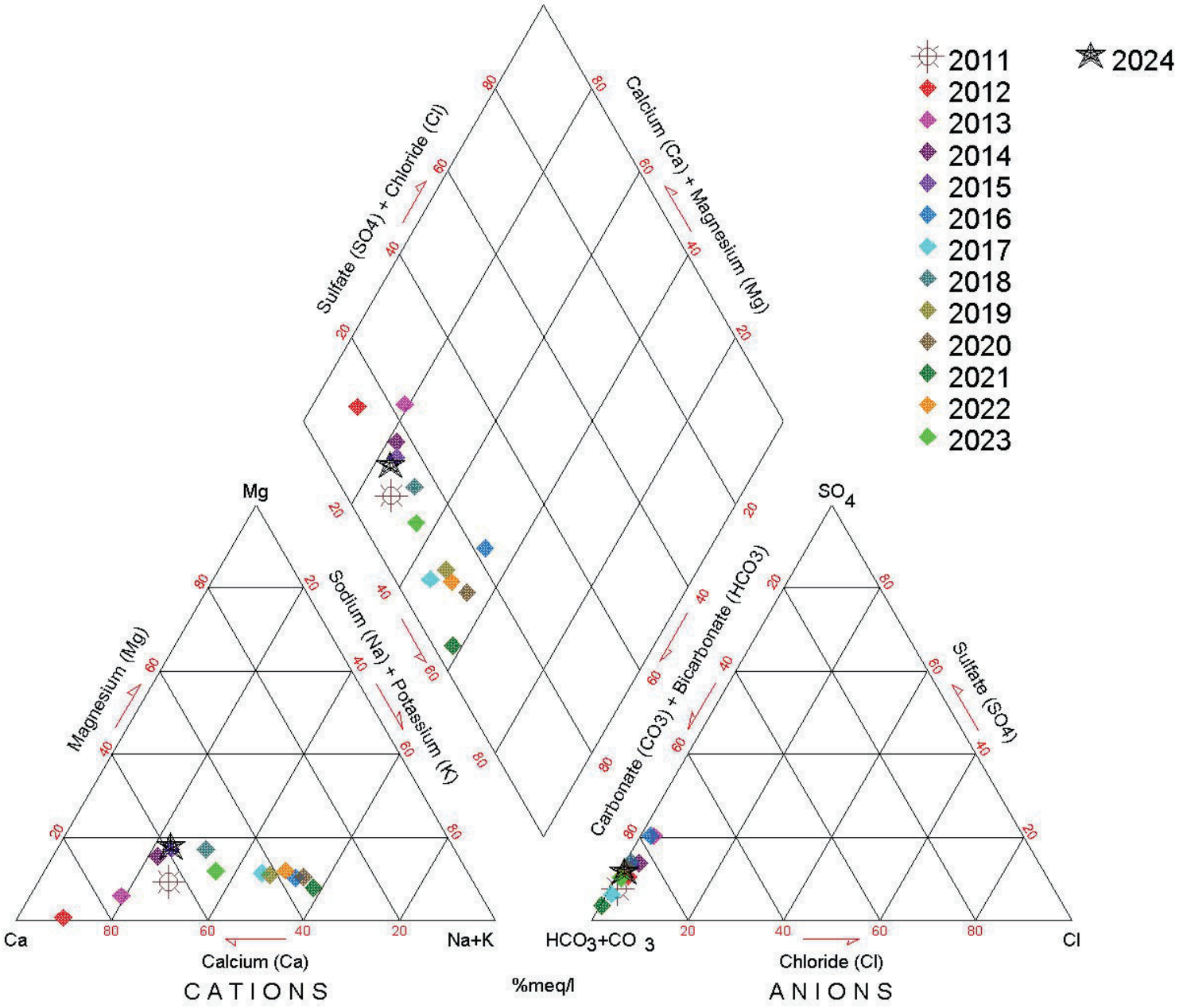


WELL QAL066D

2024 Piper Diagram



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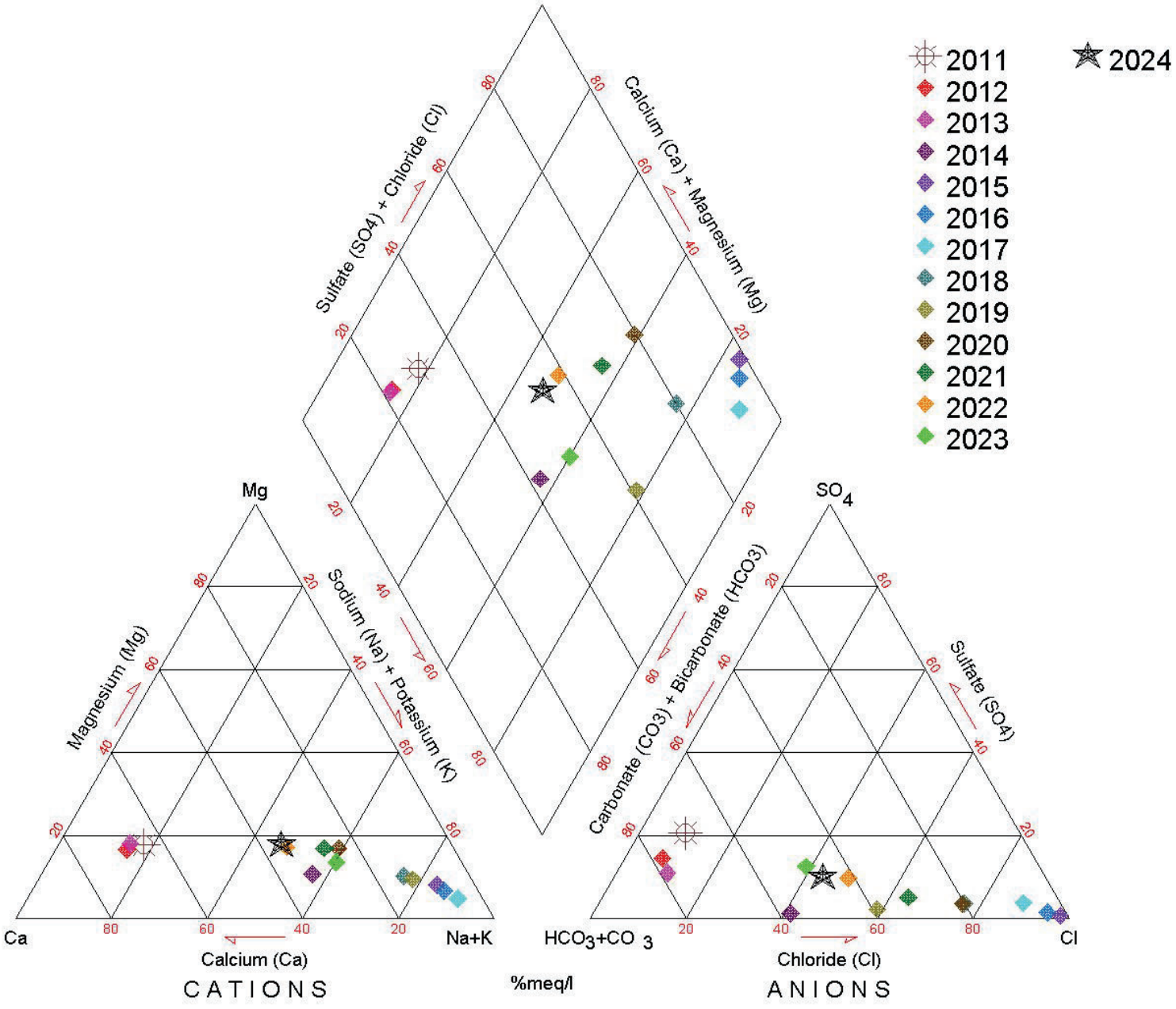
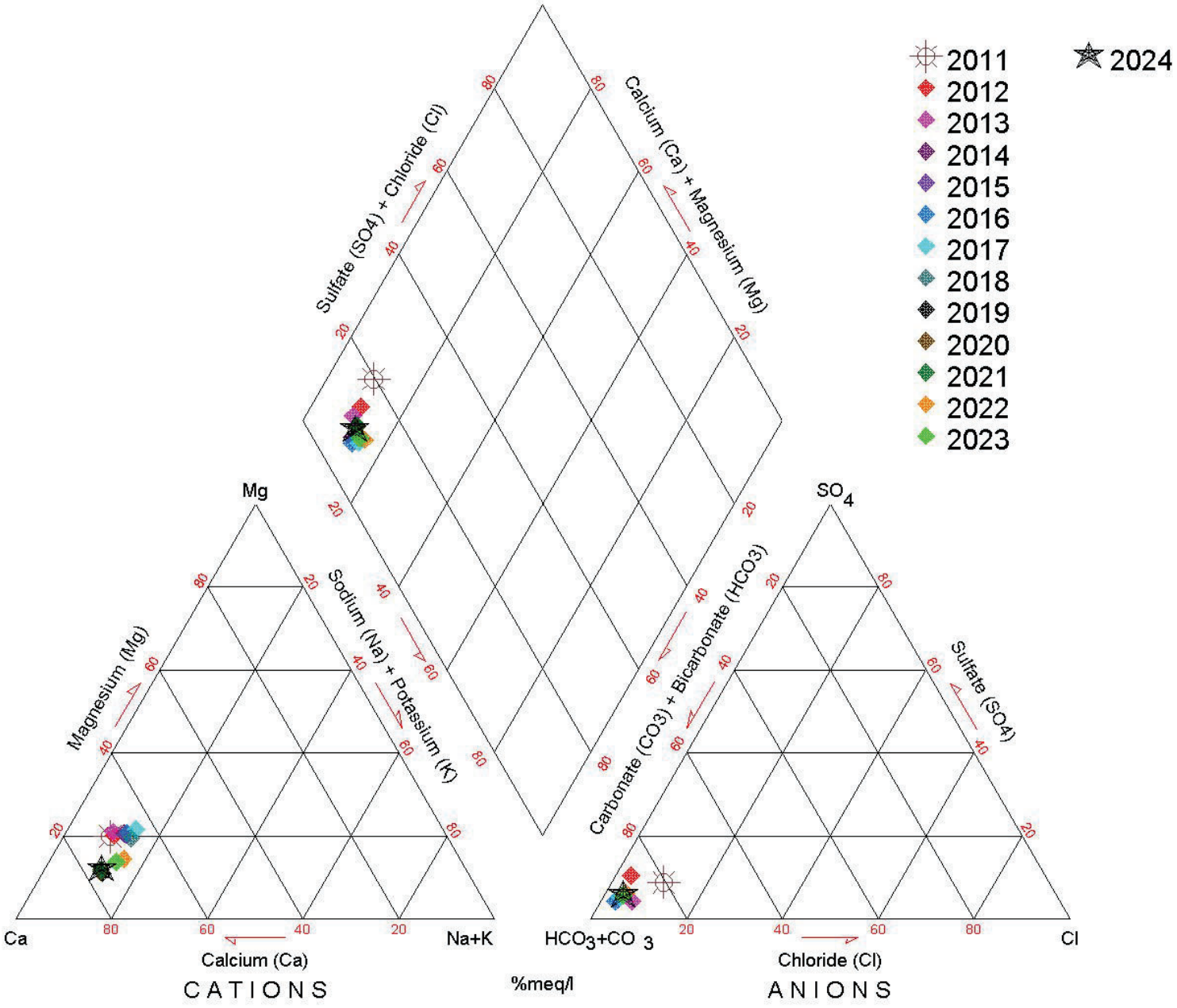


WELL QAL068A

2024 Piper Diagram



WELL QAL069A

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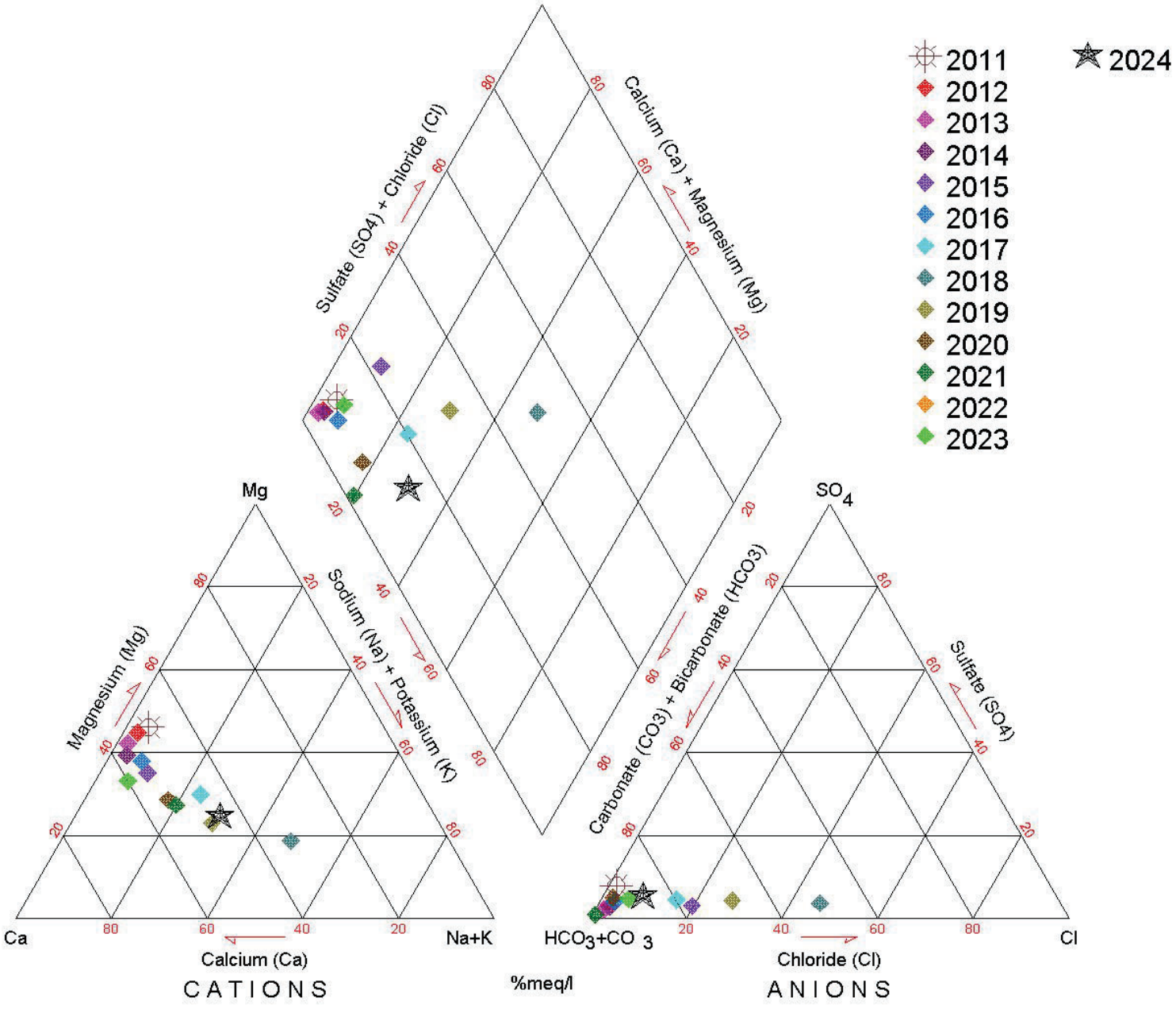
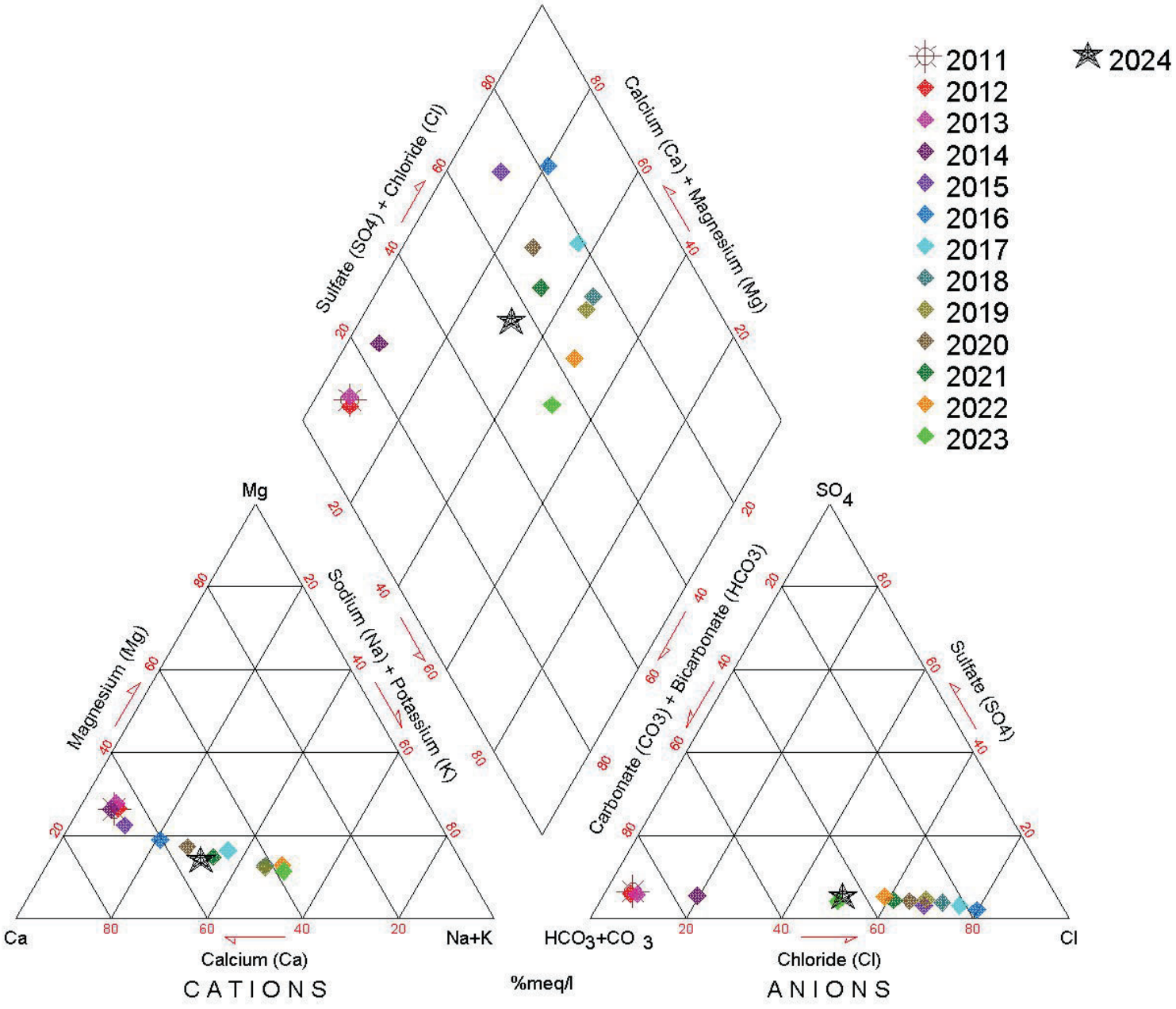


WELL QAL070A

2024 Piper Diagram



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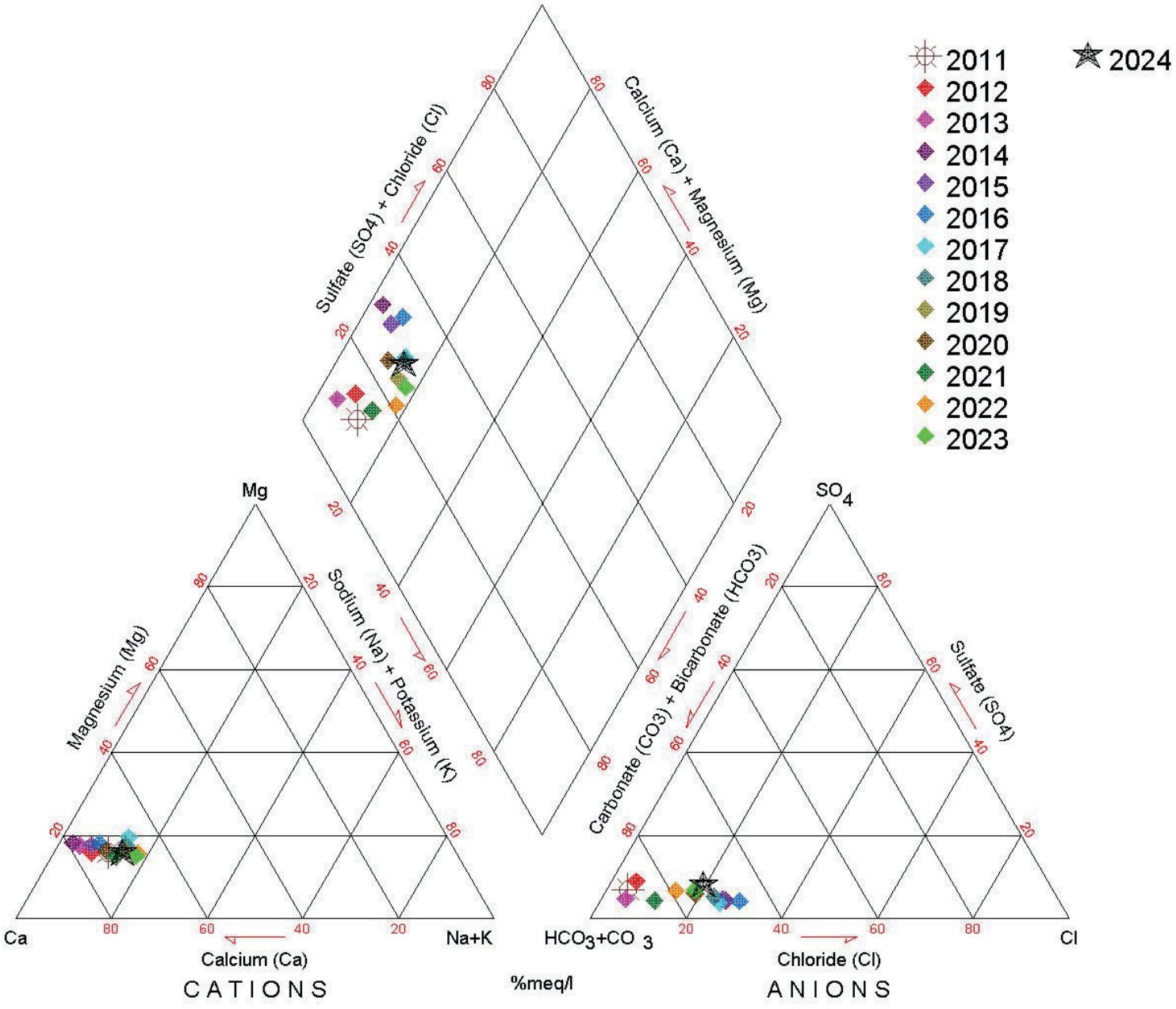
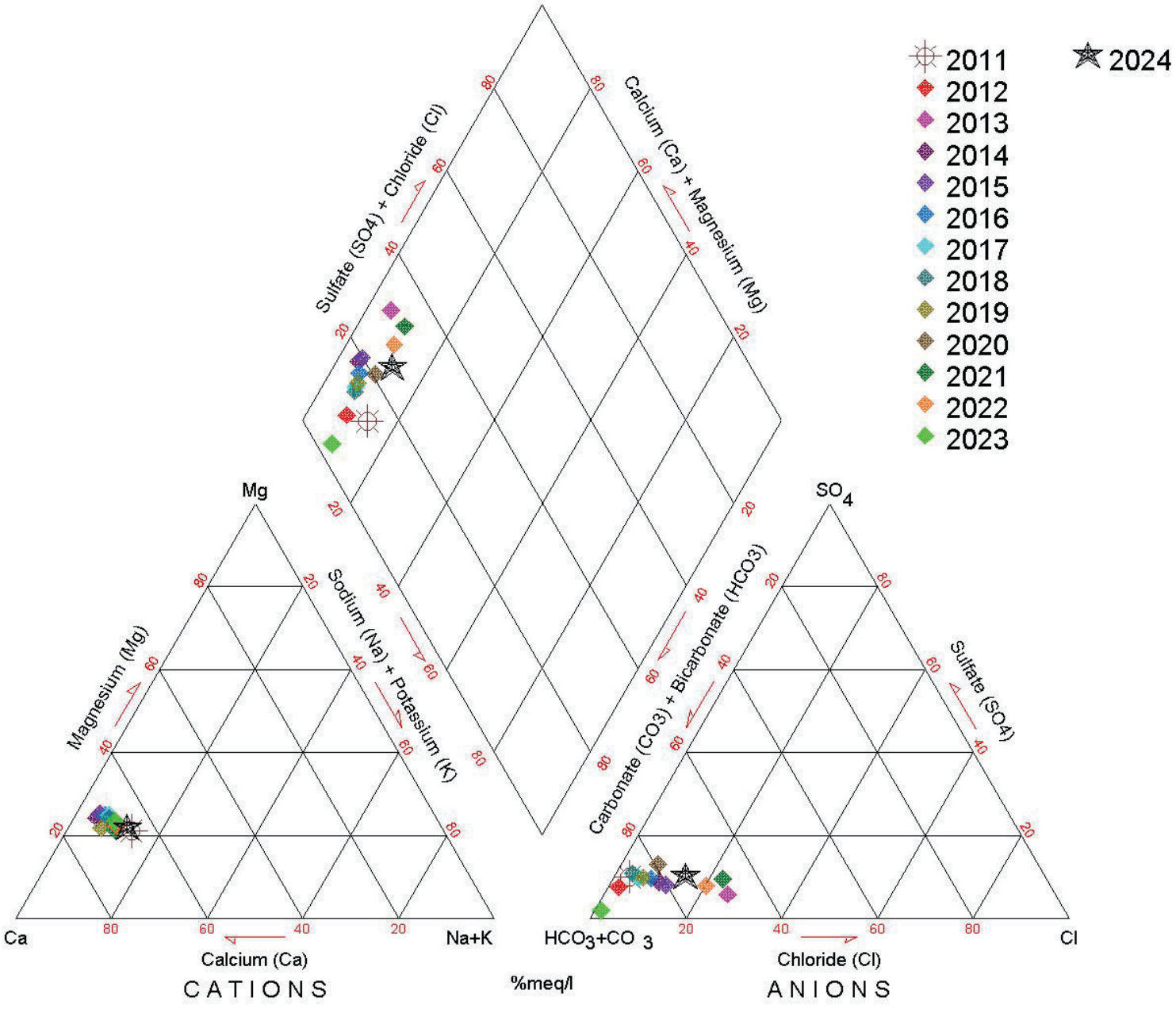
2024 Piper Diagram



WELL QAL073A

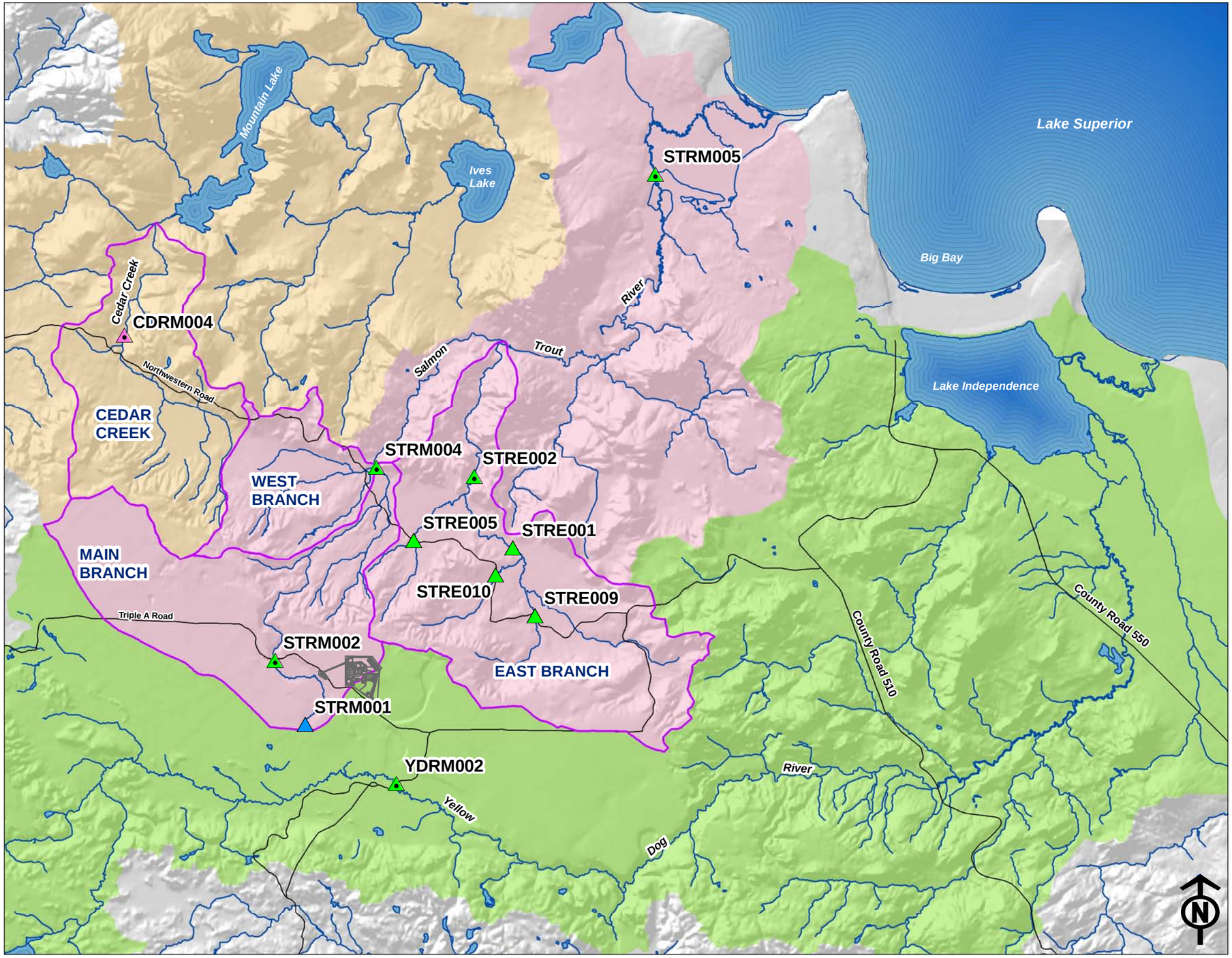
2024 Piper Diagram



Appendix J

Eagle Mine

Surface Water Location Map



MINE PERMIT SURFACE WATER MONITORING LOCATIONS

- COMPLIANCE WATER QUALITY
- BACKGROUND WATER QUALITY
- REFERENCE WATER QUALITY
- *Instrumented for continuous monitoring*
- PINE RIVER WATERSHED
- SALMON TROUT RIVER WATERSHED
- YELLOW DOG RIVER WATERSHED
- SUBWATERSHED
- ROAD
- HYDROGRAPHY
- MINE FACILITY

Reference

Data provided by: Eagle Mine and North Jackson Company

Projection & Datum: UTM NAD 83 Zone 16N

0 1 2 Miles

Scale: 1:90,000

Eagle Mine
a subsidiary of lundin mining

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Appendix K

Eagle Mine

Surface Water Results and Benchmark Summary Table

2024
Mine Permit Surface Water Quality Monitoring Data
Benchmark Summary Table

Location	Location Classifcation	Q1	Q2	Q3	Q4
STRM001	Background	pH	pH	pH	
STRM002	Compliance	pH		pH, Copper, Mercury	
STRM004	Compliance		pH, Alkalinity Bicarbonate, Calcium		pH
STRM005	Compliance	Iron	pH, Alkalinity Bicarbonate, Calcium, Magnesium, Hardness	pH	
STRE001	Compliance	Iron		Iron	
STRE002	Compliance				
STRE005	Compliance	Mercury	Alkalinity Bicarbonate, Calcium, Magnesium, Hardness		
STRE009	Compliance		pH, Alkalinity Bicarbonate, Calcium, Magnesium, Hardness		
STRE010	Compliance		Alkalinity Bicarbonate, Calcium, Magnesium, Hardness		Iron
YDRM002	Compliance	Mercury		Mercury	
CDRM004	Reference	pH			

Parameters listed in this table had values reported that were equal to or greater than a site-specific benchmark.

2024
Mine Permit Surface Water Quality Monitoring Data
STRM001 (Background)
Eagle Mine

Parameter	Unit	Permit RL	STRM001 Seasonal Benchmark				STRM001 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/12/24		06/10/24		08/28/24		10/22/24	
Field														
D.O.	ppm	--	--	--	--	--	**6.0**		**3.4**		**2.3**		**2.8**	
Flow	cfs	--	--	--	--	--	<0.10		**0.10**		**0.60**		<0.10	
pH	SU	--	6.2-7.2	6.2-7.2	6.2-7.2	6.0-7.0	**5.6**		**5.7**		**5.8**		**6.7**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**30.0**		**45.0**		**59.0**		**45.0**	
Temperature	°C	--	--	--	--	--	**0.50**		**11.0**		**17.0**		**11.0**	
Metals														
Aluminum	ug/L	50.0	--	200	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Barium	ug/L	10.0	--	40.0	--	--	--		**11.3**		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		**1.0**	
Iron	ug/L	20.0	875	1,616	6,195	675	**282**	e	**453**		**1340**		**530**	
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	44.0	179	392	40.0	**11.2**		**17.2**		**92.7**		**31.9**	
Mercury	ng/L	0.50	2.0	3.6	2.9	2.0	**0.74**		**0.88**		**0.93**		**0.51**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	40.0	--	--	--		**19.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	7.3	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	4.0	10.0	4.0	4.0	**1.2**	e	<1.0	e	<1.0		<1.0	
Major Cations														
Calcium	mg/L	0.50	--	11.0	--	--	--		**6.0**		--		--	
Magnesium	mg/L	0.50	--	2.4	--	--	--		**1.3**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		<0.50		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		<1.0		--		--	
General														
Hardness	mg/L	3.0	--	36.0	--	--	--		**20.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	<50.0		<50.0		<50.0	e	<50.0	e

2024
Mine Permit Surface Water Quality Monitoring Data
STRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM002 Seasonal Benchmark				STRM002 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/20/24		06/11/24		08/28/24		10/22/24	
Field														
D.O.	ppm	--	--	--	--	--	**12.0**		**9.4**		**7.4**		**9.4**	
Flow	cfs	--	--	--	--	--	**1.6**		**1.8**		**2.2**		**1.0**	
pH	SU	--	6.8-7.8	6.5-7.5	6.3-7.3	6.5-7.5	**6.7**		**6.5**		**8.7**		**6.6**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**54.0**		**66.0**		**75.0**		**66.0**	
Temperature	°C	--	--	--	--	--	**2.3**		**9.3**		**16.0**		**9.8**	
Metals														
Aluminum	ug/L	50.0	--	200	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Barium	ug/L	10.0	--	40.0	--	--	--		**10.4**		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	304	651	703	504	**211**	e	**365**		**792**		**140**	
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40.0	58.0	40.0	40.0	<10.0		**22.9**		**38.1**		<10.0	
Mercury	ng/L	0.50	2.0	5.8	2.4	2.8	**1.7**		**1.4**		**2.7**		**0.67**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	250	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	34.0	--	--	--		**29.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	4.0	6.2	4.0	4.0	**1.7**	e	**1.3**	e	**1.1**		**1.6**	
Major Cations														
Calcium	mg/L	0.50	--	10.3	--	--	--		**9.4**		--		--	
Magnesium	mg/L	0.50	--	2.0	--	--	--		**1.9**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		<0.50		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		<1.0		--		--	
General														
Hardness	mg/L	3.0	--	32.0	--	--	--		**31.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	<50.0		<50.0		<50.0	e	<50.0	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
STRM004 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM004 Seasonal Benchmark				STRM004 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/13/24		06/11/24		08/26/24		10/22/24	
Field														
D.O.	ppm	--	--	--	--	--	**13.0**		**11.0**		**8.3**		**9.3**	
Flow	cfs	--	--	--	--	--	**7.3**		**5.0**		**4.1**		**4.5**	
pH	SU	--	7.0-8.0	7.3-8.3	7.2-8.2	7.2-8.2	**7.4**		**7.2**		**7.2**		**7.1**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**89.0**		**111**		**118**		**104**	
Temperature	°C	--	--	--	--	--	**3.4**		**11.0**		**18.0**		**13.0**	
Metals														
Aluminum	ug/L	50.0	--	993	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		**1.1**		**1.6**		**1.0**	
Barium	ug/L	10.0	--	40	--	--	--		<10.0		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	312	984	500	406	**226**	e	**186**		**226**		**179**	
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40.0	61.0	40.0	40.0	**13.4**		**14.9**		**15.7**		**17.5**	
Mercury	ng/L	0.50	2.5	14.2	3.5	2.9	**2.0**		**1.2**		**1.0**		**1.1**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	52.0	--	--	--		**52.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	4.5	4.0	4.0	4.0	**2.0**	e	**1.9**	e	**1.7**		**2.0**	
Major Cations														
Calcium	mg/L	0.50	--	16.0	--	--	--		**16.3**		--		--	
Magnesium	mg/L	0.50	--	3.0	--	--	--		**2.9**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		<0.50		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		**1.0**		--		--	
General														
Hardness	mg/L	3.0	--	54.0	--	--	--		**53.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	< 50.0		<50.0		<50.0	e	**55.0**	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
STRM005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM005 Seasonal Benchmark				STRM005 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/13/24		06/10/24		08/26/24		10/22/24	
Field														
D.O.	ppm	--	--	--	--	--	**13.0**		**11.0**		**11.0**		**9.5**	
Flow	cfs	--	--	--	--	--	**60.0**		**32.0**		**32.0**		**28.0**	
pH	SU	--	7.1-8.1	6.6-7.6	6.6-7.6	7.2-8.2	**7.5**		**7.8**		**8.1**		**7.3**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**109**		**157**		**163**		**144**	
Temperature	°C	--	--	--	--	--	**3.4**		**13.0**		**19.0**		**11.0**	
Metals														
Aluminum	ug/L	50.0	--	568	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		**1.1**		<1.0	
Barium	ug/L	10.0	--	40.0	--	--	--		**12.9**		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	**<1.0**		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	166	470	201	309	**212**	e	**141**		**181**		**243**	
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40.0	40.0	40.0	40.0	**13.3**		**12.2**		<10.0		**10.5**	
Mercury	ng/L	0.50	2.0	11.2	2.0	2.5	**1.8**		**0.79**		**0.59**		**0.62**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	89.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	66.0	--	--	--		**72.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	6.6	4.0	4.0	4.0	**2.6**	e	**2.9**	e	**2.7**		**2.9**	
Major Cations														
Calcium	mg/L	0.50	--	19.0	--	--	--		**21.6**		--		--	
Magnesium	mg/L	0.50	--	3.9	--	--	--		**4.2**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		**0.65**		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		**1.2**		--		--	
General														
Hardness	mg/L	3.0	--	65.0	--	--	--		**71.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	< 50.0		**57.0**		**61.0**	e	**72.0**	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
STRE001 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE001 Seasonal Benchmark				STRE001 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/13/24		06/11/24		08/26/24		10/23/24	
Field														
D.O.	ppm	--	--	--	--	--	**12.0**		**11.0**		**10.0**		**9.7**	
Flow	cfs	--	--	--	--	--	**16.0**		**12.0**		**13.0**		**13.0**	
pH	SU	--	7.3-8.3	7.0-8.0	7.1-8.1	7.2-8.2	**7.6**		**7.3**		**7.7**		**7.3**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**124**		**156**		**158**		**140**	
Temperature	°C	--	--	--	--	--	**5.1**		**7.2**		**15.0**		**9.0**	
Metals														
Aluminum	ug/L	50.0	--	339	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		**1.1**		**1.4**		**1.1**	
Barium	ug/L	10.0	--	40.0	--	--	--		**12.0**		**--**		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40	40.0	40	40	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	96	327	109	160	**124**	e	**68.2**	J	**118**		**93.5**	J
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40	40.0	40	94	**10.8**		**14.7**		**22.2**		**13.0**	
Mercury	ng/L	0.50	2.0	8.6	2.0	2.2	**0.98**		**0.65**		**0.78**		**0.74**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	81.0	--	--	--		**71.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	6.1	4.0	4.0	4.0	**3.0**	e	**3.2**	e	**3.0**		**3.0**	
Major Cations														
Calcium	mg/L	0.50	--	24.0	--	--	--		**21.5**		--		--	
Magnesium	mg/L	0.50	--	4.6	--	--	--		**4.2**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		**0.50**		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		**1.2**		--		--	
General														
Hardness	mg/L	3.0	--	78.0	--	--	--		**71.0**		**--**		**--**	
TDS	mg/L	50.0	200	200	200	200	<50.0		<50.0		**54.0**	e	**66.0**	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
STRE002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE002 Seasonal Benchmark				STRE002 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/25/24		6/11/24		8/28/24		10/23/24	
Field														
D.O.	ppm	--	--	--	--	--	**14.0**		**11.0**		**10.0**		**11.0**	
Flow	cfs	--	--	--	--	--	**16.0**		**13.0**		**19.0**		**18.0**	
pH	SU	--	7.3-8.3	7.6-8.6	7.4-8.4	7.2-8.2	**7.5**		**7.6**		**7.4**		**7.6**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**134**		**159**		**159**		**142**	
Temperature	°C	--	--	--	--	--	**0.60**		**8.1**		**13.0**		**9.4**	
Metals														
Aluminum	ug/L	50.0	--	200	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		**1.2**		**1.4**		**1.2**	
Barium	ug/L	10.0	--	40.0	--	--	--		**11.2**		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40	40	40	40	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	165	194	191	182	**78.6**	e,J	**53.4**	J	**144**		**96.6**	J
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		**11.6**		**19.5**		**16.7**	
Mercury	ng/L	0.50	2.0	4.8	2.0	2.0	**0.92**		**0.54**		**0.98**		**0.77**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	81.0	--	--	--		**73.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	5.7	4.0	4.0	4.0	**3.4**	e	**3.3**	e	**2.7**		**3.1**	
Major Cations														
Calcium	mg/L	0.50	--	24.0	--	--	--		**22.4**		--		--	
Magnesium	mg/L	0.50	--	4.7	--	--	--		**4.4**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		<0.50		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		**1.3**		--		--	
General														
Hardness	mg/L	3.0	--	80.0	--	--	--		**74.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	< 50.0		**58.0**		**63.0**	e	**69.0**	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
STRE005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE005 Seasonal Benchmark				STRE005 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/12/24		06/10/24		08/28/24		10/22/24	
Field														
D.O.	ppm	--	--	--	--	--	**12.0**		**10.0**		**9.5**		**9.1**	
Flow	cfs	--	--	--	--	--	**1.0**		**0.30**		**1.1**		**0.30**	
pH	SU	--	7.1-8.1	6.8-7.8	7.3-8.3	7.0-8.0	**7.5**		**7.6**		**7.6**		**7.4**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**120**		**176**		**175**		**159**	
Temperature	°C	--	--	--	--	--	**4.0**		**11.0**		**15.0**		**13.0**	
Metals														
Aluminum	ug/L	50.0	--	1,722	--	--	--		**83.9**	e	**--**		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		**--**		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		**<1.0**		<1.0	
Barium	ug/L	10.0	--	40.0	--	--	--		**11.5**		**--**		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		**--**		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		**--**		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		**--**		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		**1.0**		<1.0		<1.0	
Iron	ug/L	20.0	489	1,218	501	259	**477**	e	**364**		**218**		**90.1**	J
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		**--**		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		**--**		--	
Manganese	ug/L	10.0	66.0	93.0	40.0	40.0	**47.8**		**68.5**		**27.4**		**10.5**	
Mercury	ng/L	0.50	2.0	17.2	2.0	2.0	**4.7**		**1.6**		**0.89**		**0.73**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		**--**		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	60.0	--	--	--		**82.0**		**--**		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		**--**		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		**--**		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		**--**		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		**0.09**	e	**--**		--	
Sulfate	mg/L	1.0	6.1	4.0	4.0	6.4	**2.5**	e	**1.9**	e	**2.0**		**2.0**	
Major Cations														
Calcium	mg/L	0.50	--	17.0	--	--	--		**26.3**		--		--	
Magnesium	mg/L	0.50	--	3.0	--	--	--		**4.4**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		<0.50		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		**1.1**		--		--	
General														
Hardness	mg/L	3.0	--	55.0	--	--	--		**84.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	**75.0**		**55.0**		**73.0**	e	**67.0**	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
STRE009 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE009 Seasonal Benchmark				STRE009 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runoff		Summer Baseflow		Fall Rain	
							03/12/24		06/10/24		08/28/24		10/23/24	
Field														
D.O.	ppm	--	--	--	--	--	**13.0**		**12.0**		**10.0**		**9.5**	
Flow	cfs	--	--	--	--	--	**4.5**		**4.1**		**4.8**		**4.1**	
pH	SU	--	7.3-8.3	6.9-7.9	7.2-8.2	6.8-7.8	**7.7**		**7.9**		**7.7**		**7.0**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**115**		**137**		**138**		**125**	
Temperature	°C	--	--	--	--	--	**5.2**		**9.7**		**15.0**		**8.8**	
Metals														
Aluminum	ug/L	50.0	--	405	--	--	--		<50.0	**e**	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		**1.0**		**1.1**		<1.0	
Barium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	165	400	224	114	**90.5**	e,J	**73.9**	J	**121**		**93.2**	J
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40.0	40.0	36.0	40.0	**10.6**		**14.2**		**15.5**		**11.8**	
Mercury	ng/L	0.50	2.0	6.6	2.9	2.0	**0.74**		<0.50		<0.50		**0.62**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	57.0	--	--	--		**60.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		**1.2**		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	5.7	4.0	4.0	10	**2.9**	e	**2.8**	e	**2.5**		**2.7**	
Major Cations														
Calcium	mg/L	0.50	--	17.0	--	--	--		**19.8**		--		--	
Magnesium	mg/L	0.50	--	3.3	--	--	--		**3.6**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		<0.50		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		**1.1**		--		--	
General														
Hardness	mg/L	3.0	--	56.0	--	--	--		**64.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	**84.0**		<50.0		<50.0	e	**59.0**	e

Explanations of abbreviations are included on the final page of this table.

2023
Mine Permit Surface Water Quality Monitoring Data
STRE010 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE010 Seasonal Benchmark				STRE010 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/12/24		06/10/24		08/28/24		10/23/24	
Field														
D.O.	ppm	--	--	--	--	--	**12.0**		**11.0**		**10.0**		**11.0**	
Flow	cfs	--	--	--	--	--	**3.3**		**2.4**		**3.5**		**3.4**	
pH	SU	--	7.3-8.3	6.9-7.9	7.2-8.2	7.0-8.0	**7.6**		**7.5**		**7.6**		**7.3**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**116**		**140**		**143**		**127**	
Temperature	°C	--	--	--	--	--	**4.9**		**8.7**		**12.0**		**8.5**	
Metals														
Aluminum	ug/L	50.0	--	431	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Barium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	165	514	135	97	**194**	e	**112**		**123**		**156**	
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40.0	43.0	40.0	40.0	**22.7**		**13.5**		**15.4**		**22.4**	
Mercury	ng/L	0.50	2.0	9.7	2.0	2.0	**2.1**		**1.1**		**0.61**		**0.83**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	55.0	--	--	--		**64.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		**0.09**	e	--		--	
Sulfate	mg/L	1.0	5.7	4.0	4.0	4.0	**2.6**	e	**2.4**	e	**2.1**		**2.3**	
Major Cations														
Calcium	mg/L	0.50	--	16.0	--	--	--		**20.6**		--		--	
Magnesium	mg/L	0.50	--	3.0	--	--	--		**3.6**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		**0.56**		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		<1.0		--		--	
General														
Hardness	mg/L	3.0	--	52.0	--	--	--		**66.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	**74.0**		<50.0		<50.0	e	<50.0	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
YDRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	YDRM002 Seasonal Benchmark				YDRM002 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/12/24		06/10/24		08/28/24		10/22/24	
Field														
D.O.	ppm	--	--	--	--	--	**12.0**		**9.2**		**7.6**		**8.7**	
Flow	cfs	--	--	--	--	--	**29.0**		**16.0**		**27.0**		**7.3**	
pH	SU	--	7.3-8.3	6.1-7.1	6.6-7.6	6.6-7.6	**7.1**		**6.6**		**6.7**		**6.9**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**46.0**		**66.0**		**73.0**		**82.0**	
Temperature	°C	--	--	--	--	--	**2.2**		**11.0**		**17.0**		**11.0**	
Metals														
Aluminum	ug/L	50.0	--	200	--	--	--		**98.8**	e	**--**		**--**	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		**--**		**--**	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		**1.1**		<1.0	
Barium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	6.8	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	165	1,192	1,270	1,207	**545**	e	**1,010**		**1070**		**860**	
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		**--**		**--**	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		**--**		**--**	
Manganese	ug/L	10.0	40.0	50.0	40.0	40.0	**22.7**		**45.4**		**25.3**		**24.1**	
Mercury	ng/L	0.50	2.0	8.1	3.1	6.0	**3.0**		**2.3**		**3.3**		**1.1**	
Molybdenum	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	30.0	--	--	--		**27.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		<0.05	e	--		--	
Sulfate	mg/L	1.0	5.7	10.0	4.0	24.0	**2.1**	e	**2.3**	e	**2.8**		**3.5**	
Major Cations														
Calcium	mg/L	0.50	--	10.0	--	--	--		**9.3**		--		--	
Magnesium	mg/L	0.50	--	2.1	--	--	--		**1.9**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		<0.50		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		<1.0		--		--	
General														
Hardness	mg/L	3.0	--	32.0	--	--	--		**31.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	**58.0**		<50.0		<50.0	e	<50.0	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
CDRM004 (Reference)
Eagle Mine

Parameter	Unit	Permit RL	CDRM004 Seasonal Benchmark				CDRM004 Data (Q1-Q4 2024)							
			Q1	Q2	Q3	Q4	Q1 2024		Q2 2024		Q3 2024		Q4 2024	
			Winter Baseflow	Spring Snowmelt & Runoff	Summer Baseflow	Fall Rain	Winter Baseflow		Spring Snowmelt & Runof		Summer Baseflow		Fall Rain	
							03/25/24		06/11/24		08/26/24		10/22/24	
Field														
D.O.	ppm	--	--	--	--	--	**12.0**		**11.0**		**9.6**		**11.0**	
Flow	cfs	--	--	--	--	--	**12.0**		**10.0**		**9.3**		**10.0**	
pH	SU	--	7.3-8.3	7.2-8.2	7.2-8.2	7.2-8.2	**7.1**		**7.7**		**7.6**		**7.7**	
Specific Conductance	µS/cm @ 25°C	--	--	--	--	--	**134**		**158**		**170**		**146**	
Temperature	°C	--	--	--	--	--	**0.90**		**11.0**		**15.0**		**12.0**	
Metals														
Aluminum	ug/L	50.0	--	258	--	--	--		<50.0	e	--		--	
Antimony	ug/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Arsenic	ug/L	1.0	4.0	4.0	4.0	4.0	**1.2**		**1.8**		**2.6**		**1.8**	
Barium	ug/L	10.0	--	40	--	--	--		**13.5**		--		--	
Beryllium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Boron	ug/L	50.0	200	200	200	200	<50.0		<50.0		<50.0		<50.0	
Cadmium	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Chromium	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Cobalt	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0		<10.0		<10.0		<10.0	
Copper	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	20.0	165	358	309	195	**90.9**	e,J	**93.7**	J	**185**		**112**	
Lead	ug/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Lithium	ug/L	10.0	--	40.0	--	--	--		<10.0		--		--	
Manganese	ug/L	10.0	40.0	57.0	44.0	96.0	<10.0		**13.6**		**17.5**		**13.6**	
Mercury	ng/L	0.50	2.0	8.1	2.0	2.0	**0.86**		**0.70**		**0.64**		**0.61**	
Molybdenum	ug/L	10.0	--	40	--	--	--		<10.0		--		--	
Nickel	ug/L	1.0	4.0	4.0	4.0	4.0	<1.0		<1.0		<1.0		<1.0	
Selenium	ug/L	2.0	8.0	8.0	8.0	8.0	<2.0		<2.0		<2.0		<2.0	
Silver	ug/L	0.20	--	0.80	--	--	--		<0.20		--		--	
Zinc	ug/L	10.0	40.0	40.0	40.0	40.0	<10.0	e	<10.0		<10.0		<10.0	
Major Anions														
Alkalinity, Bicarbonate	mg/L	2.0	--	85.0	--	--	--		**75.0**		--		--	
Alkalinity, Carbonate	mg/L	2.0	--	8.0	--	--	--		<2.0		--		--	
Chloride	mg/L	1.0	--	4.0	--	--	--		<1.0		--		--	
Fluoride	mg/L	0.10	--	0.40	--	--	--		<0.10		--		--	
Nitrogen, Nitrate	mg/L	0.05	--	0.20	--	--	--		**0.05**	e	--		--	
Sulfate	mg/L	1.0	5.7	4.0	4.0	4.0	**2.4**	e	**1.9**	e	**1.6**		**1.8**	
Major Cations														
Calcium	mg/L	0.50	--	25.0	--	--	--		**24.3**		--		--	
Magnesium	mg/L	0.50	--	4.0	--	--	--		**3.8**		--		--	
Potassium	mg/L	0.50	--	2.0	--	--	--		**0.51**		--		--	
Sodium	mg/L	0.50	--	2.0	--	--	--		**1.2**		--		--	
General														
Hardness	mg/L	3.0	--	80.0	--	--	--		**76.0**		--		--	
TDS	mg/L	50.0	200	200	200	200	<50.0		**53.0**		**63.0**	e	**62.0**	e

Explanations of abbreviations are included on the final page of this table.

2024
Mine Permit Surface Water Quality Monitoring Data
Abbreviations & Data Qualifiers
Eagle Mine

Abbreviation or Data Qualifier	Explanation
a	Estimated value. Duplicate precision for this parameter exceeded quality control limit.
b	Estimated value. Sample received after EPA established hold time expired.
e	Estimated value. The laboratory statement of data qualifications indicates that a quality control limit for this parameter was exceeded.
NM	Not measured.
p	Pending. Some parameters/locations require additional baseline data to calculate a benchmark.
Q	Quarter.
R	Measured value was rejected based on quality control procedures.
RL	Laboratory reporting limit.
s	Potential false positive value. Compound present in blank sample.
t	Trending. Benchmarks are not proposed for baseline datasets that appear to be trending (using samples collected through Q4 2012) because the data do not represent a random distribution about the baseline mean. Trend analysis is recommended in place of benchmark screening for parameters that appear to be trending.
	Value is equal to or above site-specific benchmark at a compliance monitoring.

Appendix L

Eagle Mine

Surface Water Monitoring Trend Analysis

Summary & Trending Charts

2024 Mine Permit Surface Water
Trend Analysis Summary
Eagle Mine

Location	Quarter	Classification	Parameter	Unit	# Samples	# NDs	Non-detects handling	# used in Runs Test	Min	Max	Mean	St. Dev.	# Above Mean	# Below Mean	# Equal Mean	# Runs	Critical value	Sig level	Trend?	Remarks
STRE002	1	Compliance	Sulfate	mg/L	15	1	Included as RL	15	2.9	5.2	4.1	0.68	7	8	0	4	4	0.05	Y	Non-unique RL in data
STRE005	1	Compliance	Sulfate	mg/L	13	2	Included as RL	13	1.0	5.5	2.9	1.30	6	7	0	4	4	0.05	Y	Non-unique RL in data
STRE009	1	Compliance	Iron	ug/L	13	0	No NDs	13	49.4	182	84.8	34.37	6	7	0	4	4	0.05	Y*	Non-unique RL in data
STRE009	1	Compliance	Manganese	ug/L	13	8	Included as RL	13	10.0	23.9	11.5	3.80	3	10	0	3	3	0.05	Y	
STRE009	1	Compliance	Sulfate	mg/L	13	0	No NDs	13	2.8	4.6	3.7	0.59	6	7	0	2	4	0.05	Y	Non-unique RL in data
STRM005	1	Compliance	Sulfate	mg/L	14	0	No NDs	14	2.6	5.8	3.9	1.00	5	9	0	4	4	0.05	Y	Non-unique RL in data
CDRM004	2	Reference	Calcium	mg/L	17	0	No NDs	17	8.1	24.3	17.6	4.42	10	7	0	4	5	0.05	Y	Non-unique RL in data
CDRM004	2	Reference	Nitrogen, Nitrate	mg/L	17	6	Included as RL	17	0.05	0.10	0.07	0.02	7	10	0	5	5	0.05	Y	
STRE001	2	Compliance	Sodium	mg/L	17	0	No NDs	17	0.58	1.4	1.0	0.23	11	6	0	4	5	0.05	Y	Non-unique RL in data
STRE002	2	Compliance	Calcium	mg/L	16	0	No NDs	16	8.1	22.4	16.5	4.24	9	7	0	5	5	0.05	Y	Non-unique RL in data
STRE002	2	Compliance	Sodium	mg/L	16	0	No NDs	16	0.74	1.3	1.1	0.17	9	7	0	5	5	0.05	Y	Non-unique RL in data
STRE002	2	Compliance	Sulfate	mg/L	16	9	Included as RL	16	1.0	5.0	2.0	1.30	7	9	0	3	5	0.05	Y	Non-unique RL in data
STRE005	2	Compliance	Alkalinity, Bicarbonate	mg/L	13	0	No NDs	13	17.0	107	52.5	26.91	6	7	0	4	4	0.05	Y*	
STRE005	2	Compliance	Calcium	mg/L	13	0	No NDs	13	5.7	26.3	15.3	6.15	7	6	0	2	4	0.05	Y*	Non-unique RL in data
STRE005	2	Compliance	Magnesium	mg/L	13	0	No NDs	13	1.3	4.4	2.8	0.93	6	7	0	4	4	0.05	Y*	Non-unique RL in data
STRE005	2	Compliance	Sodium	mg/L	13	4	Included as RL	13	0.50	1.2	0.9	0.20	7	6	0	2	4	0.05	Y	Non-unique RL in data
STRE009	2	Compliance	Calcium	mg/L	13	0	No NDs	13	9.4	19.8	15.0	3.23	7	5	1	2	3	0.05	Y*	Non-unique RL in data
STRE010	2	Compliance	Calcium	mg/L	13	0	No NDs	13	8.6	20.6	15.0	3.83	7	6	0	2	4	0.05	Y*	Non-unique RL in data
STRE010	2	Compliance	Magnesium	mg/L	13	0	No NDs	13	1.6	3.6	2.7	0.62	7	6	0	2	4	0.05	Y*	Non-unique RL in data
STRM002	2	Compliance	Chloride	mg/L	19	10	Included as RL	19	1.0	1.7	1.2	0.24	9	10	0	5	6	0.05	Y	
STRM002	2	Compliance	Mercury	ng/L	19	0	No NDs	19	1.4	5.54	3.2	1.17	9	10	0	5	6	0.05	Y	Non-unique RL in data
STRM002	2	Compliance	Potassium	mg/L	19	5	Included as RL	19	0.42	0.68	0.55	0.06	9	10	0	6	6	0.05	Y	Non-unique RL in data

Mine Permit Surface Water Trend Analysis
Notes and Abbreviations Used in Statistical Summary Tables
Eagle Mine

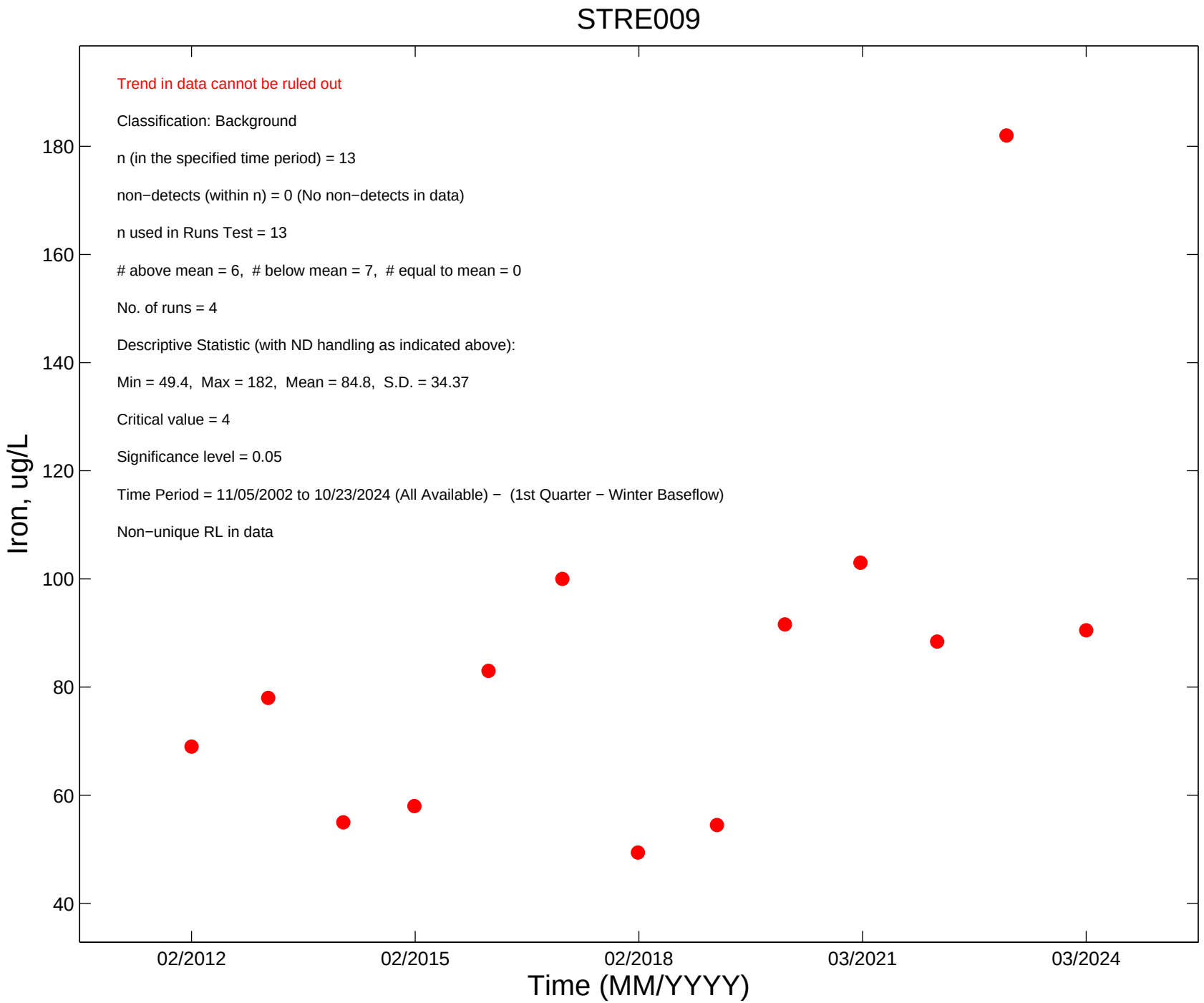
Abbreviation	Explanation
Y	Null Hypothesis that the sequence was produced in a random manner cannot be accepted at the indicated significance level (i.e., a trend in data cannot be ruled out).
Y*	In addition to a trend being identified, the parameter exceeded the limit at least two times in a row.
ND	Non detect (reported concentration was below the analytical reporting limit).
RL	Reporting limit.

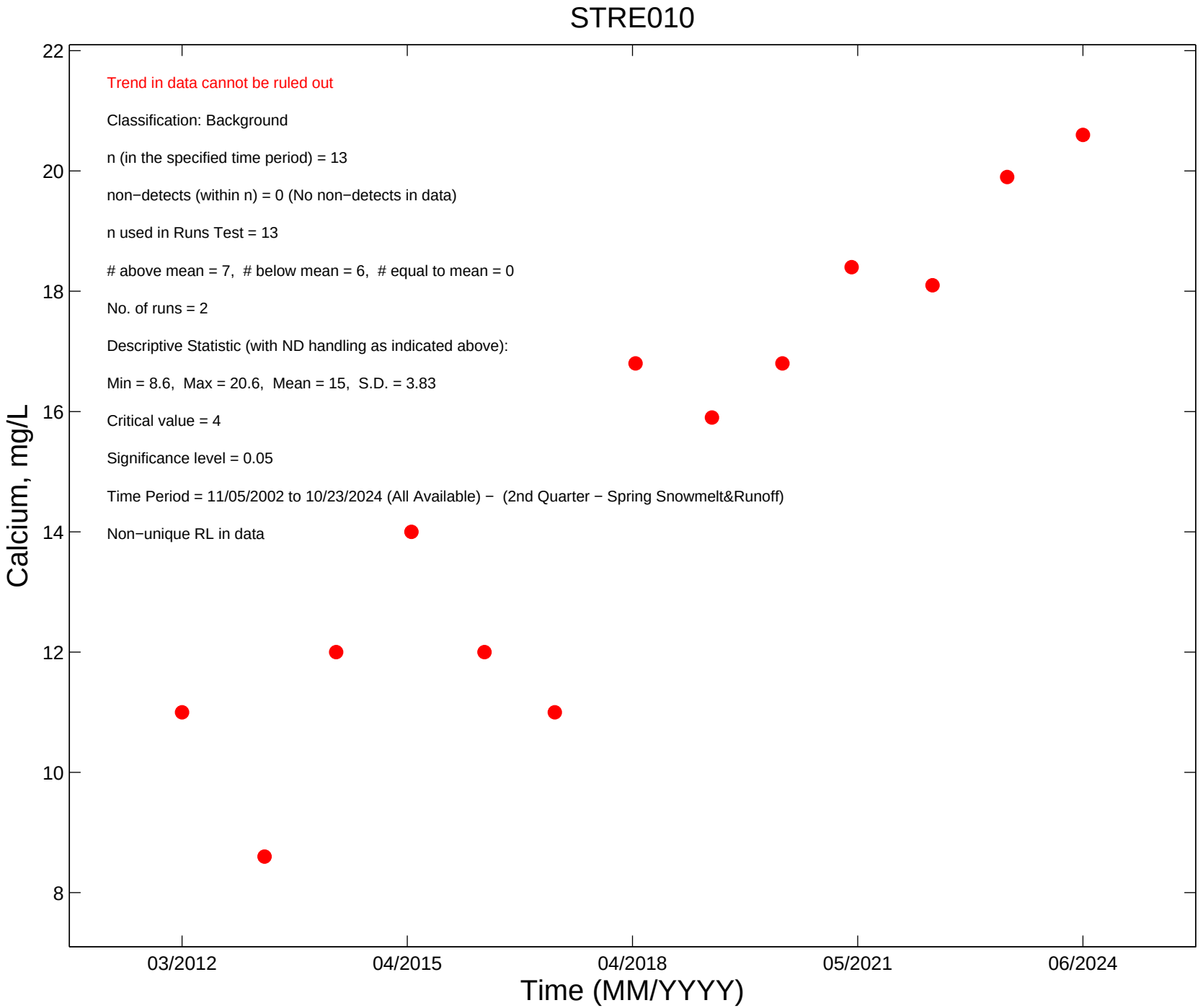
Notes:

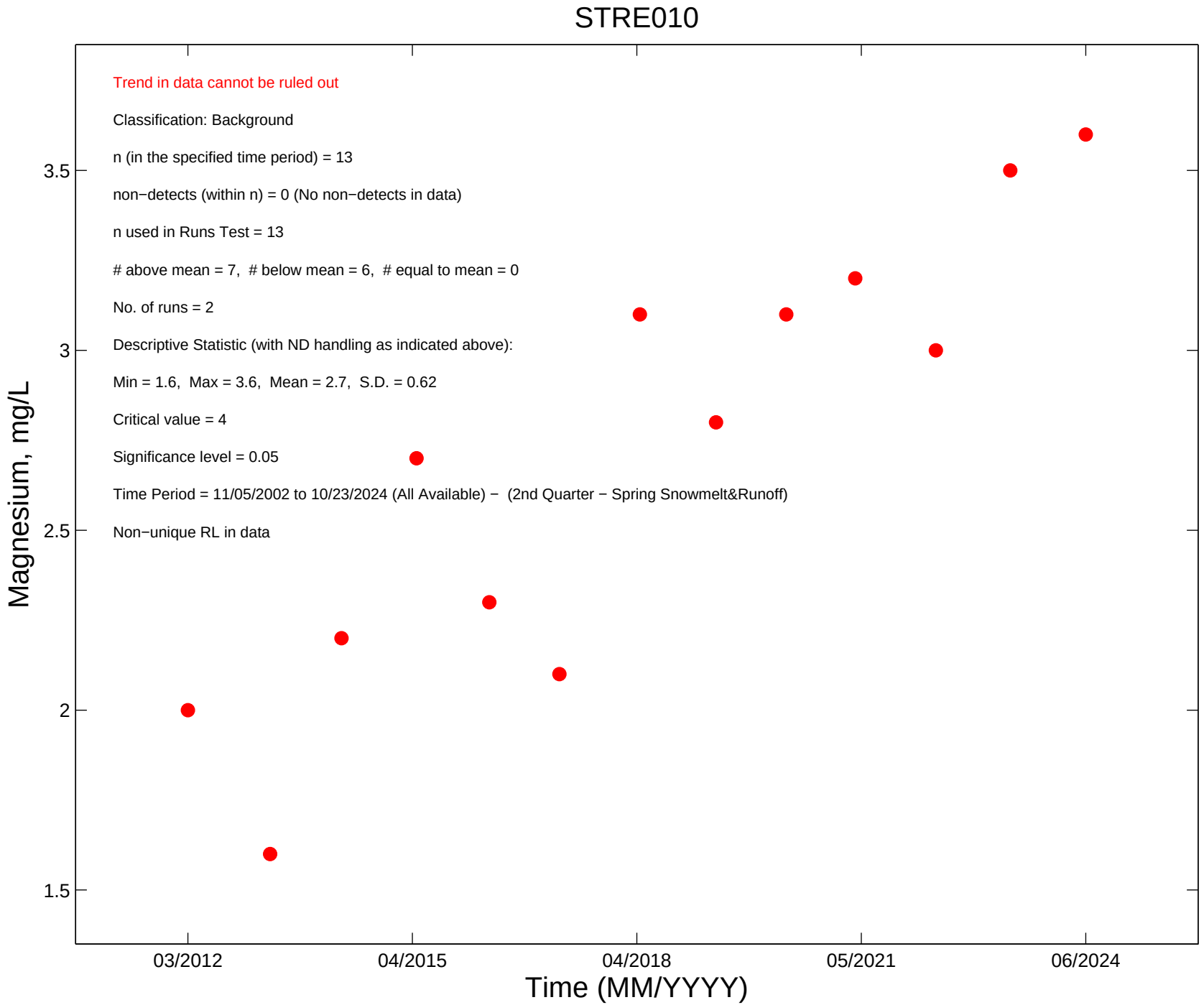
Charts are included for compliance locations with trends that also had two exceedances in a row in 2024.

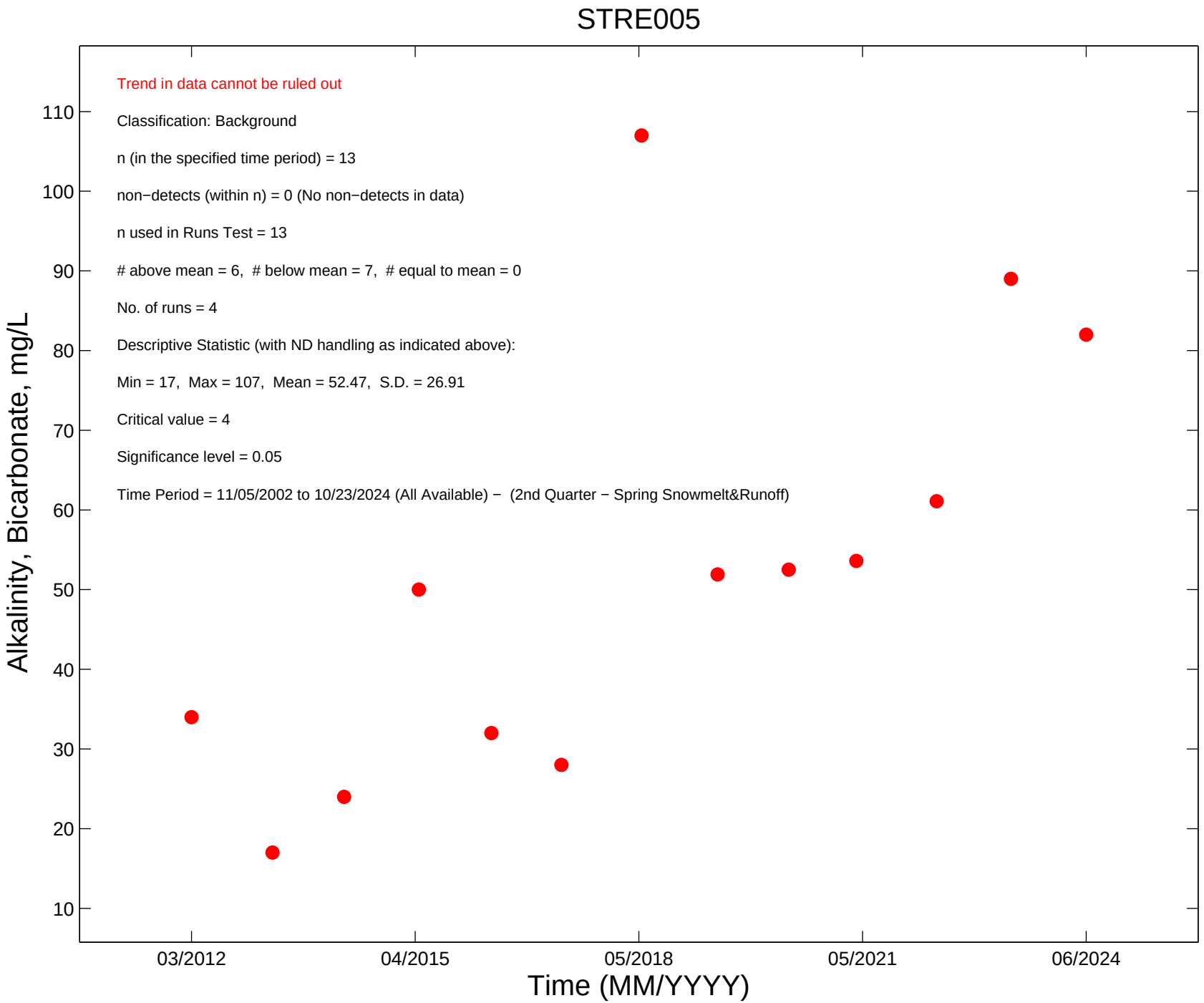
Sulfate trend analysis period is 2005-2024 to eliminate effect of high previous RL.

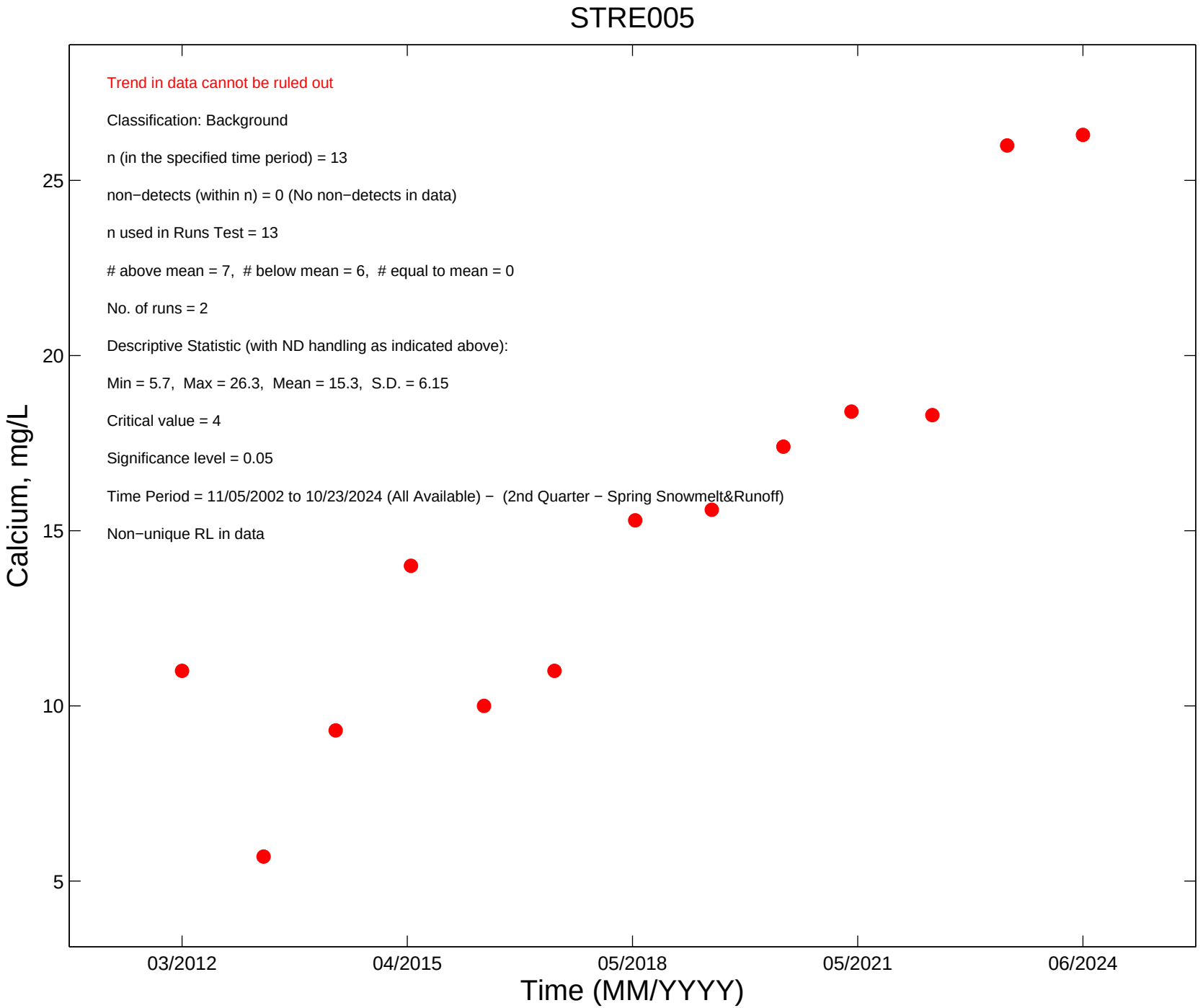
Trends rejected if they appear to be an artifact of non-detect values and/or inconsistent RLs.

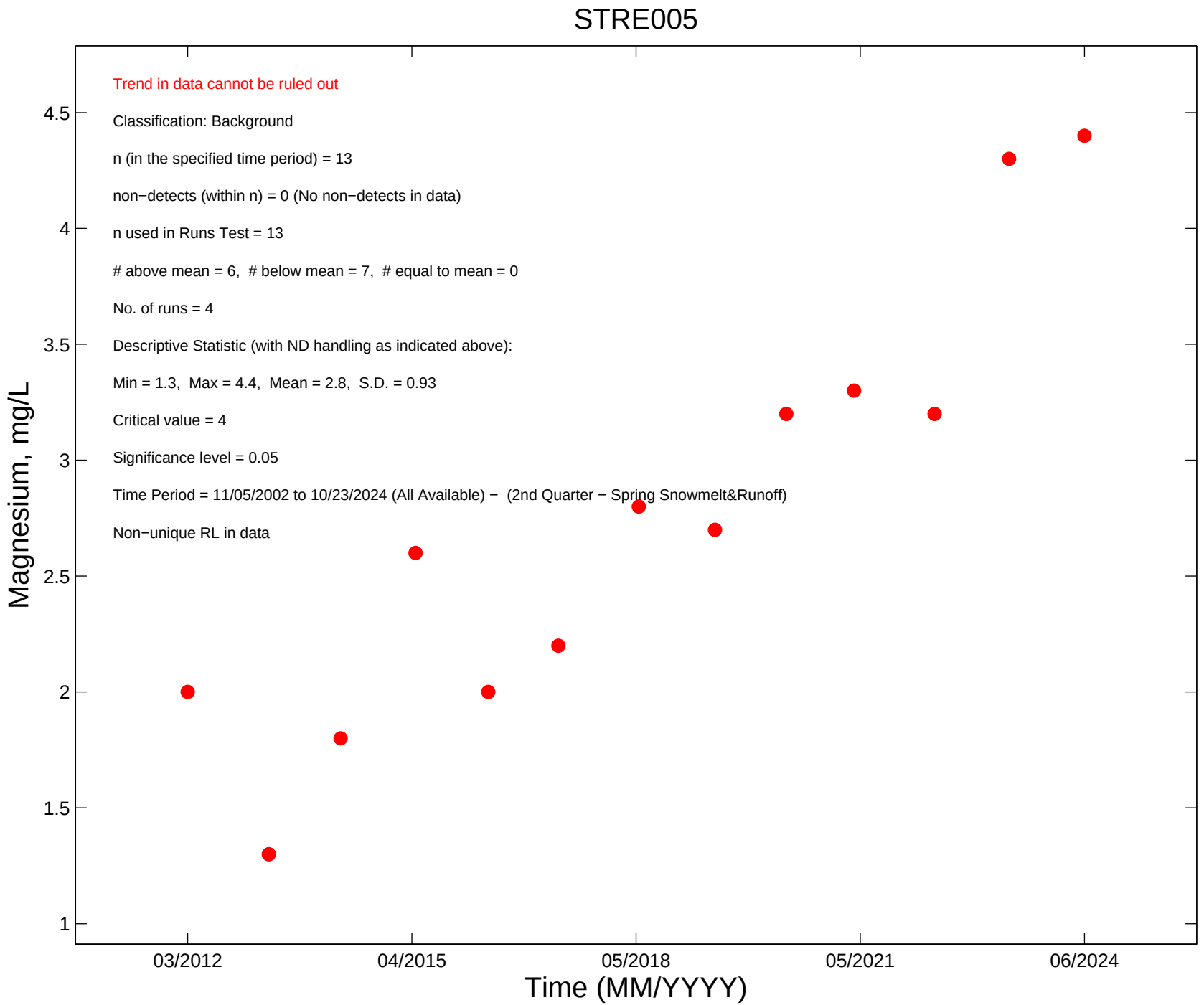

STRE009
Trend in data cannot be ruled out
Classification: Background
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 6, # below mean = 7, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 49.4, Max = 182, Mean = 84.8, S.D. = 34.37
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (1st Quarter − Winter Baseflow)
Non−unique RL in data
Iron, ug/L
180
160
140
120
100
80
60
40
02/2012
02/2015
02/2018
03/2021
03/2024
Time (MM/YYYY)

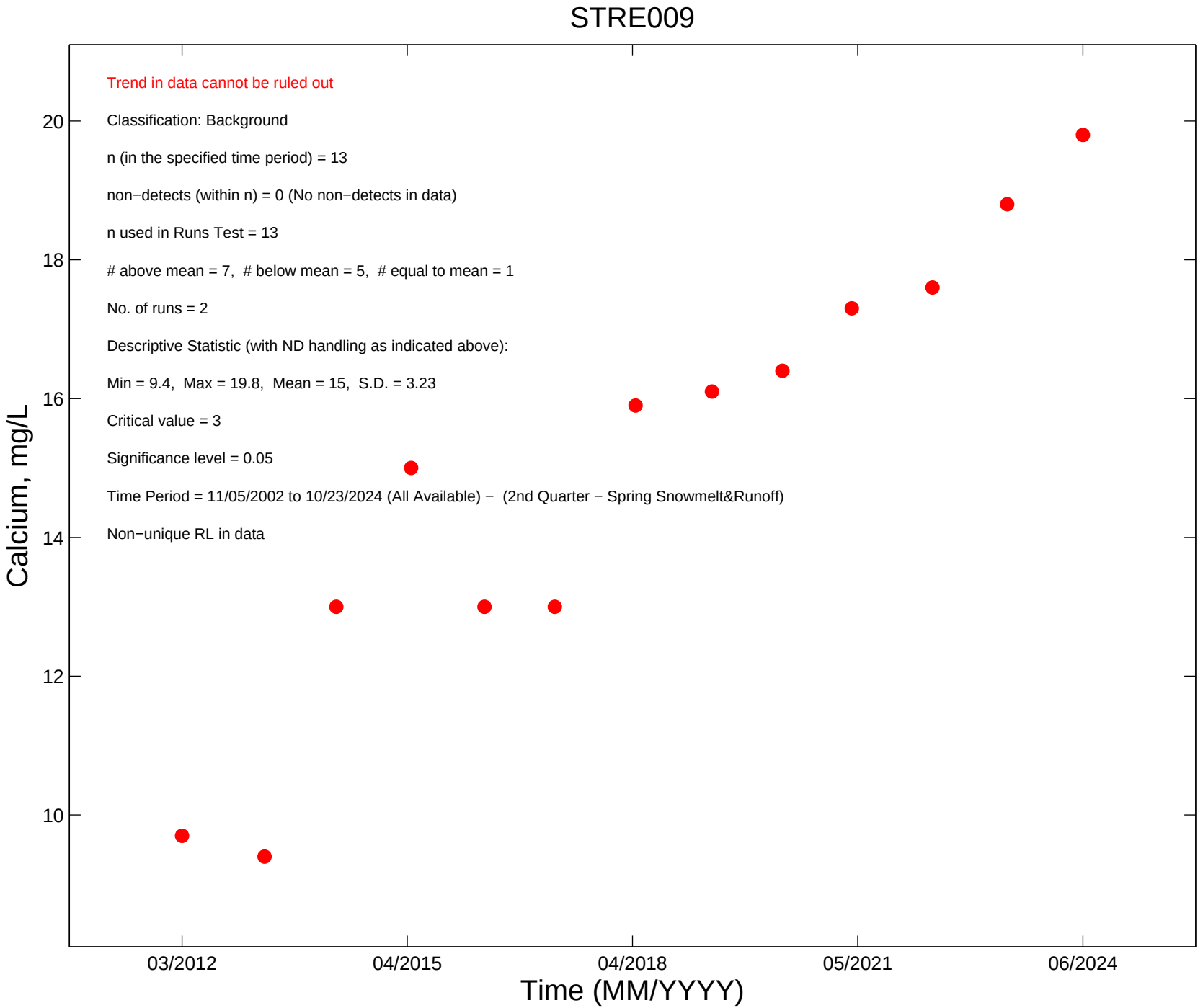

STRE010
Trend in data cannot be ruled out
Classification: Background
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 7, # below mean = 6, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 8.6, Max = 20.6, Mean = 15, S.D. = 3.83
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (2nd Quarter − Spring Snowmelt&Runoff)
Non−unique RL in data
Calcium, mg/L
22
20
18
16
14
12
10
8
03/2012
04/2015
04/2018
05/2021
06/2024
Time (MM/YYYY)

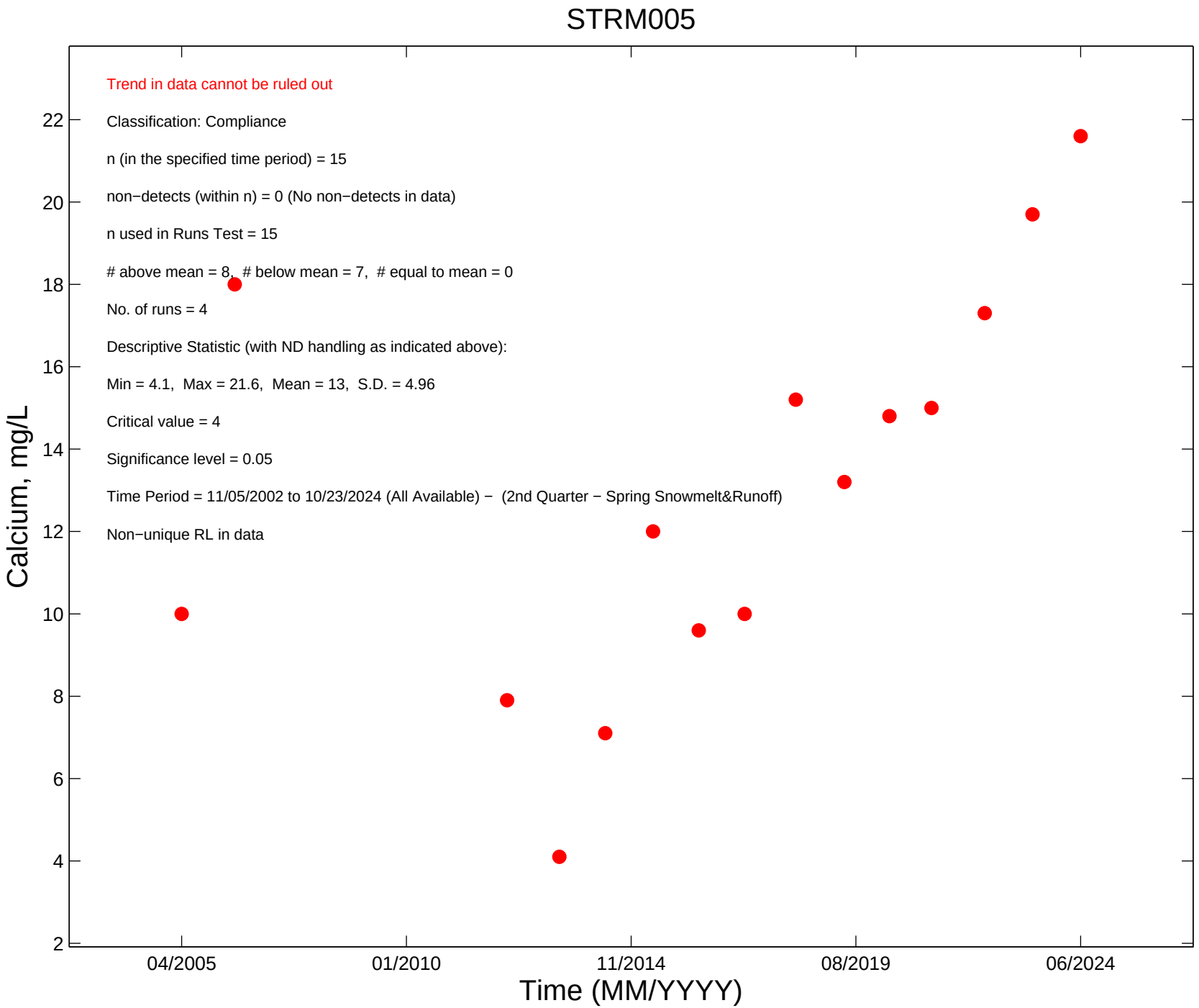

STRE010
Trend in data cannot be ruled out
Classification: Background
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 7, # below mean = 6, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 1.6, Max = 3.6, Mean = 2.7, S.D. = 0.62
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (2nd Quarter − Spring Snowmelt&Runoff)
Non−unique RL in data
Magnesium, mg/L
3.5
3
2.5
2
1.5
03/2012
04/2015
04/2018
05/2021
06/2024
Time (MM/YYYY)

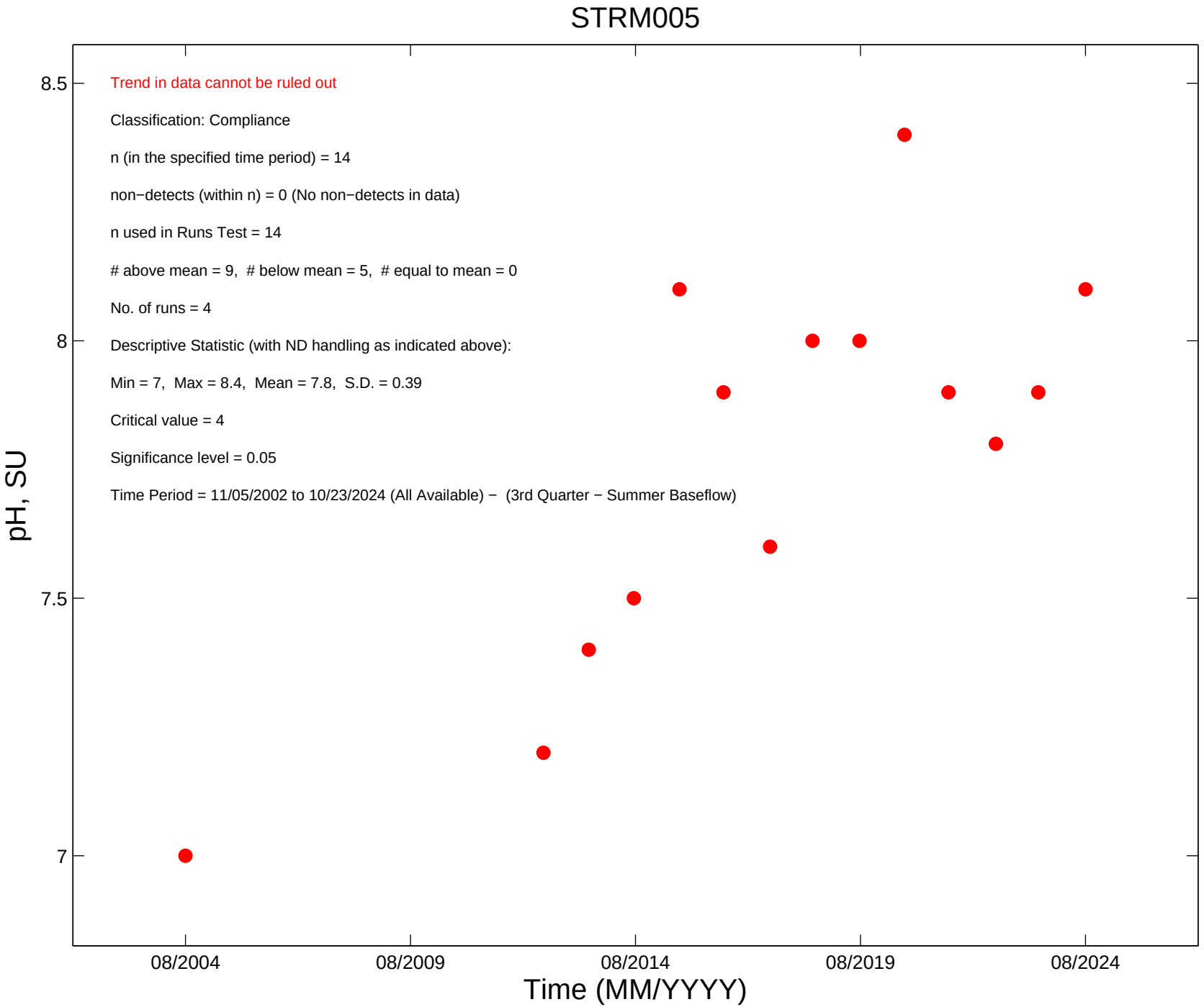

STRE005
Trend in data cannot be ruled out
Classification: Background
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 6, # below mean = 7, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 17, Max = 107, Mean = 52.47, S.D. = 26.91
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (2nd Quarter − Spring Snowmelt&Runoff)
Alkalinity, Bicarbonate, mg/L
110
100
90
80
70
60
50
40
30
20
10
03/2012
04/2015
05/2018
05/2021
06/2024
Time (MM/YYYY)


STRE005
Trend in data cannot be ruled out
Classification: Background
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 7, # below mean = 6, # equal to mean = 0
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 5.7, Max = 26.3, Mean = 15.3, S.D. = 6.15
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (2nd Quarter − Spring Snowmelt&Runoff)
Non−unique RL in data
Calcium, mg/L
25
20
15
10
5
03/2012
04/2015
05/2018
05/2021
06/2024
Time (MM/YYYY)


STRE005
Trend in data cannot be ruled out
Classification: Background
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 6, # below mean = 7, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 1.3, Max = 4.4, Mean = 2.8, S.D. = 0.93
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (2nd Quarter − Spring Snowmelt&Runoff)
Non−unique RL in data
Magnesium, mg/L
4.5
4
3.5
3
2.5
2
1.5
1
03/2012
04/2015
05/2018
05/2021
06/2024
Time (MM/YYYY)


STRE009
Trend in data cannot be ruled out
Classification: Background
n (in the specified time period) = 13
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 13
above mean = 7, # below mean = 5, # equal to mean = 1
No. of runs = 2
Descriptive Statistic (with ND handling as indicated above):
Min = 9.4, Max = 19.8, Mean = 15, S.D. = 3.23
Critical value = 3
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (2nd Quarter − Spring Snowmelt&Runoff)
Non−unique RL in data
Calcium, mg/L
20
18
16
14
12
10
03/2012
04/2015
04/2018
05/2021
06/2024
Time (MM/YYYY)


STRM005
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 15
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 15
above mean = 8, # below mean = 7, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 4.1, Max = 21.6, Mean = 13, S.D. = 4.96
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (2nd Quarter − Spring Snowmelt&Runoff)
Non−unique RL in data
Calcium, mg/L
22
20
18
16
14
12
10
8
6
4
2
04/2005
01/2010
11/2014
08/2019
06/2024
Time (MM/YYYY)

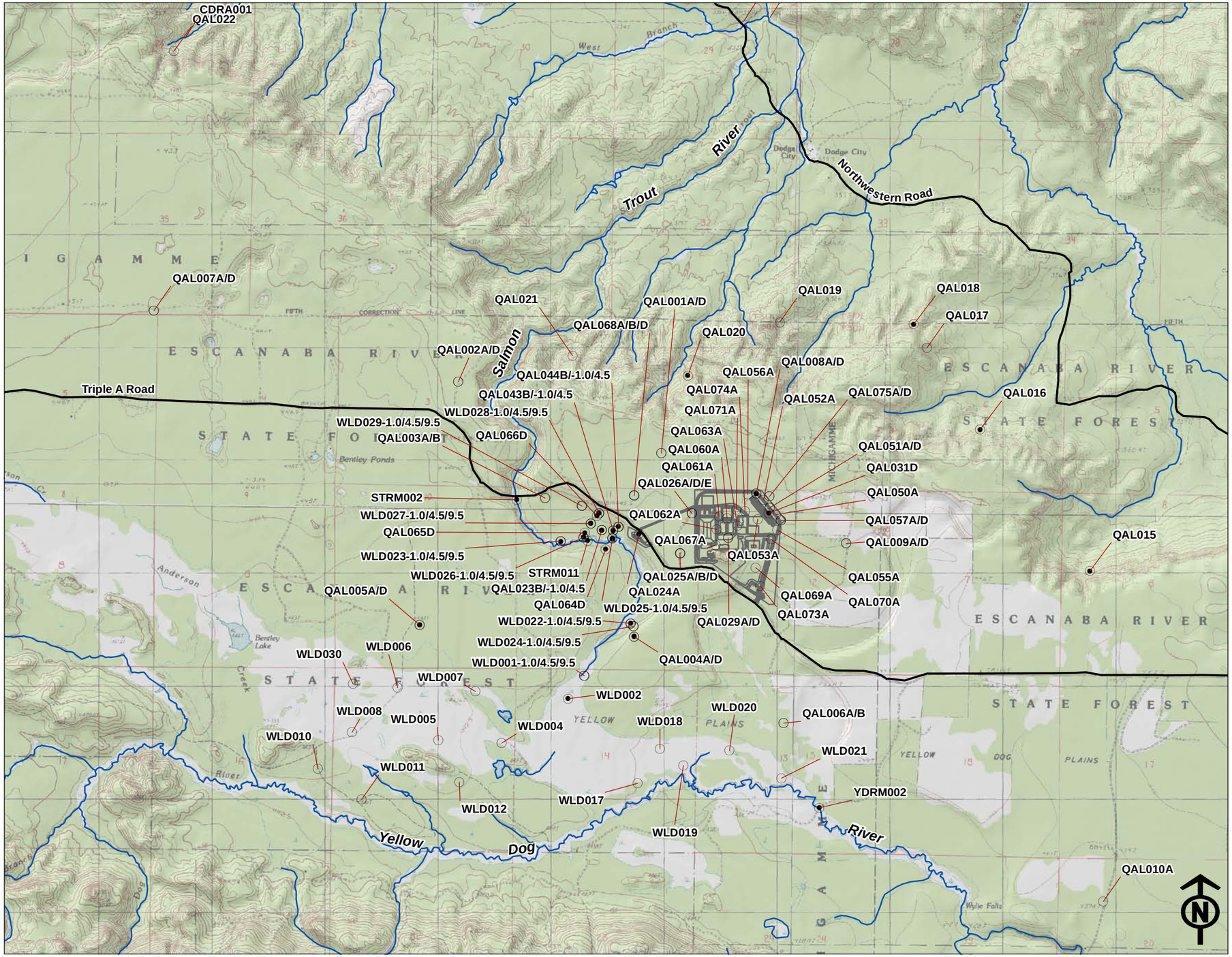

STRM005
Trend in data cannot be ruled out
Classification: Compliance
n (in the specified time period) = 14
non−detects (within n) = 0 (No non−detects in data)
n used in Runs Test = 14
above mean = 9, # below mean = 5, # equal to mean = 0
No. of runs = 4
Descriptive Statistic (with ND handling as indicated above):
Min = 7, Max = 8.4, Mean = 7.8, S.D. = 0.39
Critical value = 4
Significance level = 0.05
Time Period = 11/05/2002 to 10/23/2024 (All Available) − (3rd Quarter − Summer Baseflow)
8.5
8
7.5
7
pH, SU
08/2004
08/2009
08/2014
08/2019
08/2024
Time (MM/YYYY)

Appendix M

Eagle Mine

Water Level Monitoring Location Map

MINE PERMIT WATER LEVEL MONITORING LOCATION MAP



ELEVATION

Instrumented for continuous monitoring

ROAD

HYDROGRAPHY

MINE FACILITY

Reference

Data provided by: Eagle Mine and North Jackson Company

Projection & Datum: UTM NAD 83 Zone 16N

0 1 Miles

Scale: 1:36,000

Eagle Mine
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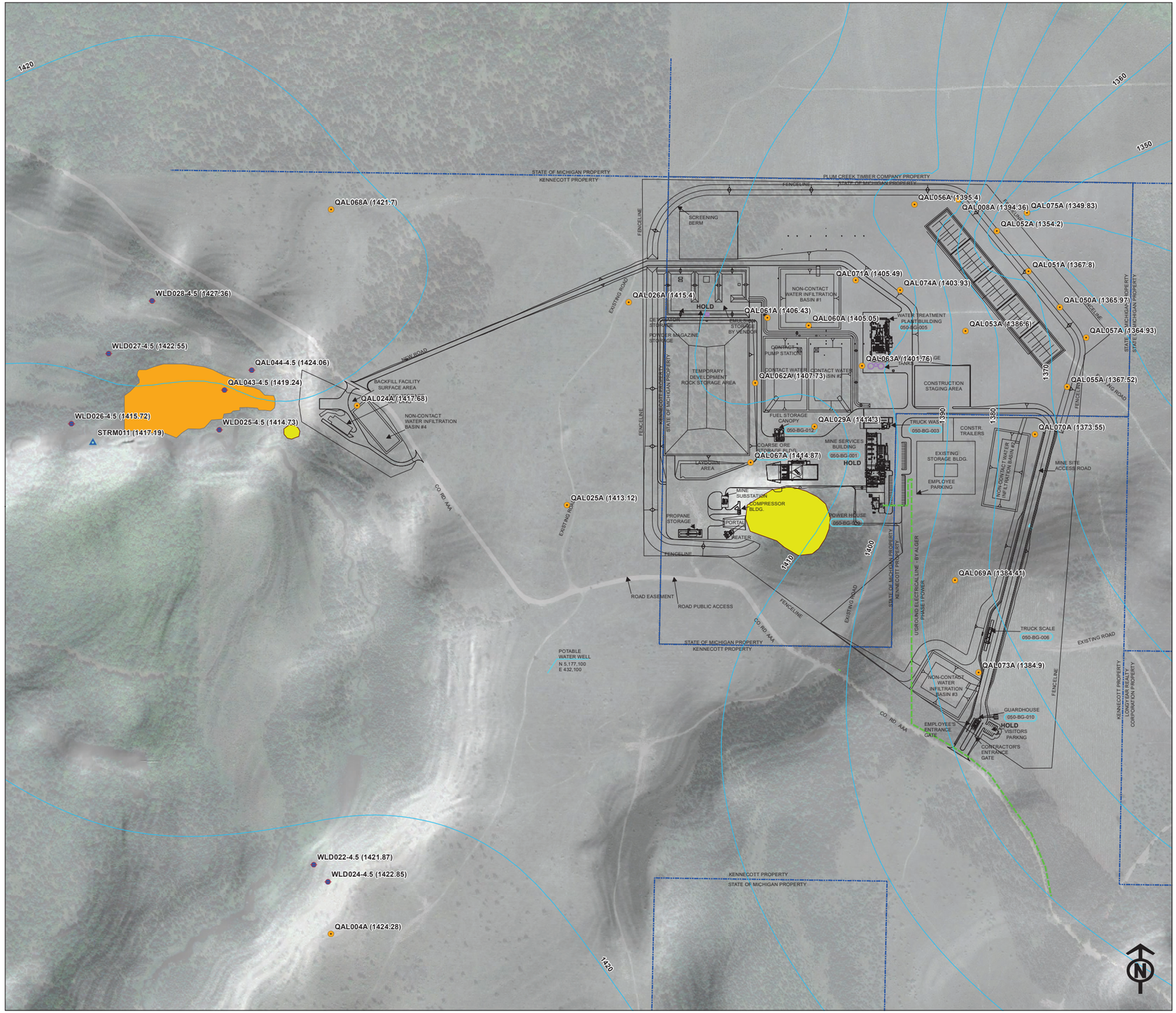
Appendix N

Eagle Mine

Groundwater Contour Maps



A-ZONE GROUNDWATER ELEVATION CONTOURS WINTER BASEFLOW, JAN-MAR 2024

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

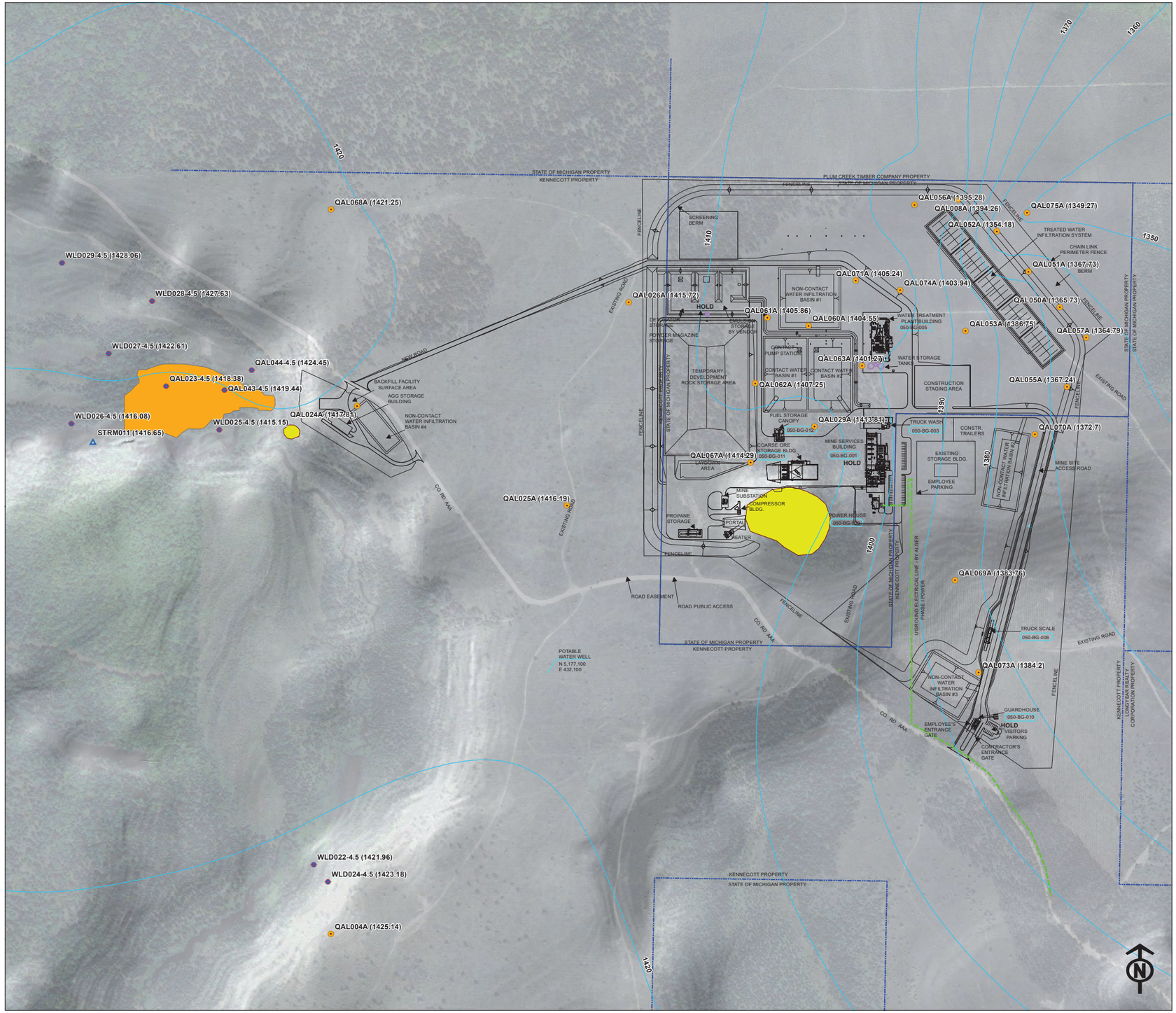
0 500 1,000 Feet

1:3,600

Eagle Mine
a subsidiary of hudbay mining

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1



A-ZONE GROUNDWATER ELEVATION CONTOURS
SPRING RUNOFF, MAY-JUN 2024
HS VIEW

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 500 1,000 Feet

1:3,600

Eagle Mine
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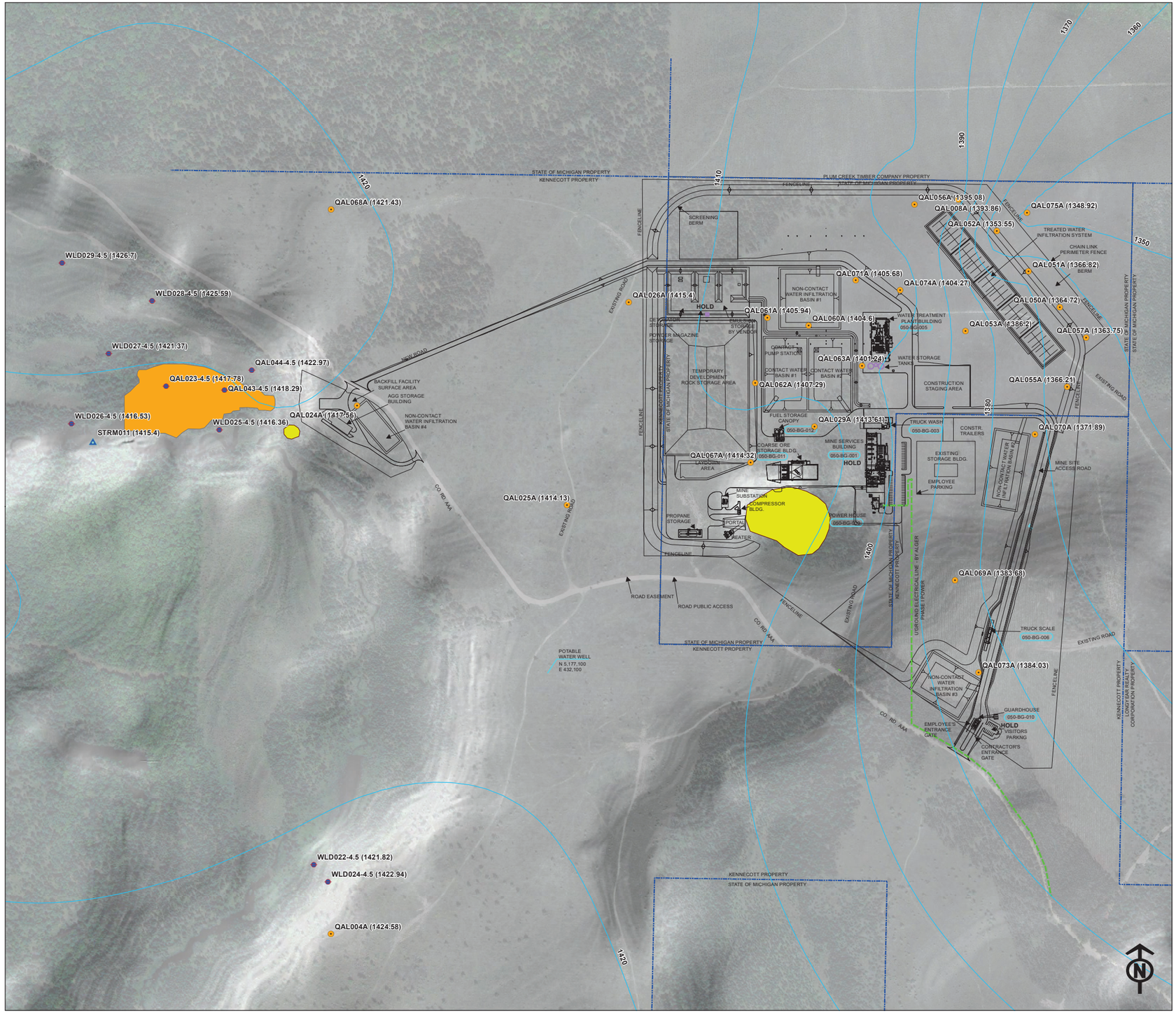
North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

A-ZONE GROUNDWATER ELEVATION CONTOURS
SUMMER BASEFLOW AUG 2024
HS VIEW



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 500 1,000 Feet

1:3,600

Eagle Mine
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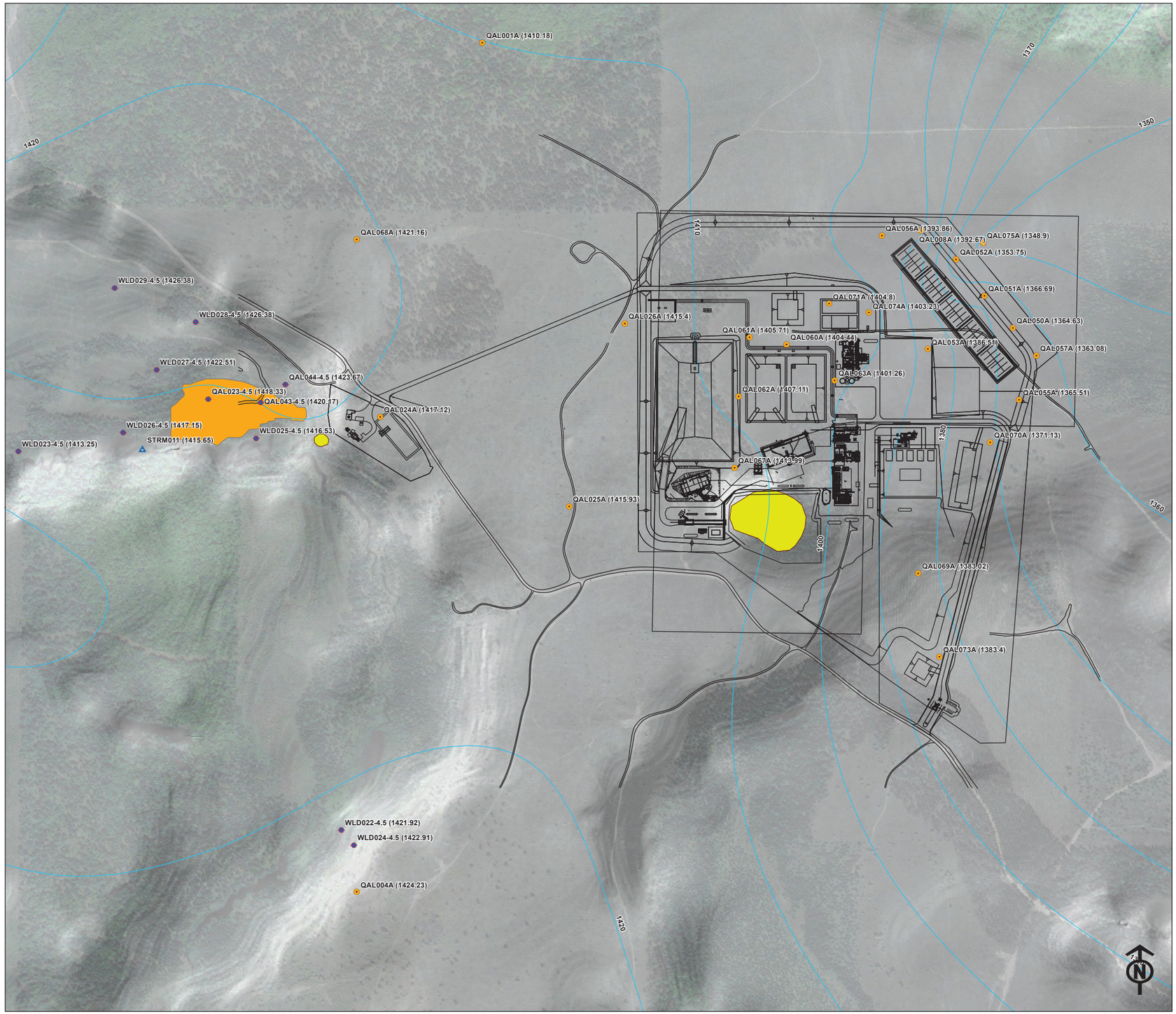
North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1



A-ZONE GROUNDWATER ELEVATION CONTOURS
FALL RAIN RUNOFF OCT-NOV 2024
HS VIEW

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 500 1,000 Feet

1:4,000

Eagle Mine
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North Jackson Company
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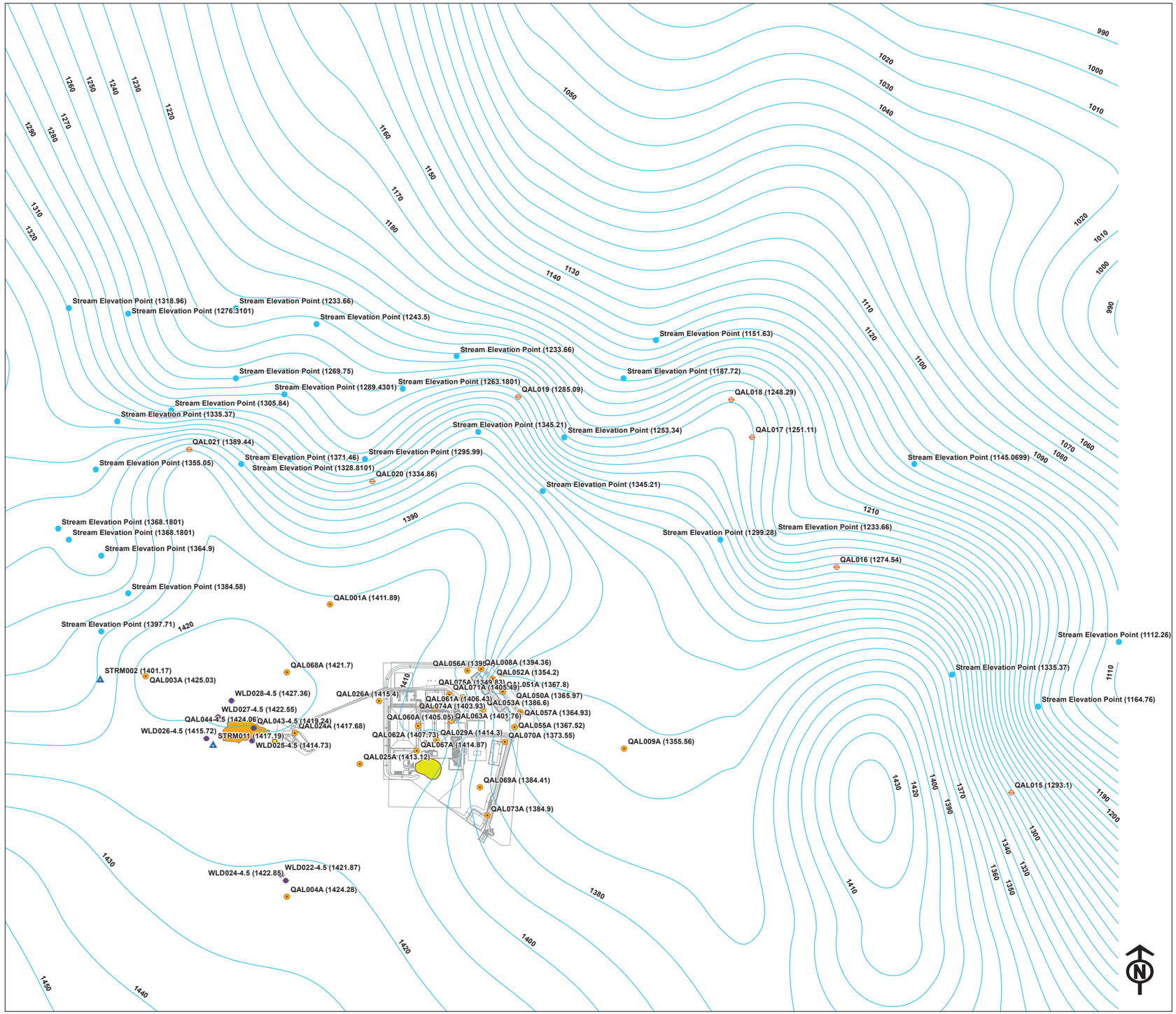
Figure: 1



A-ZONE GROUNDWATER ELEVATION CONTOURS
WINTER BASEFLOW, JAN-MAR 2024

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 1,450 2,900 Feet

1:11,634

Eagle Mine
a subsidiary of hudbay mining

North Jackson Company
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Figure: 1

A-ZONE GROUNDWATER ELEVATION CONTOURS
SPRING RUNOFF, MAY-JUN 2024

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 2,000 4,000 Feet

1:16,000

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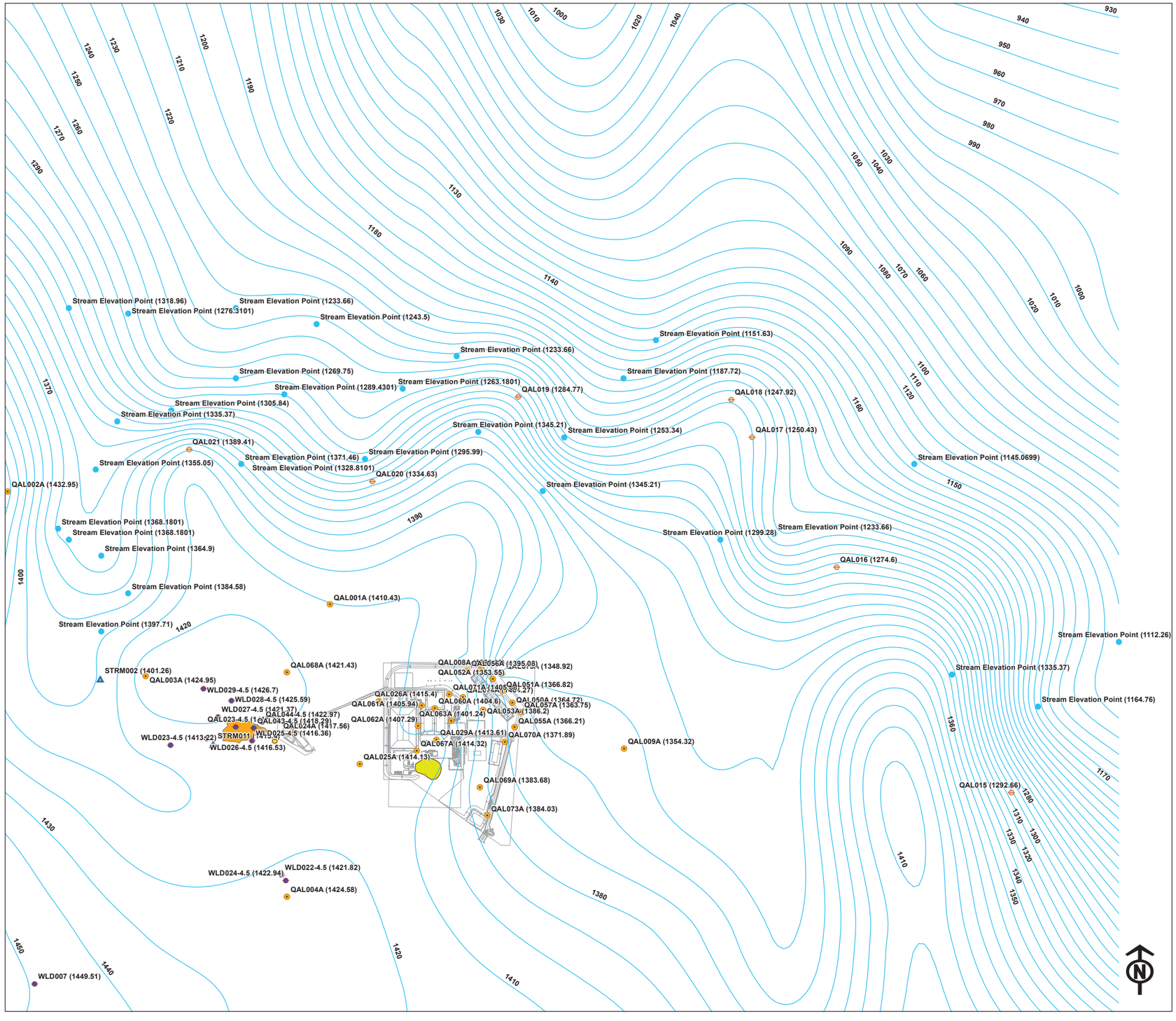
Figure: 1



A-ZONE GROUNDWATER ELEVATION CONTOURS SUMMER BASEFLOW, AUG 2024

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

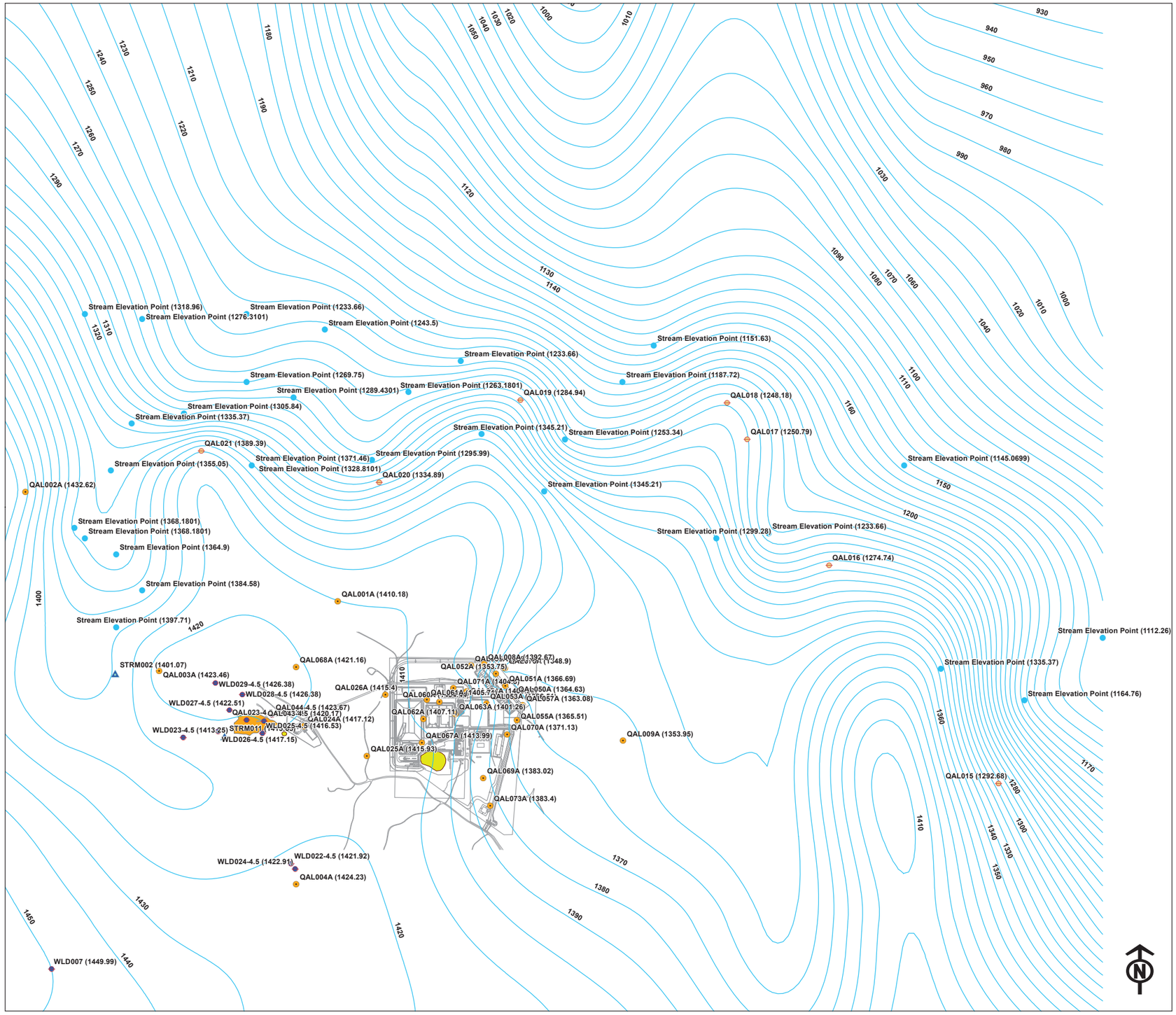
0 1,450 2,900 Feet

1:11,634

Eagle Mine
a subsidiary of Lundin Mining

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1



A-ZONE GROUNDWATER ELEVATION CONTOURS
FALL RAIN RUNOFF OCT-NOV 2024

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 2,000 4,000 Feet

1:12,000

Eagle Mine
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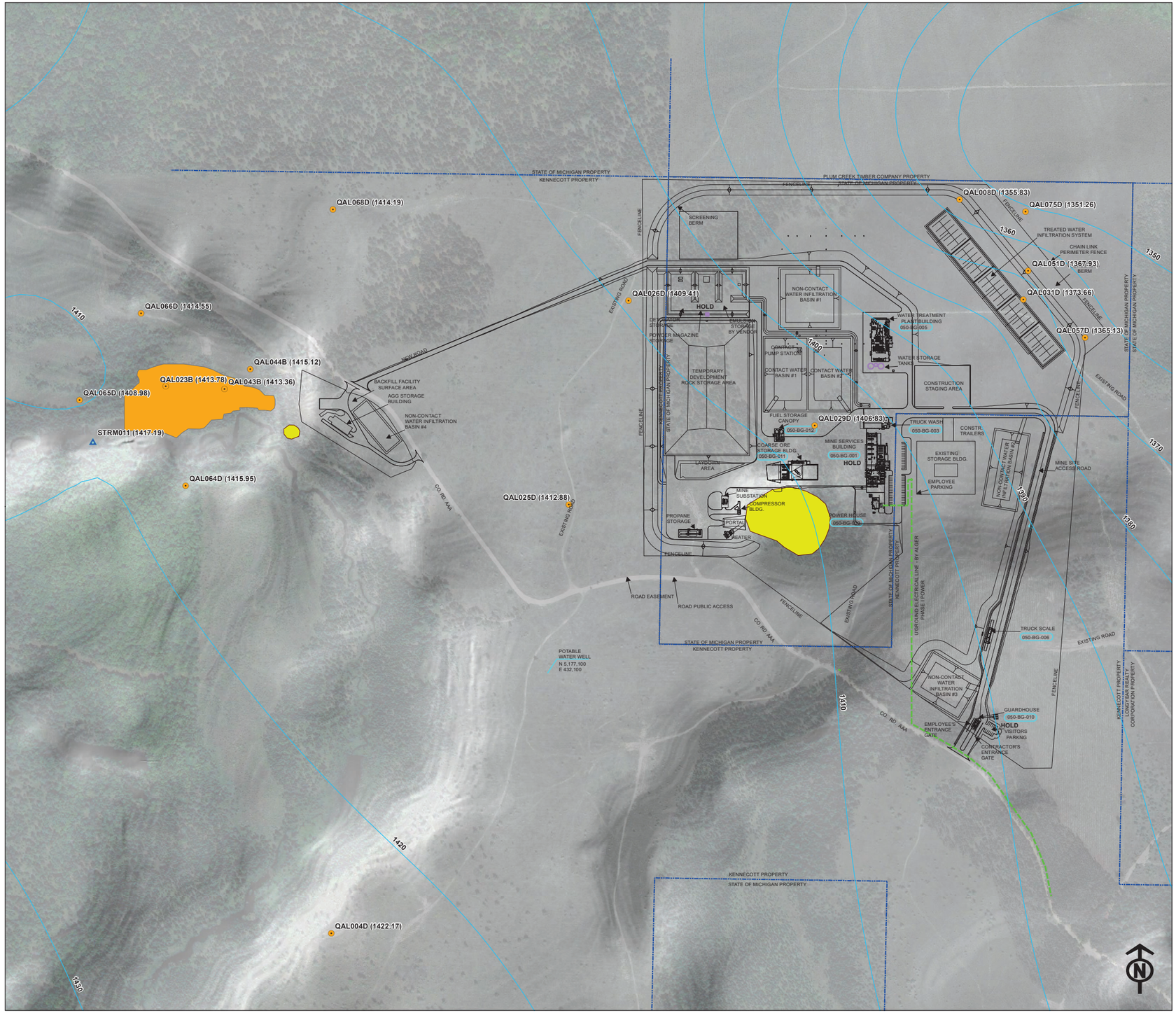
North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
WINTER BASEFLOW, JAN-MAR 2024
HS VIEW



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 500 1,000 Feet

1:3,600

Eagle Mine
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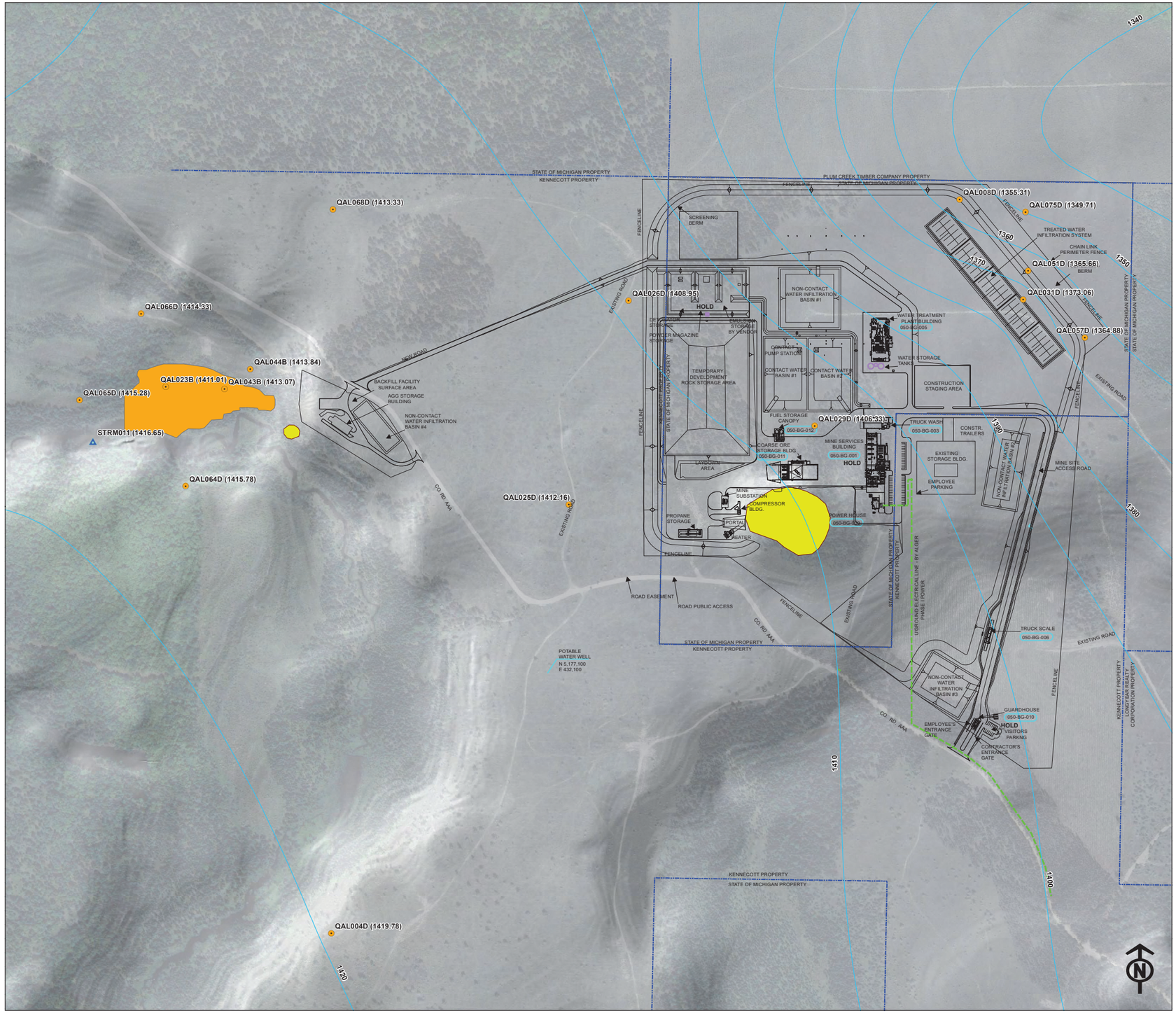
North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
SPRING RUNOFF, MAY-JUN 2024
HS VIEW



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 500 1,000 Feet

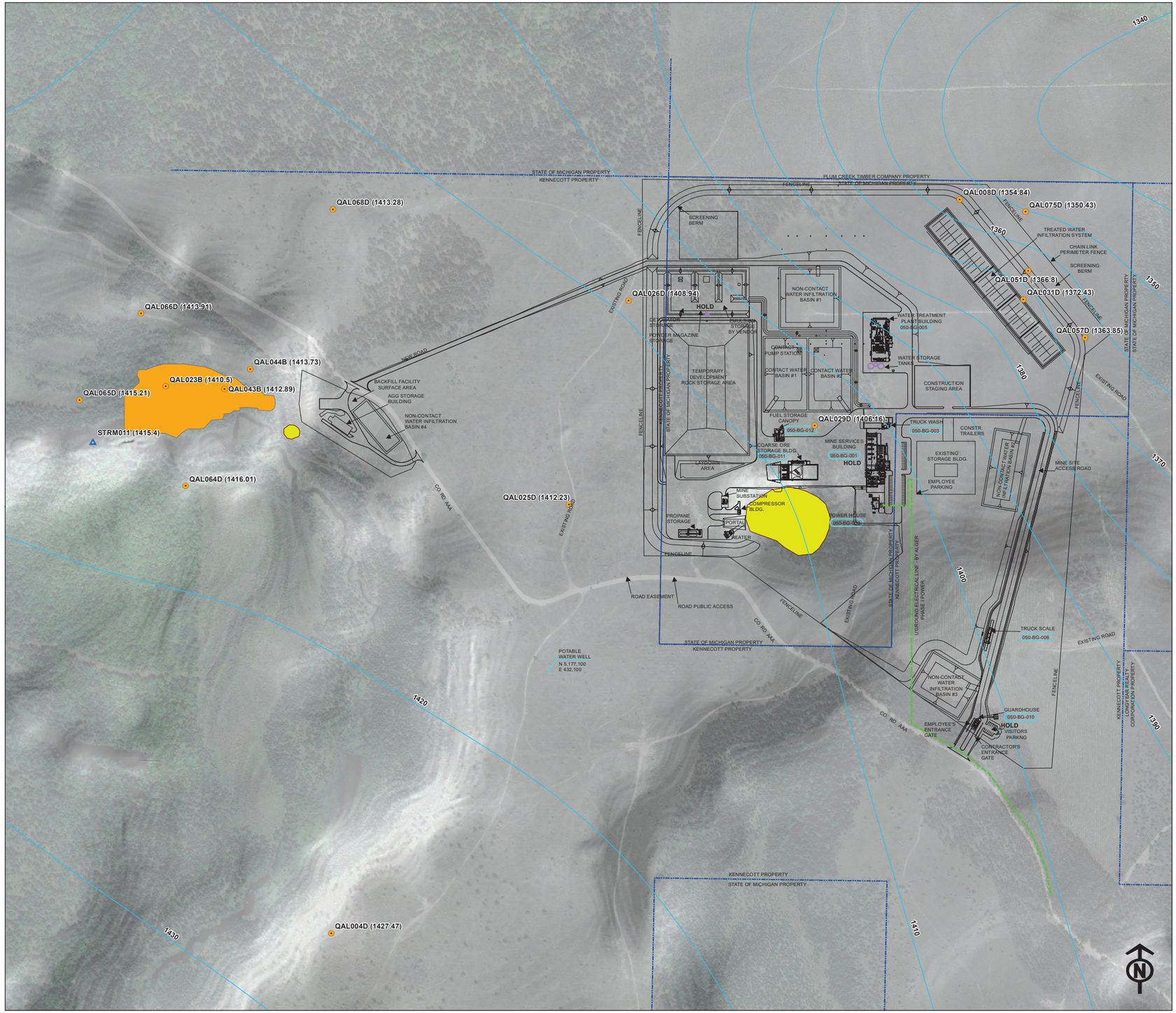
1:3,600

Eagle Mine
a subsidiary of lundin mining

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
SUMMER BASEFLOW AUG 2024
HS VIEW



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 500 1,000 Feet

1:3,600

Eagle Mine
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North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
FALL RAIN RUNOFF OCT-NOV 2024
HS VIEW

Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 500 1,000 Feet

1:4,000

Eagle Mine
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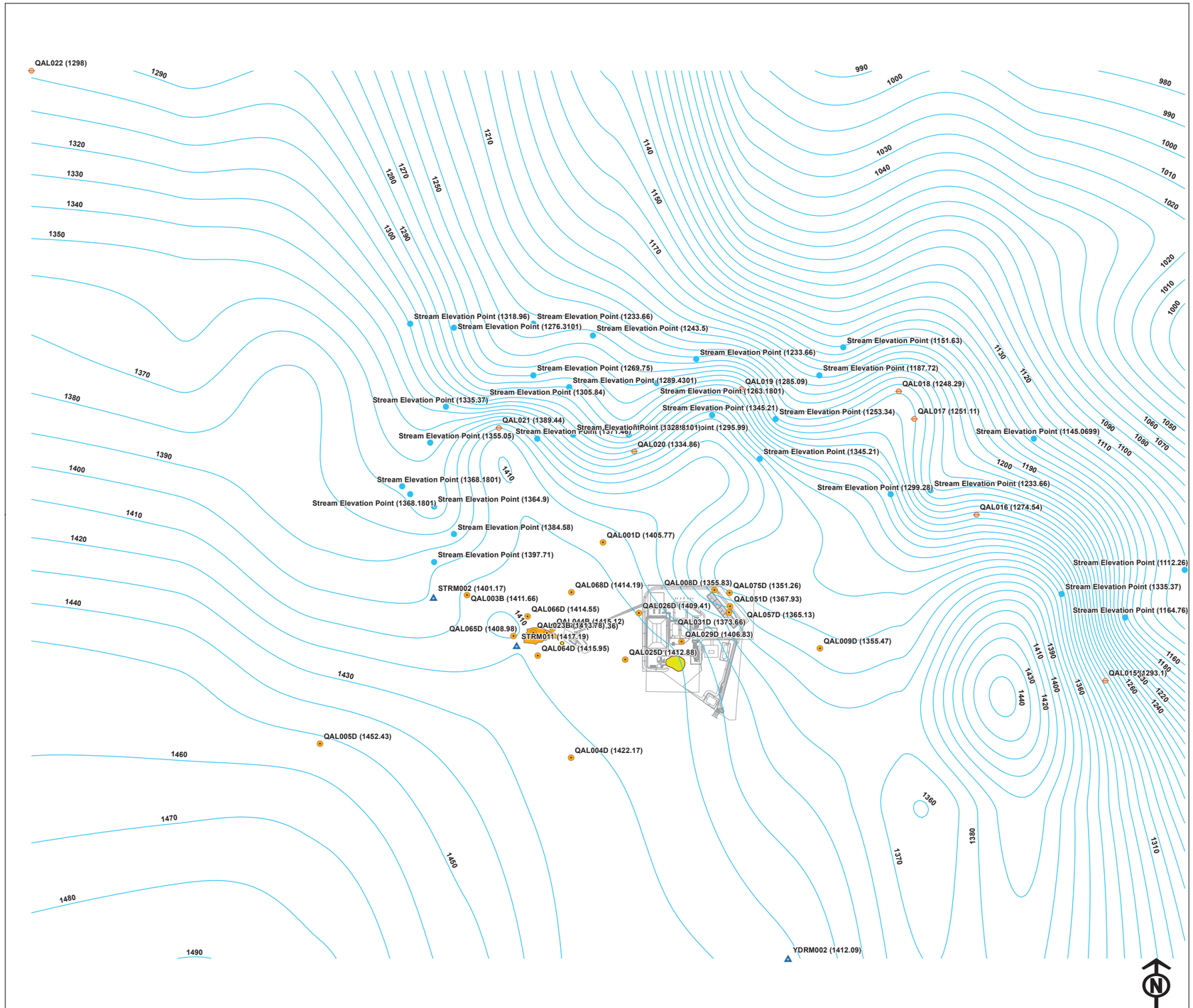
North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
WINTER BASEFLOW, JAN-MAR 2024



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 2,000 4,000 Feet

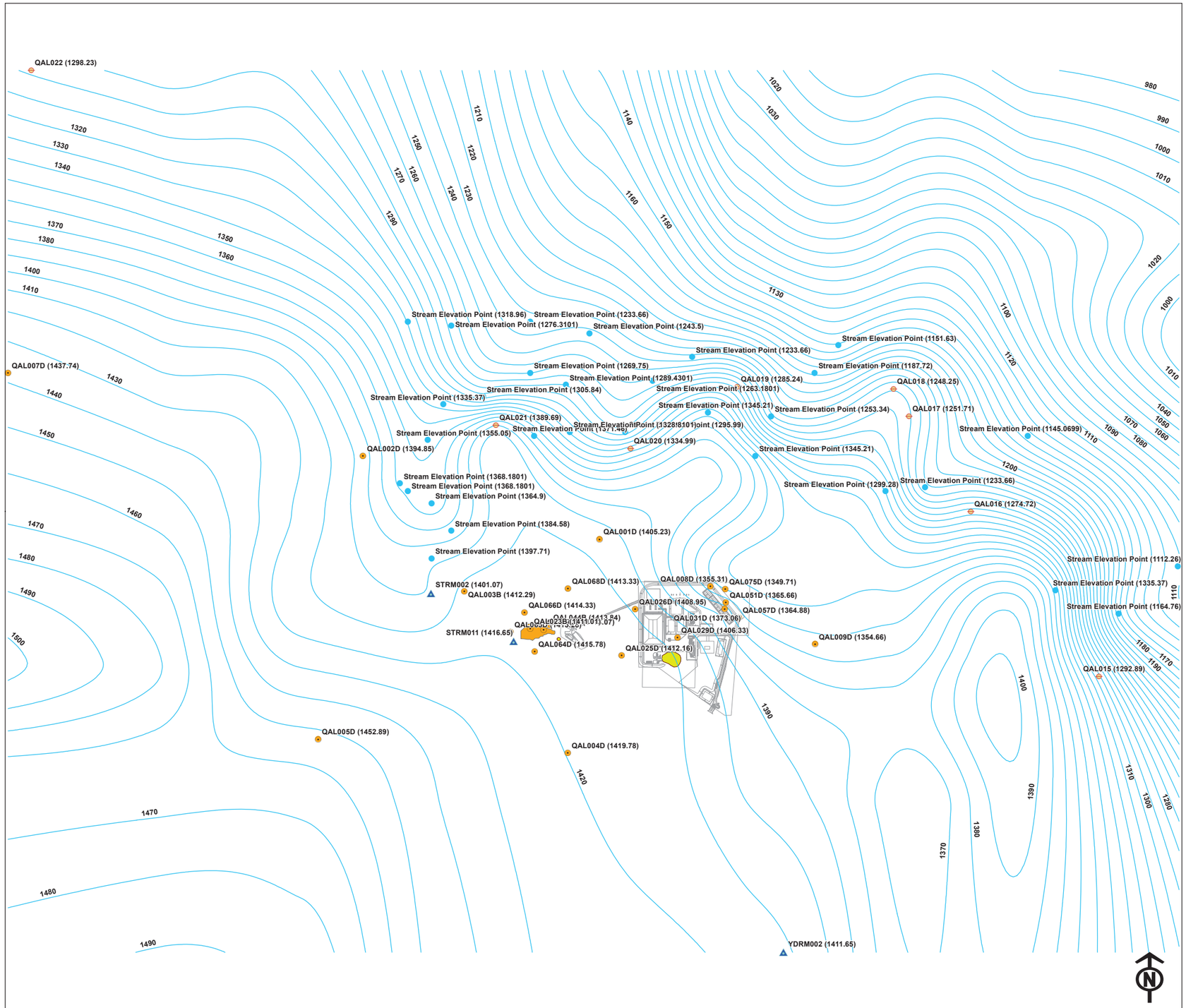
1:16,000

Eagle Mine
a subsidiary of lundin mining

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
SPRING RUNOFF, MAY-JUN 2024



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 2,000 4,000 Feet

1:16,000

Eagle Mine
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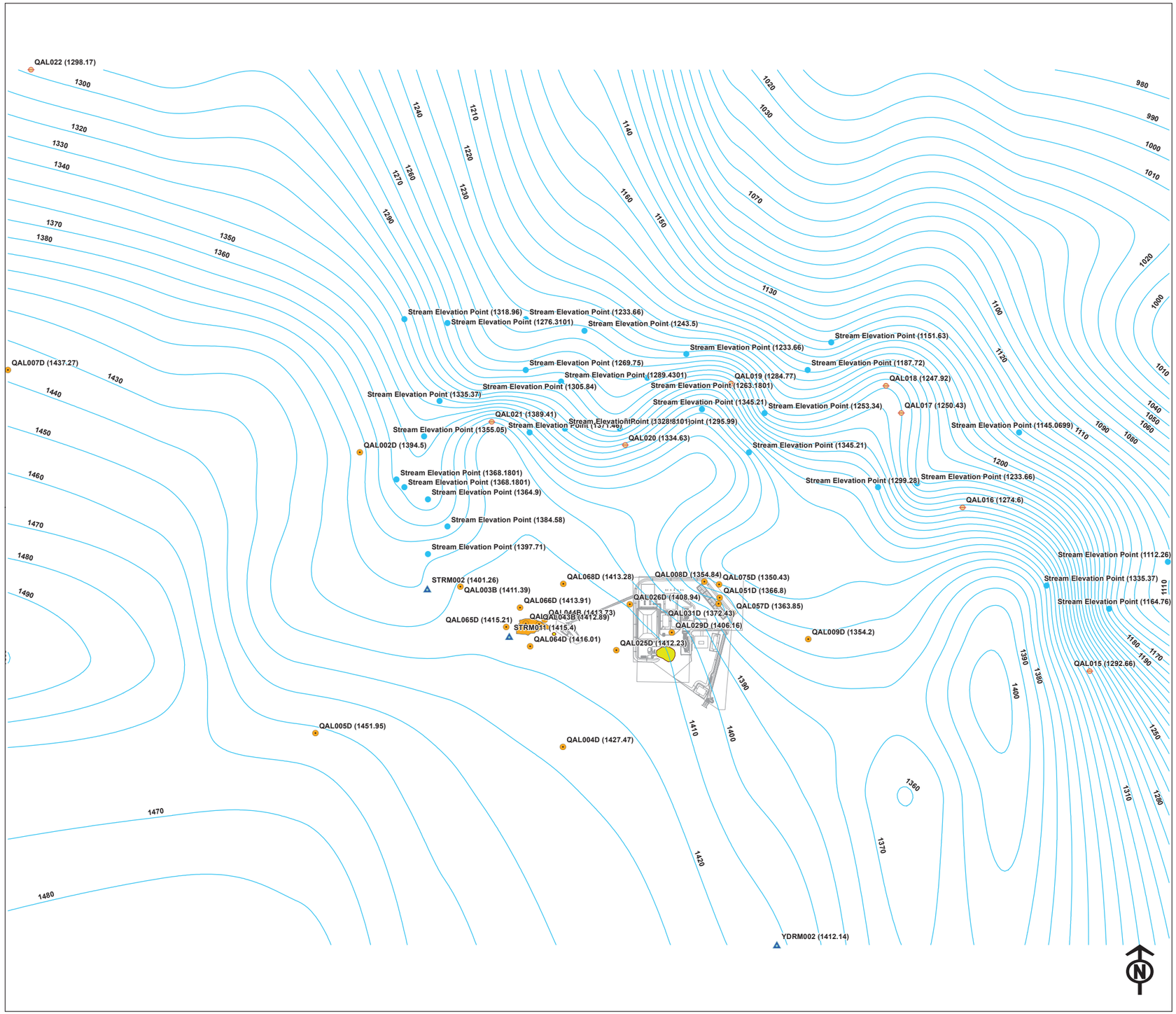
North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
SUMMER BASEFLOW AUG 2024



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 2,000 4,000 Feet

1:16,000

Eagle Mine
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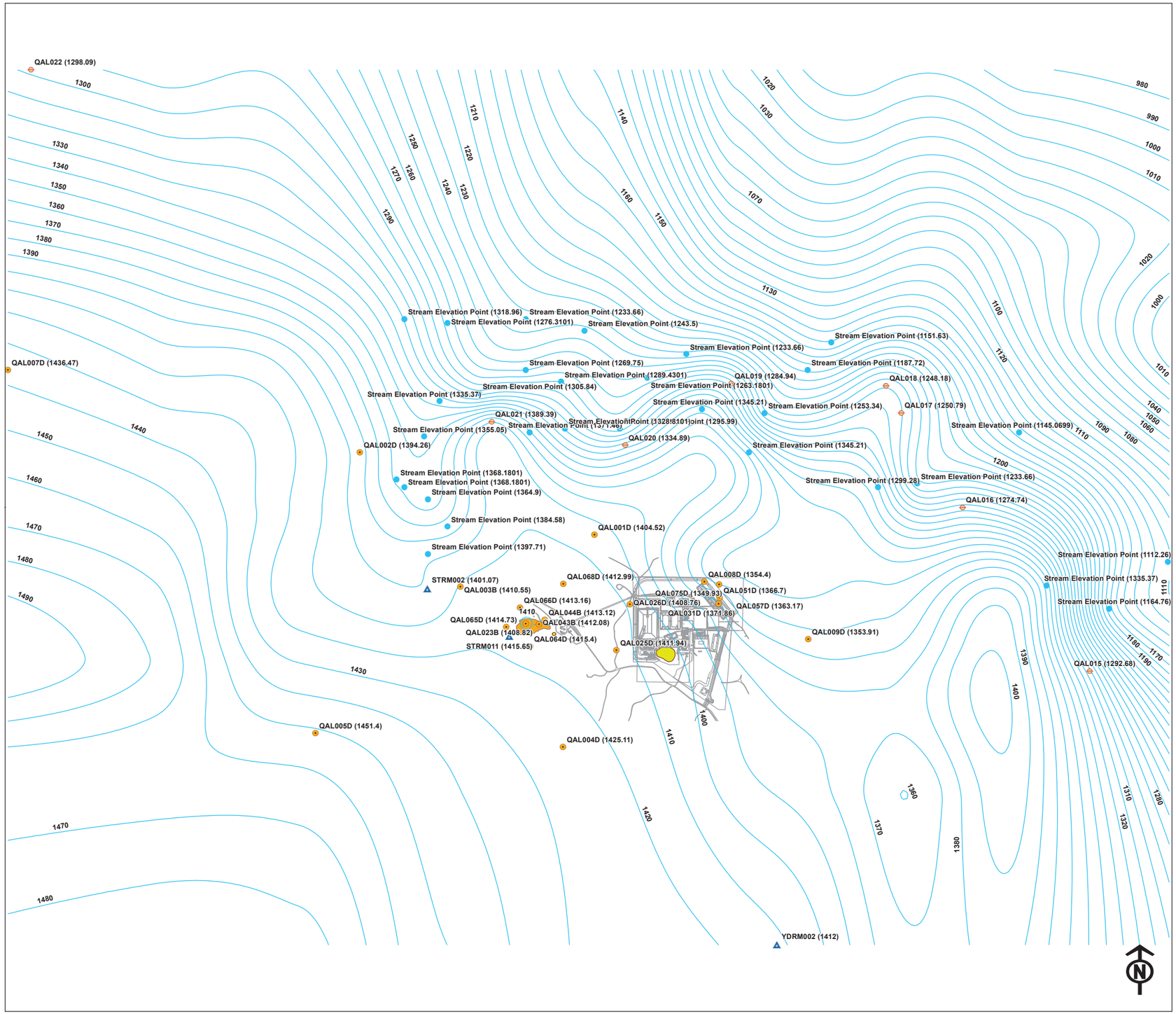
North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

D-ZONE GROUNDWATER ELEVATION CONTOURS
FALL RAIN RUNOFF OCT-NOV 2024



Legend

- Monitoring Well
- Seep Piezometer
- Surface Water Monitoring Location
- Wetland Piezometer
- Stream Elevation Point
  (Source: Digital Elevation Model: 98 ft resolution)
- Groundwater Elevation Contour (10' interval)
- Mine Facilities
- Ore Body
- Outcrop

Reference

Data provided by: Eagle Mine and North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 2,000 4,000 Feet

1:16,000

Eagle Mine
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North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1

Appendix O

Eagle Mine

Continuous Groundwater Level Results

2024 Water Year
Continuous Monitoring Results
Monitoring Well Locations
Eagle Mine

	QAL023B	QAL024A	QAL044B	QAL064D	QAL065D	QAL066D
Background						
Mean	1416.9	1417.8	1416.2	1418.7	1417.1	1416.9
Standard Dev.	0.4	0.4	0.4	0.7	0.4	0.3
Minimum	1415.7	1417.2	1414.9	1415.7	1416.1	1416.1
Maximum	1417.6	1418.5	1416.9	1419.6	1417.8	1417.5
Oct-23						
Mean	1414.0	1418.6	1415.4	1416.3	1415.9	1415.8
Minimum	1413.7	1418.5	1415.3	1416.1	1415.7	1415.7
Maximum	1414.5	1418.7	1415.5	1416.6	1416.1	1415.9
Nov-23						
Mean	1413.6	1418.3	1415.3	1416.3	1415.9	1415.7
Minimum	1413.5	1418.2	1415.1	1416.1	1415.8	1415.6
Maximum	1413.8	1418.5	1415.4	1416.5	1416.1	1415.8
Dec-23						
Mean	1413.3	1418.0	1415.0	1416.2	1415.8	1415.5
Minimum	1413.2	1418.0	1414.9	1415.8	1415.7	1415.4
Maximum	1413.5	1418.2	1415.2	1416.3	1416.0	1415.6
Jan-24						
Mean	1412.4	1417.8	1414.7	1415.9	1415.5	1415.1
Minimum	1412.1	1417.7	1414.5	1415.6	1415.4	1414.9
Maximum	1413.2	1418.0	1414.9	1416.2	1415.8	1415.4
Feb-24						
Mean	1411.7	1417.6	1414.3	1415.8	1415.3	1414.7
Minimum	1411.5	1417.5	1414.1	1415.6	1415.2	1414.4
Maximum	1412.2	1417.7	1414.5	1416.0	1415.6	1414.9
Mar-24						
Mean	NM	1417.3	1413.9	1415.6	1415.1	1414.4
Minimum	NM	1417.3	1413.8	1415.3	1415.0	1414.4
Maximum	NM	1417.5	1414.1	1415.7	1415.3	1414.5
Apr-24						
Mean	1411.1	1417.3	1413.9	1415.7	1415.3	NM
Minimum	1411.0	1417.3	1413.7	1415.4	1415.1	NM
Maximum	1411.1	1417.4	1413.9	1415.9	1415.4	NM
May-24						
Mean	1410.9	1417.6	1413.8	1415.8	1415.3	NM
Minimum	1410.6	1417.5	1413.6	1415.5	1415.1	NM
Maximum	1411.2	1417.8	1413.9	1416.1	1415.4	NM
Jun-24						
Mean	1410.7	1417.7	1413.8	1415.9	1415.3	1414.0
Minimum	1410.5	1417.7	1413.7	1415.7	1415.1	1413.9
Maximum	1410.9	1417.8	1413.9	1416.2	1415.5	1414.2

2024 Water Year
Continuous Monitoring Results
Monitoring Well Locations
Eagle Mine

	QAL023B	QAL024A	QAL044B	QAL064D	QAL065D	QAL066D
Background						
Mean	1416.9	1417.8	1416.2	1418.7	1417.1	1416.9
Standard Dev.	0.4	0.4	0.4	0.7	0.4	0.3
Minimum	1415.7	1417.2	1414.9	1415.7	1416.1	1416.1
Maximum	1417.6	1418.5	1416.9	1419.6	1417.8	1417.5
Jul-24						
Mean	1410.7	1417.6	1413.8	1416.0	1415.3	1414.0
Minimum	1410.5	1417.5	1413.7	1415.8	1415.2	1413.9
Maximum	1410.8	1417.7	1413.9	1416.2	1415.4	1414.1
Aug-24						
Mean	1410.4	1417.4	1413.7	1415.9	1415.1	1413.8
Minimum	1410.3	1417.4	1413.6	1415.7	1415.0	1413.8
Maximum	1410.6	1417.5	1413.8	1416.0	1415.2	1413.9
Sep-24						
Mean	1410.1	1417.2	1413.5	1415.8	1414.9	1413.6
Minimum	1409.8	1417.2	1413.3	1415.5	1414.8	1413.4
Maximum	1410.4	1417.3	1413.7	1416.0	1415.2	1413.8

Source: North Jackson Company, REACH System

* All results are calculated based on mean daily values from continuous monitoring.

NM = Not measured.

Results in red indicate values outside of the background range.

2024 Water Year
Continuous Monitoring Results
Wetland Monitoring Locations
Eagle Mine

	WLD022-4.5	WLD023-4.5	WLD025-4.5	WLD025-9.5	WLD026-4.5	WLD026-9.5	WLD027-4.5	WLD027-9.5	WLD028-4.5	WLD028-9.5
Background										
Mean	1422.6	1413.5	1415.5	1415.9	1416.3	1416.2	1422.1	1422.2	1427.2	1427.0
Standard Dev.	0.2	0.5	0.3	0.2	0.3	0.3	0.7	0.7	0.5	0.5
6" limit	1421.6	1411.4	1414.3	1414.6	1415.3	1415.3	1419.8	1419.8	1424.5	1424.7
Minimum	1422.1	1411.9	1414.8	1415.1	1415.8	1415.8	1420.3	1420.3	1425.0	1425.2
Maximum	1422.9	1414.7	1416.5	1416.7	1417.0	1416.7	1423.1	1423.1	1428.3	1428.3
Oct-23										
Mean	1422.1	1413.2	1415.3	1415.4	1416.2	1416.2	1422.3	1422.3	1427.3	1427.2
Minimum	1422.1	1412.9	1415.3	1415.0	1416.0	1416.0	1421.6	1421.6	1426.7	1426.9
Maximum	1422.2	1413.4	1415.4	1415.7	1416.5	1416.5	1422.8	1422.7	1427.7	1427.6
Nov-23										
Mean	1422.1	1413.3	1415.2	NM	1416.4	1416.4	1422.6	1422.5	1427.6	1427.4
Minimum	1422.0	1413.3	1415.2	NM	1416.3	1416.3	1422.5	1422.5	1427.5	1427.2
Maximum	1422.2	1413.4	1415.4	NM	1416.5	1416.6	1422.7	1422.8	1427.8	1427.6
Dec-23										
Mean	1422.0	1413.4	1415.2	NM	1416.4	1416.4	1422.6	1422.5	1427.6	1427.3
Minimum	1422.0	1413.3	1415.1	NM	1416.3	1416.3	1422.4	1422.4	1427.4	1427.1
Maximum	1422.1	1413.5	1415.3	NM	1416.5	1416.6	1422.8	1422.8	1427.8	1427.6
Jan-24										
Mean	1421.9	1413.4	1414.9	NM	1416.3	1416.2	1422.5	1422.4	1427.5	1427.1
Minimum	1421.9	1413.4	1414.9	NM	1416.3	1416.1	1422.4	1422.4	1427.4	1427.0
Maximum	1422.0	1413.4	1415.0	NM	1416.4	1416.3	1422.6	1422.6	1427.7	1427.3
Feb-24										
Mean	1421.9	1413.4	1414.9	NM	1416.4	1416.2	1422.5	1422.5	1427.5	1427.1
Minimum	1421.9	1413.4	1414.9	NM	1416.3	1416.2	1422.5	1422.5	1427.4	1427.0
Maximum	1422.0	1413.5	1415.1	NM	1416.6	1416.4	1422.7	1422.7	1427.7	1427.4
Mar-24										
Mean	1421.9	1413.4	1414.9	NM	1416.4	1416.3	1422.6	1422.6	1427.7	1427.3
Minimum	1421.8	1413.4	1414.8	NM	1416.3	1416.2	1422.5	1422.5	1427.4	1427.0
Maximum	1422.0	1413.5	1415.1	NM	1416.6	1416.5	1422.9	1422.8	1427.9	1427.5
Apr-24										
Mean	1422.0	1413.5	1415.1	NM	1416.5	1416.6	1422.7	1422.7	1427.9	1427.5
Minimum	1421.9	1413.5	1415.0	NM	1416.4	1416.3	1422.6	1422.6	1427.8	1427.2
Maximum	1422.1	1413.5	1415.3	NM	1416.7	1416.8	1423.0	1422.9	1428.1	1427.8
May-24										
Mean	1421.9	1413.4	1415.4	NM	1416.4	1416.5	1422.5	1422.5	1427.6	1427.1
Minimum	1421.9	1413.3	1415.3	NM	1416.4	1416.5	1422.4	1422.3	1427.3	1426.9
Maximum	1422.0	1413.5	1415.7	NM	1416.5	1416.6	1422.7	1422.7	1427.9	1427.5
Jun-24										
Mean	1421.9	1413.3	1415.9	NM	1416.5	1416.7	1422.3	1422.3	1427.1	1426.8
Minimum	1421.8	1413.2	1415.7	NM	1416.4	1416.6	1421.8	1421.8	1426.4	1426.4
Maximum	1422.1	1413.5	1416.1	NM	1416.7	1417.0	1422.8	1422.8	1427.6	1427.3

2024 Water Year
Continuous Monitoring Results
Wetland Monitoring Locations
Eagle Mine

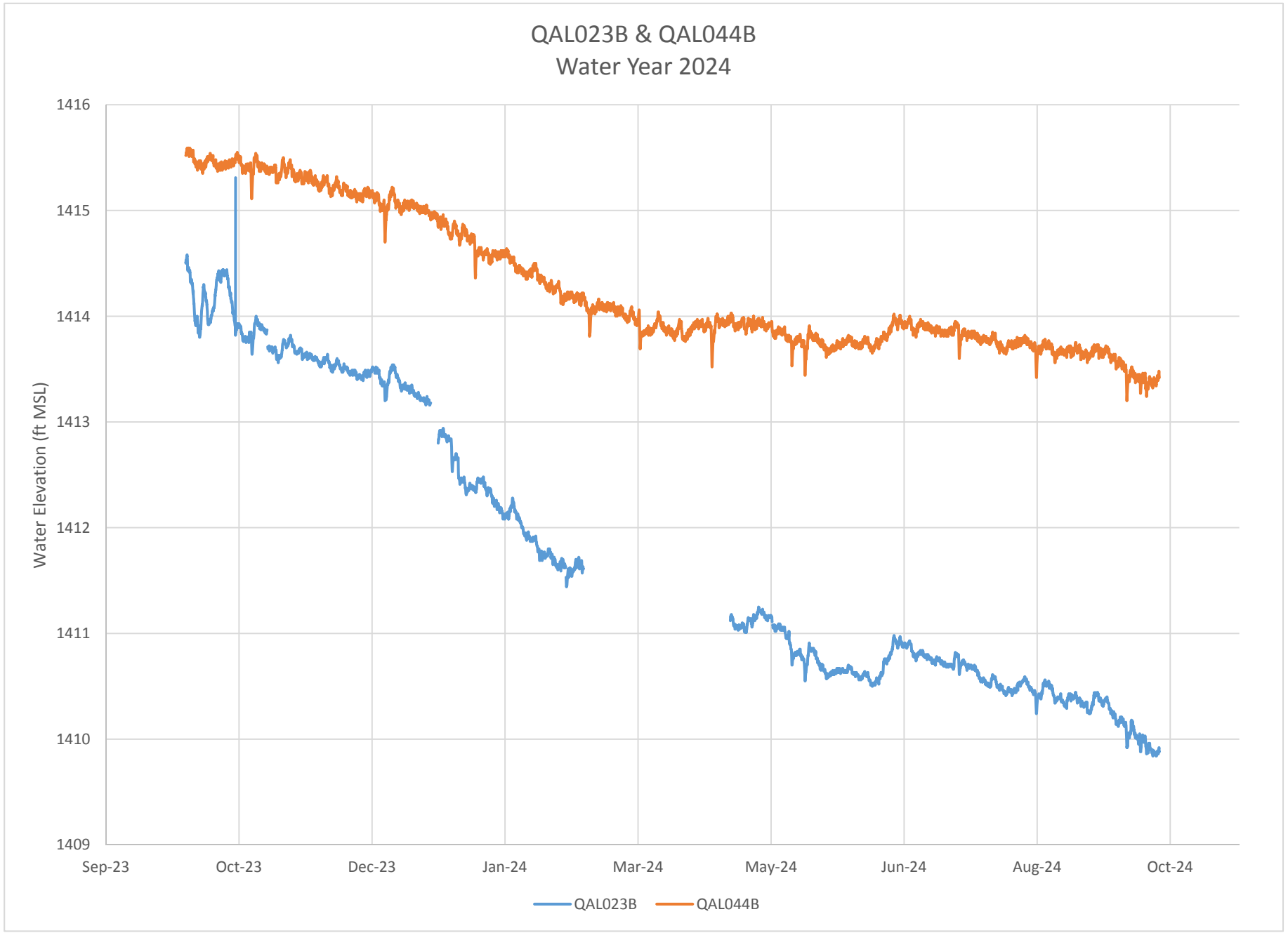
	WLD022-4.5	WLD023-4.5	WLD025-4.5	WLD025-9.5	WLD026-4.5	WLD026-9.5	WLD027-4.5	WLD027-9.5	WLD028-4.5	WLD028-9.5
Background										
Mean	1422.6	1413.5	1415.5	1415.9	1416.3	1416.2	1422.1	1422.2	1427.2	1427.0
Standard Dev.	0.2	0.5	0.3	0.2	0.3	0.3	0.7	0.7	0.5	0.5
6" limit	1421.6	1411.4	1414.3	1414.6	1415.3	1415.3	1419.8	1419.8	1424.5	1424.7
Minimum	1422.1	1411.9	1414.8	1415.1	1415.8	1415.8	1420.3	1420.3	1425.0	1425.2
Maximum	1422.9	1414.7	1416.5	1416.7	1417.0	1416.7	1423.1	1423.1	1428.3	1428.3
Jul-24										
Mean	1421.8	1413.2	1416.2	NM	1416.6	1416.8	1422.1	1422.1	1426.9	1426.6
Minimum	1421.7	1412.9	1416.1	NM	1416.6	1416.8	1421.3	1421.3	1426.1	1426.0
Maximum	1421.9	1413.4	1416.5	NM	1416.8	1416.9	1422.5	1422.4	1427.5	1427.0
Aug-24										
Mean	1421.8	1413.1	1416.5	NM	1416.8	1416.8	1421.3	1421.3	1425.9	1425.8
Minimum	1421.7	1412.8	1416.5	NM	1416.7	1416.8	1420.9	1420.9	1425.6	1425.6
Maximum	1422.0	1413.4	1416.6	NM	1416.9	1417.0	1422.0	1422.0	1426.7	1426.1
Sep-24										
Mean	1421.7	1412.9	1416.6	NM	1416.9	1417.0	1421.4	1421.4	1425.8	1425.7
Minimum	1421.7	1412.6	1416.6	NM	1416.9	1416.9	1420.7	1420.7	1425.4	1425.3
Maximum	1422.0	1413.4	1416.7	NM	1417.0	1417.1	1422.2	1422.2	1426.6	1426.2

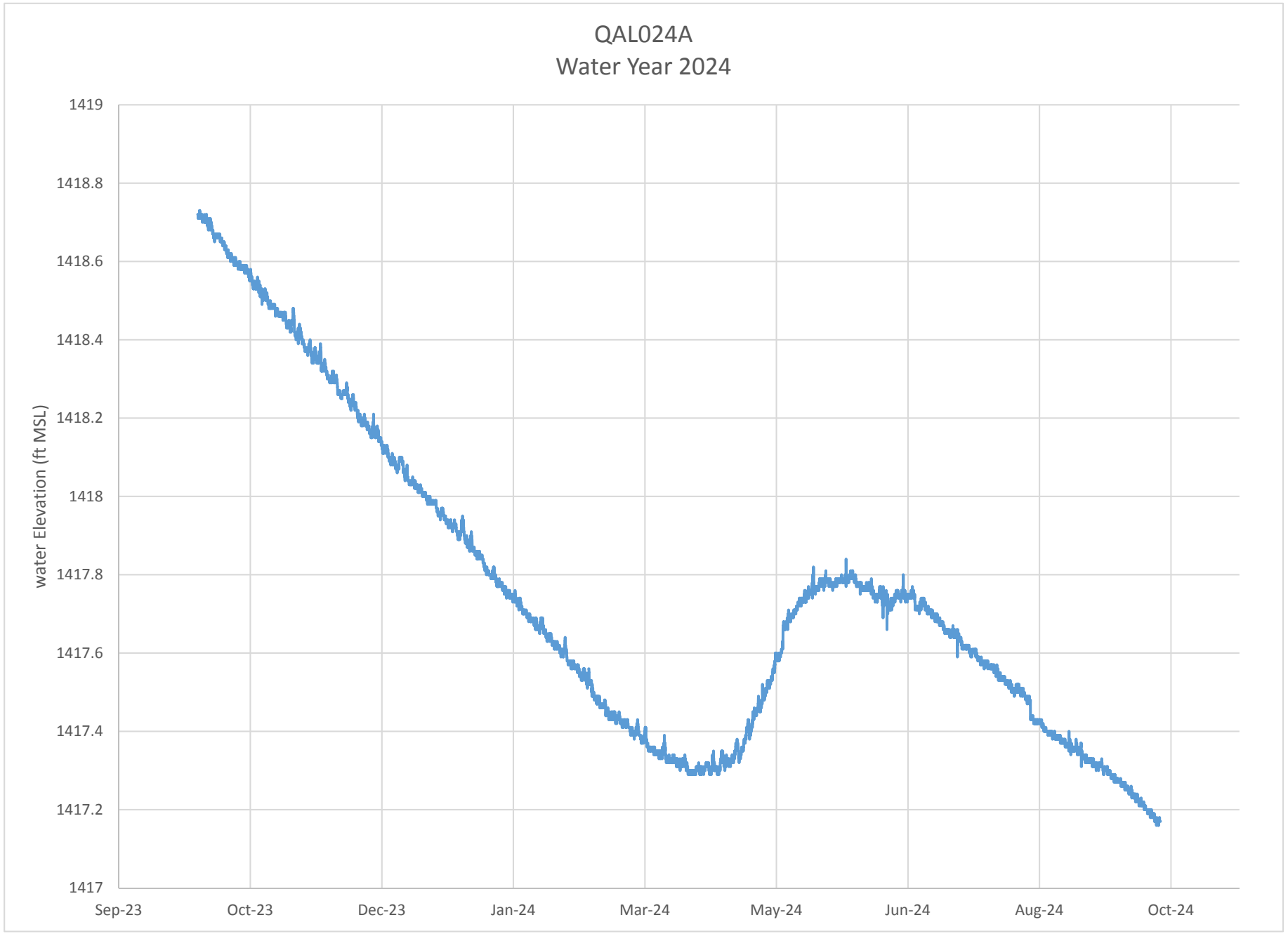
Source: North Jackson Company, REACH System
* All results are calculated based on mean daily values from continuous monitoring.
NM = Not measured.
Results in red indicate values outside of the background range.

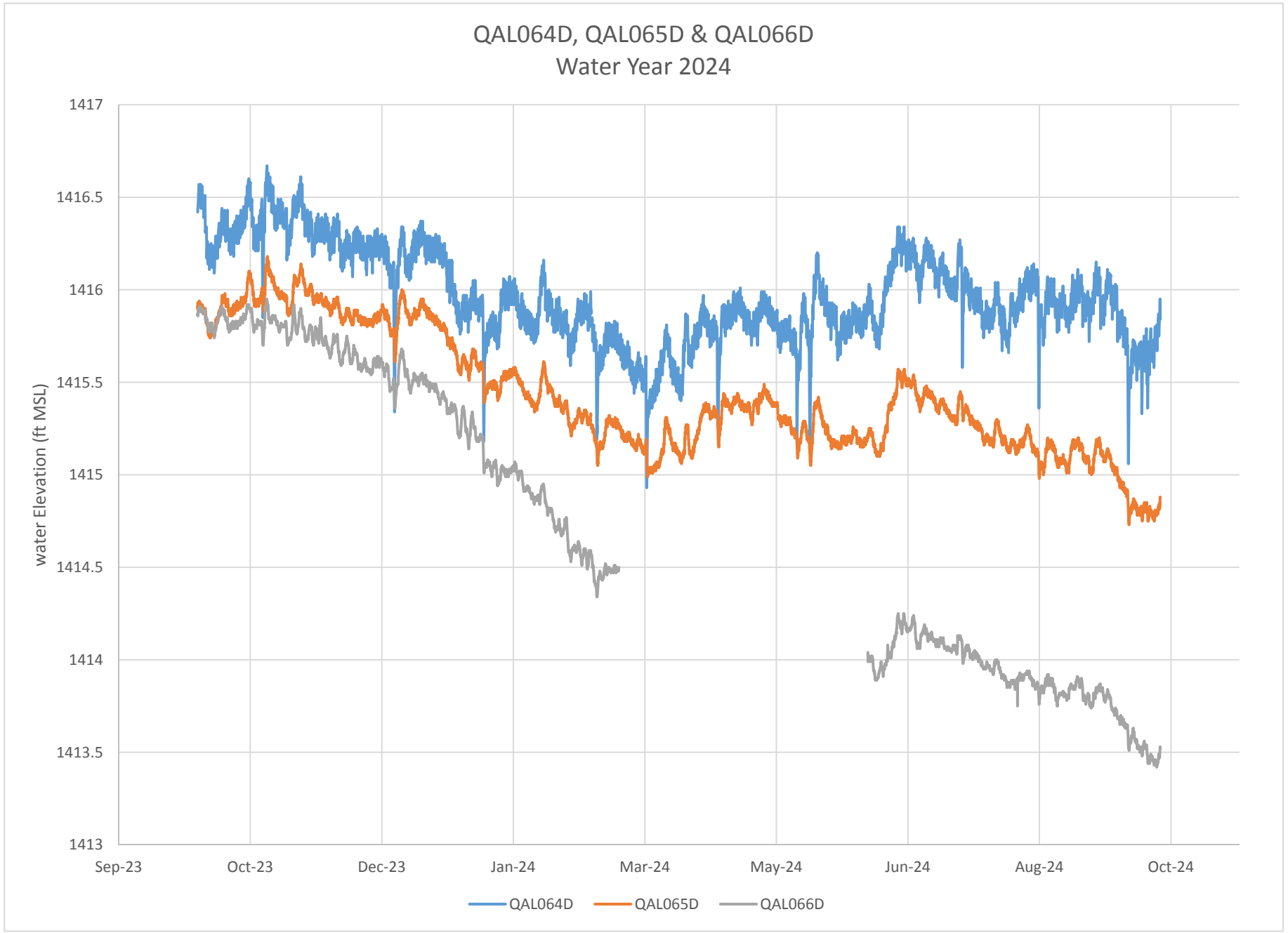
Appendix P

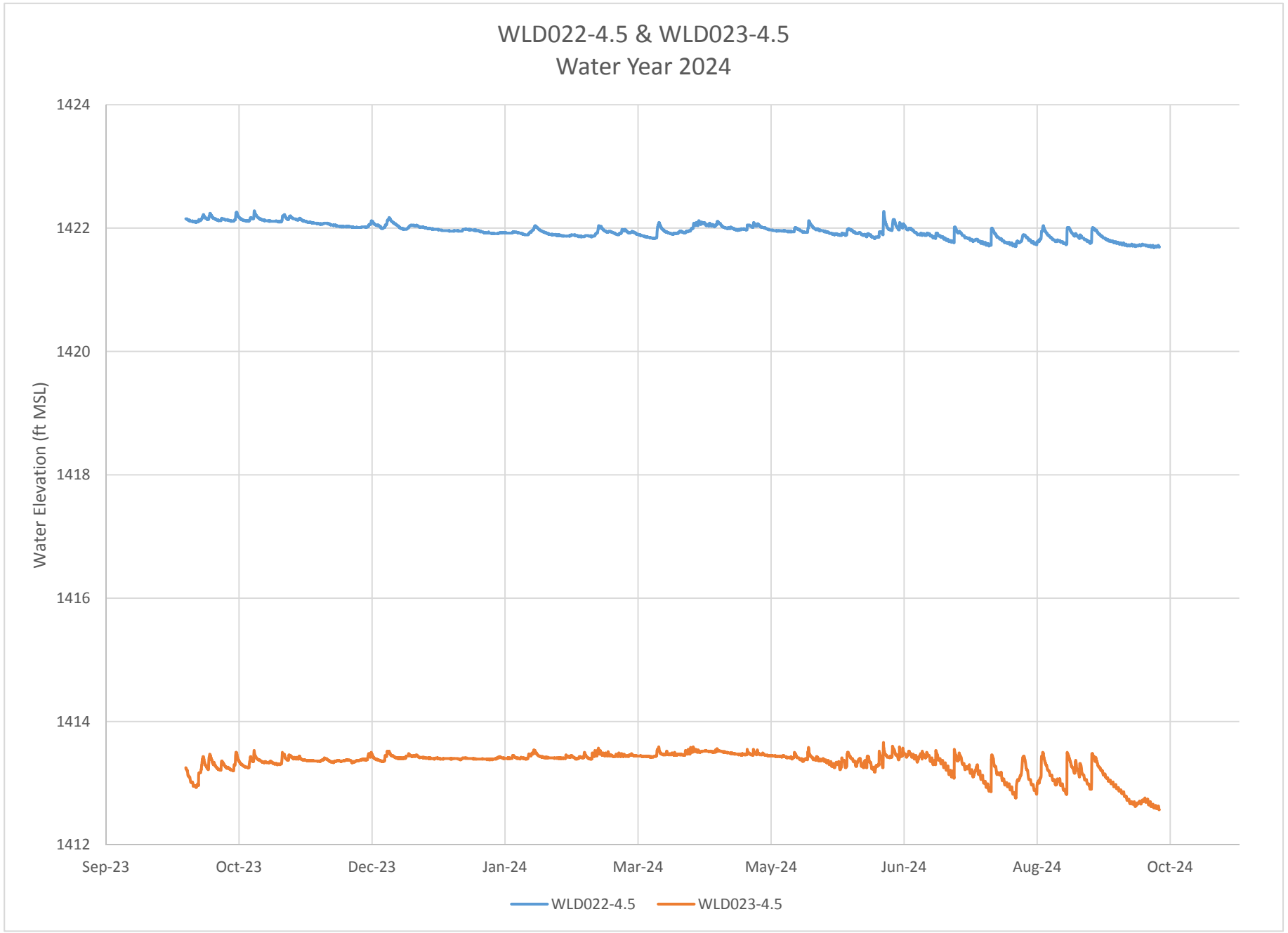
Eagle Mine

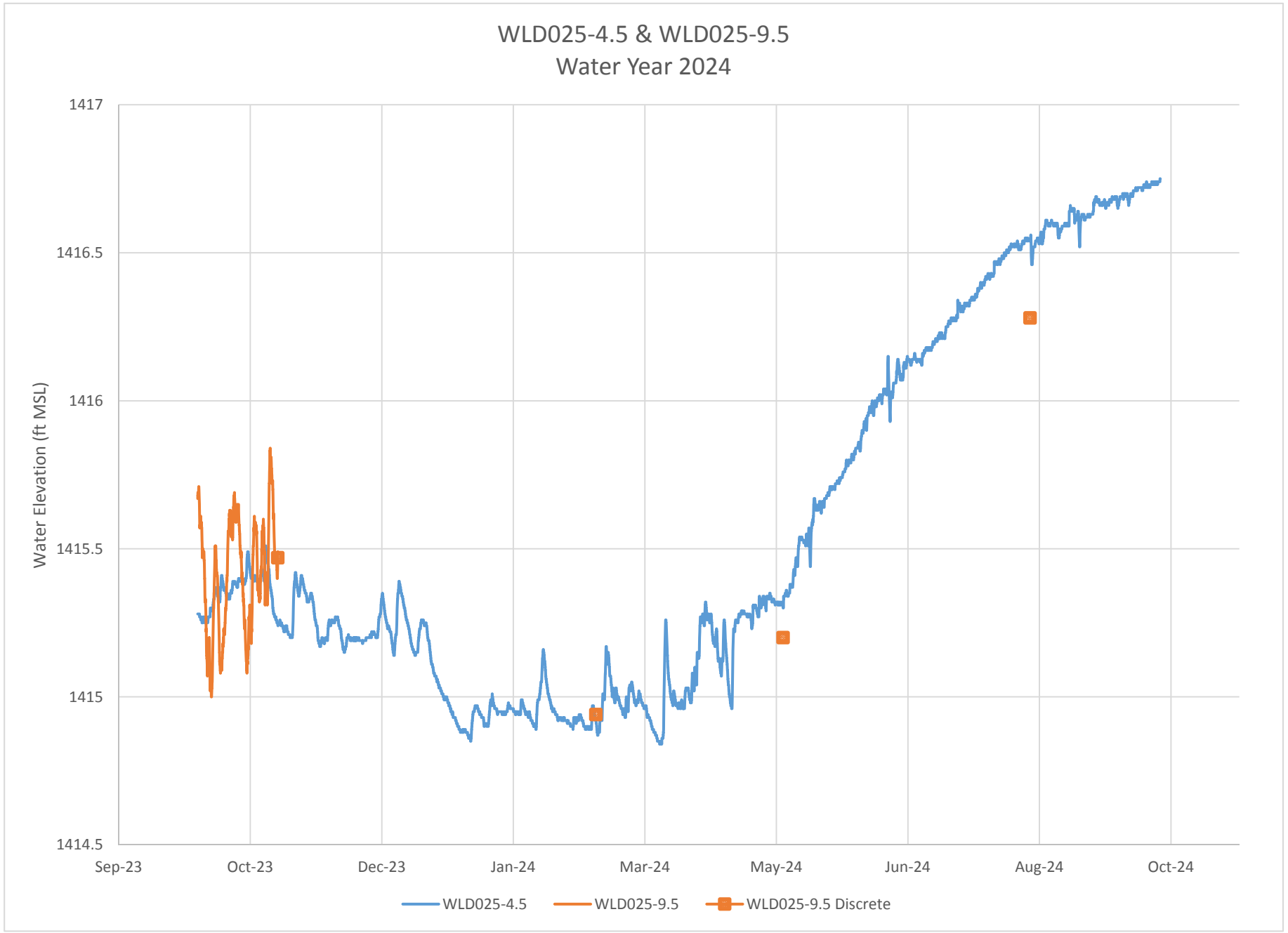
Groundwater and Wetland Hydrographs

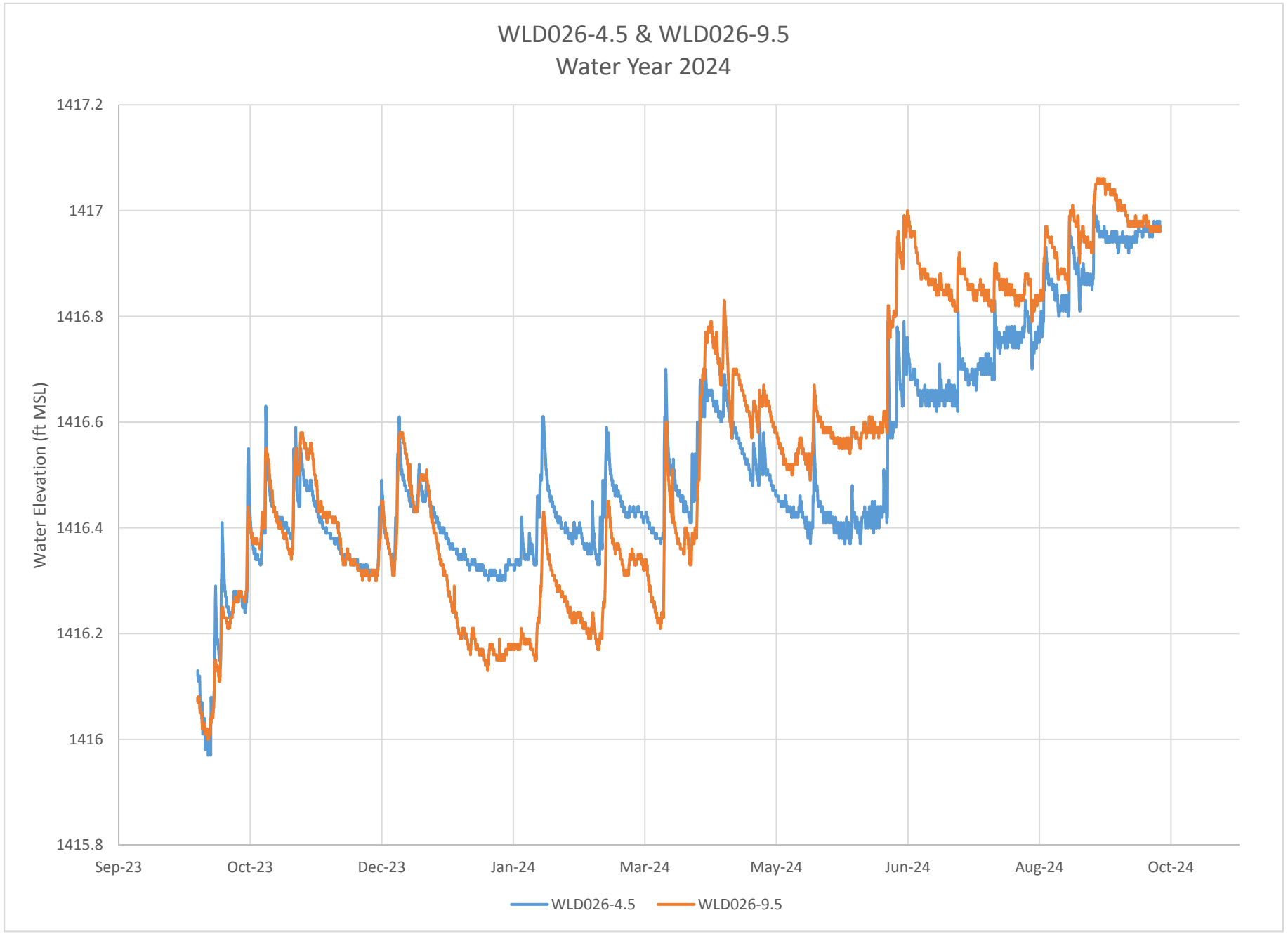

QAL023B & QAL044B
Water Year 2024
Water Elevation (ft MSL)
1416
1415
1414
1413
1412
1411
1410
1409
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24
QAL023B
QAL044B

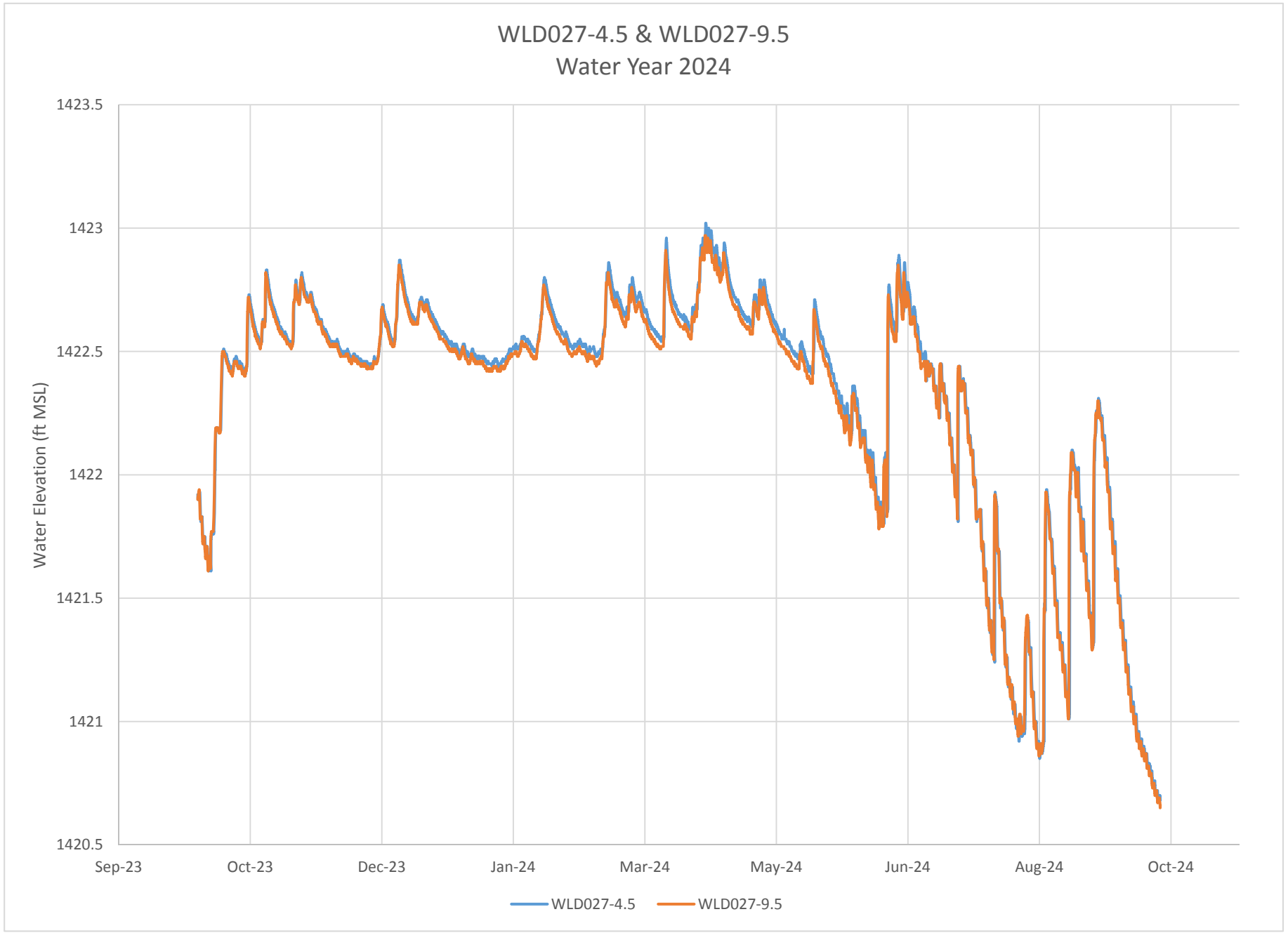

QAL024A
Water Year 2024
water Elevation (ft MSL)
1419
1418.8
1418.6
1418.4
1418.2
1418
1417.8
1417.6
1417.4
1417.2
1417
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24

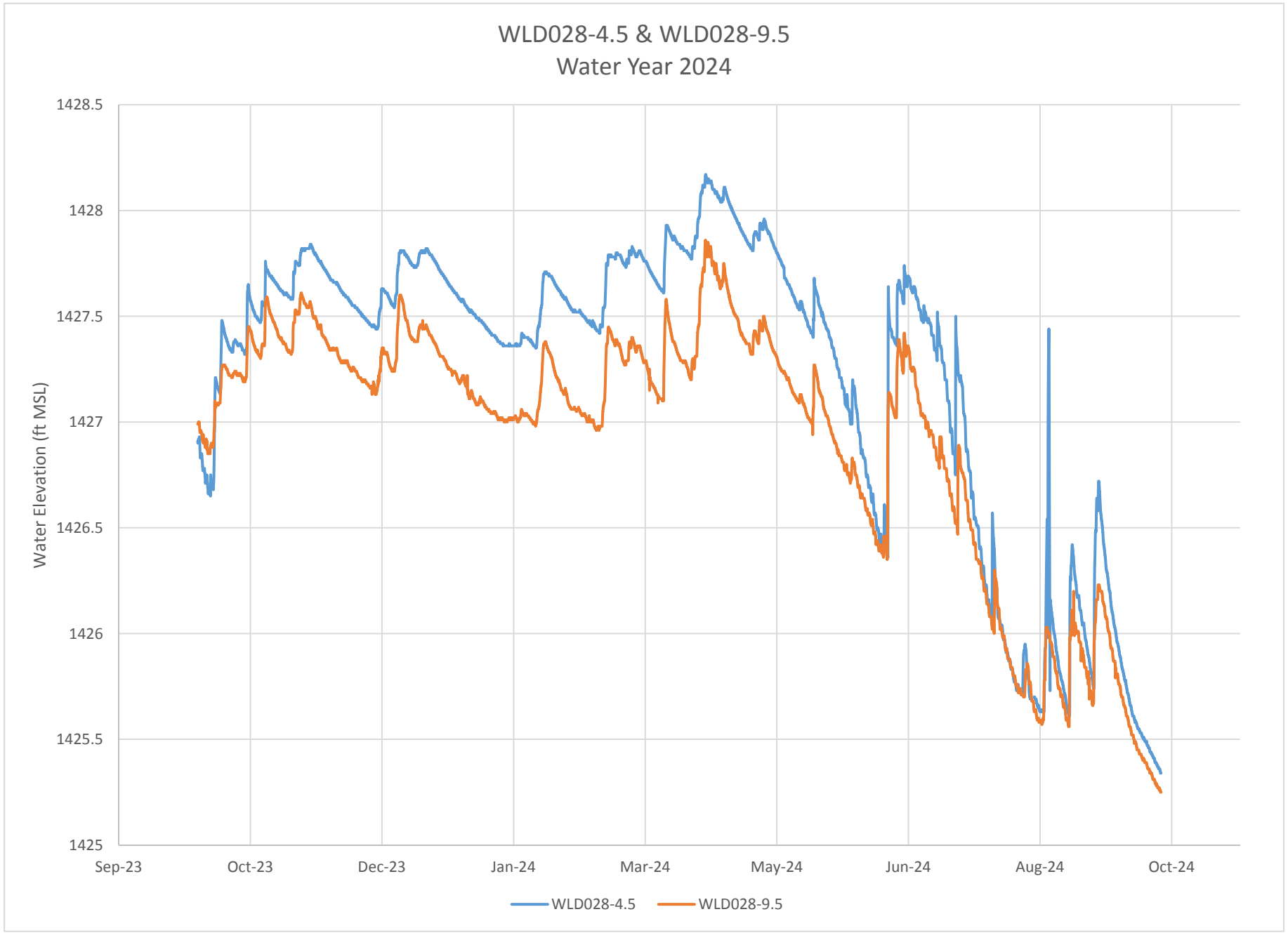

QAL064D, QAL065D & QAL066D
Water Year 2024
water Elevation (ft MSL)
1417
1416.5
1416
1415.5
1415
1414.5
1414
1413.5
1413
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24
QAL064D
QAL065D
QAL066D


WLD022-4.5 & WLD023-4.5
Water Year 2024
Water Elevation (ft MSL)
1424
1422
1420
1418
1416
1414
1412
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24
WLD022-4.5
WLD023-4.5


WLD025-4.5 & WLD025-9.5
Water Year 2024
Water Elevation (ft MSL)
1417
1416.5
1416
1415.5
1415
1414.5
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24
WLD025-4.5
WLD025-9.5
WLD025-9.5 Discrete


WLD026-4.5 & WLD026-9.5
Water Year 2024
Water Elevation (ft MSL)
1417.2
1417
1416.8
1416.6
1416.4
1416.2
1416
1415.8
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24
WLD026-4.5
WLD026-9.5


WLD027-4.5 & WLD027-9.5
Water Year 2024
Water Elevation (ft MSL)
1423.5
1423
1422.5
1422
1421.5
1421
1420.5
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24
WLD027-4.5
WLD027-9.5


WLD028-4.5 & WLD028-9.5
Water Year 2024
Water Elevation (ft MSL)
1428.5
1428
1427.5
1427
1426.5
1426
1425.5
1425
Sep-23
Oct-23
Dec-23
Jan-24
Mar-24
May-24
Jun-24
Aug-24
Oct-24
WLD028-4.5
WLD028-9.5

Appendix Q

Eagle Mine

Discrete Groundwater Elevations

Mine Permit Water Elevation Data
2024 Full Network Quarterly Discrete Measurements
Eagle Project

Location	1st Qtr 2024		2nd Qtr 2024		3rd Qtr 2024		4th Qtr 2024	
	Elev. (ft MSL)	Meas. Date	Elev. (ft MSL)	Meas. Date	Elev. (ft MSL)	Meas. Date	Elev. (ft MSL)	Meas. Date
QAL001A	1411.89	02/21/24	1410.79	06/05/24	1410.43	08/12/24	1410.18	11/07/24
QAL001D	1405.77	02/21/24	1405.23	06/05/24	NM	08/13/24	1404.52	11/07/24
QAL002A	NM	03/22/24	1432.90	06/05/24	1432.95	08/12/24	1432.62	11/07/24
QAL002D	NM	03/22/24	1394.85	06/05/24	1394.50	08/12/24	1394.26	11/07/24
QAL003A	1425.03	02/27/24	1426.24	06/05/24	1424.95	08/12/24	1423.46	11/06/24
QAL003B	1411.66	02/27/24	1412.29	06/05/24	1411.39	08/12/24	1410.55	11/06/24
QAL004A	1424.28	02/29/24	1425.14	05/10/24	1424.58	08/12/24	1424.23	11/07/24
QAL004D	1422.17	02/29/24	1419.78	05/10/24	1427.47	08/12/24	1425.11	11/07/24
QAL005A	1453.55	02/27/24	1454.31	06/05/24	1453.01	08/13/24	1452.08	11/06/24
QAL005D	1452.43	02/27/24	1452.89	06/05/24	1451.95	08/13/24	1451.40	11/06/24
QAL006A	1414.14	02/21/24	1415.30	06/05/24	1414.00	08/13/24	1412.86	11/06/24
QAL006B	1400.25	02/21/24	1401.15	06/05/24	1400.22	08/13/24	1399.28	11/06/24
QAL007A	NM	03/01/24	1428.86	06/05/24	1428.77	08/13/24	1428.30	11/06/24
QAL007D	NM	03/01/24	1437.74	06/05/24	1437.27	08/13/24	1436.47	11/06/24
QAL008A	1394.36	02/21/24	1394.26	05/10/24	1393.86	08/12/24	1392.67	11/06/24
QAL008D	1355.83	02/21/24	1355.31	05/10/24	1354.84	08/12/24	1354.40	11/06/24
QAL009A	1355.56	02/21/24	1354.81	06/05/24	1354.32	08/12/24	1353.95	11/07/24
QAL009D	1355.47	02/21/24	1354.66	06/05/24	1354.20	08/12/24	1353.91	11/07/24
QAL010A	1420.66	02/21/24	1422.44	06/05/24	1423.29	08/12/24	1422.11	11/07/24
QAL015	1293.10	02/21/24	1292.89	06/05/24	1292.66	08/12/24	1292.68	11/06/24
QAL016	1274.54	02/21/24	1274.72	06/05/24	1274.60	08/13/24	1274.74	11/06/24
QAL017	1251.11	02/21/24	1251.71	06/05/24	1250.43	08/13/24	1250.79	11/06/24
QAL018	1248.29	02/21/24	1248.25	06/05/24	1247.92	08/13/24	1248.18	11/06/24
QAL019	1285.09	02/21/24	1285.24	06/05/24	1284.77	08/13/24	1284.94	11/06/24
QAL020	1334.86	02/21/24	1334.99	06/05/24	1334.63	08/13/24	1334.89	11/06/24
QAL021	1389.44	02/21/24	1389.69	06/05/24	1389.41	08/13/24	1389.39	11/06/24
QAL022	NM	03/01/24	1298.23	06/05/24	1298.17	08/13/24	1298.09	11/06/24
QAL023-1.0	F	02/27/24	1418.37	05/10/24	1417.94	08/12/24	1418.33	11/07/24
QAL023-4.5	F	02/27/24	1418.38	05/10/24	1417.78	08/12/24	1418.33	11/07/24
QAL023B	1413.78	02/27/24	1411.01	05/10/24	1410.50	08/12/24	1408.82	11/07/24
QAL024A	1417.68	02/29/24	1417.81	05/10/24	1417.56	08/12/24	1417.12	11/06/24
QAL025A	1413.12	02/26/24	1416.19	05/06/24	1414.13	08/06/24	1415.93	10/29/24
QAL025B	1416.52	02/26/24	1416.16	05/06/24	1416.36	08/06/24	1415.82	10/29/24
QAL025D	1412.88	02/20/24	1412.16	05/06/24	1412.23	08/06/24	1411.94	10/29/24
QAL026A	<1415.4	02/27/24	1415.72	05/07/24	<1415.4	08/06/24	<1415.4	10/28/24
QAL026D	1409.41	02/19/24	1408.95	05/06/24	1408.94	08/06/24	1408.76	11/04/24
QAL026E	1409.28	02/26/24	1408.74	05/06/24	1408.68	08/06/24	1408.46	10/28/24
QAL029A	1414.30	02/20/24	1413.81	05/02/24	1413.61	08/05/24	NM	10/28/24
QAL029D	1406.83	02/20/24	1406.33	05/02/24	1406.16	08/06/24	NM	10/28/24
QAL031D	1373.66	02/21/24	1373.06	05/10/24	1372.43	08/12/24	1371.86	11/06/24
QAL043-1.0	1419.38	02/27/24	1419.43	05/10/24	D	08/12/24	1420.23	11/06/24
QAL043-4.5	1419.24	02/27/24	1419.44	05/10/24	1418.29	08/12/24	1420.17	11/06/24
QAL043B	1413.36	02/27/24	1413.07	05/10/24	1412.89	08/12/24	1411.71	11/18/24
QAL044-1.0	1424.06	02/27/24	1424.43	05/10/24	D	08/12/24	1424.13	11/06/24
QAL044-4.5	1424.06	02/27/24	1424.45	05/10/24	1422.97	08/12/24	1423.67	11/06/24
QAL044B	1415.12	02/27/24	1413.84	05/10/24	1413.73	08/12/24	1413.12	11/06/24
QAL050A	1365.97	02/20/24	1365.73	05/01/24	1364.72	08/05/24	1364.63	11/04/24
QAL051A	1367.80	02/19/24	1367.73	05/01/24	1366.82	08/05/24	1366.69	11/04/24
QAL051D	1367.93	02/20/24	1365.66	05/01/24	1366.80	08/05/24	1366.70	11/04/24
QAL052A	1354.20	02/19/24	1354.18	05/01/24	1353.55	08/05/24	1353.75	11/04/24
QAL053A	1386.60	02/19/24	1386.75	05/01/24	1386.20	08/05/24	1386.51	11/04/24
QAL055A	1367.52	02/19/24	1367.24	05/01/24	1366.21	08/05/24	1365.51	11/06/24
QAL056A	1395.40	02/19/24	1395.28	05/01/24	1395.08	08/05/24	1393.86	11/04/24
QAL057A	1364.93	02/19/24	1364.79	05/01/24	1363.75	08/06/24	1363.08	11/06/24
QAL057D	1365.13	02/20/24	1364.88	05/01/24	1363.85	08/06/24	1363.17	11/06/24
QAL060A	1405.05	02/26/24	1404.55	05/06/24	1404.60	08/07/24	1404.44	10/29/24
QAL061A	1406.43	02/26/24	1405.86	05/06/24	1405.94	08/07/24	1405.71	10/29/24
QAL062A	1407.73	02/26/24	1407.25	05/06/24	1407.29	08/07/24	1407.11	10/29/24
QAL063A	1401.76	02/26/24	1401.27	05/06/24	1401.24	08/07/24	1401.26	10/29/24

Mine Permit Water Elevation Data
2024 Full Network Quarterly Discrete Measurements
Eagle Project

Location	1st Qtr 2024		2nd Qtr 2024		3rd Qtr 2024		4th Qtr 2024	
	Elev. (ft MSL)	Meas. Date	Elev. (ft MSL)	Meas. Date	Elev. (ft MSL)	Meas. Date	Elev. (ft MSL)	Meas. Date
QAL064D	1415.95	01/09/24	1415.78	05/10/24	1416.01	08/12/24	1415.40	11/07/24
QAL065D	1408.98	02/27/24	1415.28	05/10/24	1415.21	08/12/24	1414.73	11/07/24
QAL066D	1414.55	02/27/24	1414.33	05/10/24	1413.91	08/12/24	1413.16	11/06/24
QAL067A	1414.87	02/26/24	1414.29	05/06/24	1414.32	08/07/24	1413.99	10/29/24
QAL068A	1421.70	02/27/24	1421.25	05/06/24	1421.43	08/06/24	1421.16	10/28/24
QAL068B	1413.92	02/27/24	1413.29	05/06/24	1413.14	08/06/24	1412.90	10/28/24
QAL068D	1414.19	02/27/24	1413.33	05/06/24	1413.28	08/06/24	1412.99	10/28/24
QAL069A	1384.41	02/27/24	1383.76	05/07/24	1383.68	08/07/24	1383.02	10/30/24
QAL070A	1373.55	02/21/24	1372.70	05/07/24	1371.89	08/12/24	1371.13	11/06/24
QAL071A	1405.49	02/26/24	1405.24	05/06/24	1405.68	08/07/24	1404.80	10/30/24
QAL073A	1384.90	02/21/24	1384.20	05/07/24	1384.03	08/12/24	1383.40	11/06/24
QAL074A	1403.93	02/26/24	1403.94	05/06/24	1404.27	08/07/24	1403.23	10/29/24
QAL075A	1349.83	02/20/24	1349.27	05/02/24	1348.92	08/05/24	1348.90	11/04/24
QAL075D	1351.26	02/20/24	1349.71	05/02/24	1350.43	08/05/24	1349.93	11/04/24
QAL076E	NM	03/01/24	1312.77	06/05/24	1312.88	08/13/24	1312.80	11/07/24
QAL077E	NM	03/01/24	1234.31	06/05/24	1234.79	08/13/24	1234.37	11/07/24
STRM002	1401.17	03/12/24	1401.07	06/05/24	1401.26	08/28/24	1401.07	10/22/24
STRM011	1417.19	02/27/24	1416.65	05/10/24	1415.40	08/12/24	1415.65	11/07/24
WLD001-1.0	NM	03/01/24	NM	06/05/24	NM	08/12/24	NM	11/07/24
WLD001-4.5	NM	03/01/24	NM	06/05/24	NM	08/12/24	NM	11/07/24
WLD001-9.5	NM	03/01/24	NM	06/05/24	NM	08/12/24	NM	11/07/24
WLD002	NM	03/01/24	NM	06/05/24	NM	08/12/24	NM	11/07/24
WLD004	NM	03/01/24	1446.19	06/05/24	1445.69	08/13/24	1446.12	11/06/24
WLD005	NM	03/01/24	1450.75	06/05/24	1450.32	08/13/24	1450.50	11/06/24
WLD006	NM	03/01/24	1455.23	06/05/24	1454.11	08/13/24	1454.95	11/06/24
WLD007	NM	03/01/24	1450.37	06/05/24	1449.51	08/13/24	1449.99	11/06/24
WLD008	NM	03/01/24	1453.44	06/05/24	1452.88	08/13/24	1452.85	11/06/24
WLD010	NM	03/01/24	1447.39	06/05/24	1446.00	08/13/24	1447.17	11/06/24
WLD011	NM	03/01/24	1446.48	06/05/24	1445.09	08/13/24	1446.02	11/06/24
WLD012	NM	03/01/24	1445.93	06/05/24	1445.16	08/13/24	1445.88	11/06/24
WLD017	NM	03/01/24	1423.11	06/05/24	1421.90	08/13/24	1423.28	11/06/24
WLD018	NM	03/01/24	1423.22	06/05/24	1422.75	08/13/24	1423.16	11/06/24
WLD019	NM	03/01/24	1419.71	06/05/24	1418.96	08/13/24	1419.78	11/06/24
WLD020	NM	03/01/24	1418.89	06/05/24	1418.09	08/13/24	1419.04	11/06/24
WLD021	NM	03/01/24	1415.33	06/05/24	1414.38	08/13/24	1414.81	11/06/24
WLD022-1.0	F	02/29/24	1421.96	05/10/24	1421.88	08/12/24	1422.05	11/07/24
WLD022-4.5	1421.87	02/29/24	1421.96	05/10/24	1421.82	08/12/24	1421.92	11/07/24
WLD022-9.5	F	02/29/24	1422.27	05/10/24	1422.13	08/12/24	1422.09	11/07/24
WLD023-1.0	NM	03/01/24	1413.70	06/05/24	1413.43	08/12/24	1413.46	11/07/24
WLD023-4.5	NM	03/01/24	1413.48	06/05/24	1413.22	08/12/24	1413.25	11/07/24
WLD023-9.5	NM	03/01/24	1415.11	06/05/24	1414.94	08/12/24	1414.78	11/07/24
WLD024-1.0	F	02/29/24	1422.91	05/10/24	1422.75	08/12/24	1422.72	11/07/24
WLD024-4.5	1422.85	02/29/24	1423.18	05/10/24	1422.94	08/12/24	1422.91	11/07/24
WLD024-9.5	1423.44	02/29/24	1423.41	05/10/24	1423.01	08/12/24	1422.98	11/07/24
WLD025-1.0	1414.75	02/29/24	1415.23	05/10/24	1416.48	08/12/24	1416.77	11/18/24
WLD025-4.5	1414.73	02/29/24	1415.15	05/10/24	1416.36	08/12/24	1416.53	11/07/24
WLD025-9.5	1414.70	02/29/24	1414.96	05/10/24	1416.26	08/12/24	1416.57	11/07/24
WLD026-1.0	1415.38	02/27/24	1415.53	05/10/24	1416.45	08/12/24	1416.73	11/07/24
WLD026-4.5	1415.72	02/27/24	1416.08	05/10/24	1416.53	08/12/24	1416.83	11/07/24
WLD026-9.5	1415.81	02/27/24	1416.31	05/10/24	1416.53	08/12/24	1416.97	11/07/24
WLD027-1.0	1423.31	02/27/24	1423.43	05/10/24	D	08/12/24	1422.60	11/07/24
WLD027-4.5	1422.55	02/27/24	1422.61	05/10/24	1421.37	08/12/24	1422.51	11/07/24
WLD027-9.5	1422.51	02/27/24	1422.59	05/10/24	1421.33	08/12/24	1422.45	11/07/24
WLD028-1.0	1427.46	02/27/24	1427.67	05/10/24	D	08/13/24	D	11/07/24
WLD028-4.5	1427.36	02/27/24	1427.63	05/10/24	1425.59	08/13/24	1426.38	11/07/24
WLD028-9.5	1426.82	02/27/24	1427.01	05/10/24	1425.46	08/13/24	1425.85	11/07/24
WLD029-1.0	NM	03/01/24	D	06/05/24	D	08/12/24	D	11/07/24
WLD029-4.5	NM	03/01/24	1428.06	06/05/24	1426.70	08/12/24	1426.38	11/07/24
WLD029-9.5	NM	03/01/24	1430.17	06/05/24	1427.02	08/12/24	1426.34	11/07/24
WLD030	NM	03/01/24	1454.77	06/05/24	1454.10	08/13/24	1454.37	11/06/24
YDRM002	1412.09	03/12/24	1411.65	06/05/24	1412.14	08/28/24	1412.00	10/22/24

Footnotes at the end of table.

2024 Mine Permit Water Elevation Data
Footnote Explanation
Eagle Project

Footnote	Explanation
BP	Below pump. Maximum water elevation is shown.
D	Dry.
F	Frozen.
NM	Not measured.
R	Measured value was rejected based on quality control procedures.

Appendix R

Eagle Mine

Continuous Surface Water Monitoring Results

2024 Water Year
Continuous Monitoring Results
Surface Water Location STRE002
Eagle Mine

STRE002								
Parameter	Month	Background MEAN	Background Min	Background MAX	Background SD	Water Year MEAN	Water Year MIN	Water Year MAX
Temperature	2023/10	7.5	3.2	14.6	1.5	8.2	3.0	13.6
	2023/11	3.4	-0.10	9.3	0.50	3.6	0.90	5.8
	2023/12	0.80	-0.20	3.2	0.40	2.6	1.0	5.3
	2024/01	0.60	-0.20	0.80	0.50	1.5	0.20	3.0
	2024/02	0.50	-0.20	2.4	0.20	1.7	0.30	3.5
	2024/03	1.5	-0.20	4.7	0.30	2.3	1.0	4.0
	2024/04	4.2	-0.10	10.8	1.6	4.9	1.1	8.0
	2024/05	9.7	1.3	17.8	1.0	10.1	6.8	12.2
	2024/06	13.0	8.1	17.0	0.70	12.3	9.5	15.6
	2024/07	14.1	10.6	18.2	1.0	13.3	12.0	15.6
	2024/08	13.5	10.0	17.6	0.70	12.9	11.1	14.8
	2024/09	11.4	7.0	16.6	0.80	11.9	9.6	13.9
Flow	2023/10	22.9	12.0	119	7.1	24.3	15.1	50.0
	2023/11	18.5	12.4	37.8	3.1	24.1	17.2	45.6
	2023/12	17.8	12.1	58.8	4.1	25.6	17.4	56.7
	2024/01	18.1	12.0	45.0	3.5	18.7	15.3	28.9
	2024/02	17.3	12.0	50.0	5.6	19.6	14.5	45.7
	2024/03	23.3	12.0	111	5.7	23.2	14.0	50.9
	2024/04	37.0	12.0	132	10.3	29.2	16.2	63.7
	2024/05	22.2	11.8	161	6.3	18.2	12.3	42.4
	2024/06	18.0	12.0	90.1	3.5	20.1	12.1	58.6
	2024/07	14.0	11.8	33.0	1.5	12.7	9.8	23.2
	2024/08	14.5	11.8	74.4	2.3	12.3	9.5	22.8
	2024/09	16.9	11.7	69.8	3.2	11.4	9.6	23.9
Specific Conductivity	2023/10	128	70.0	146	14.4	132	126	141
	2023/11	130	80.0	148	9.2	133	123	140
	2023/12	133	89.0	153	6.7	131	117	143
	2024/01	133	115	145	3.9	136	129	138
	2024/02	133	111	144	3.1	127	109	137
	2024/03	122	54.0	148	13.6	122	105	135
	2024/04	95.6	50.0	146	18.2	118	90.5	139
	2024/05	122	37.0	149	9.3	138	116	149
	2024/06	129	94.0	169	6.4	142	115	155
	2024/07	146	119	165	7.4	153	142	157
	2024/08	146	107	163	6.5	157	154	159
	2024/09	138	80.0	149	6.0	156	155	157

2024 Water Year
Continuous Monitoring Results
Surface Water Location STRM004
Eagle Mine

STRM004								
Parameter	Month	Background MEAN	Background Min	Background MAX	Background SD	Water Year MEAN	Water Year MIN	Water Year MAX
Temperature	2023/10	7.5	2.3	15.2	1.6	8.7	3.0	15.1
	2023/11	3.0	0.0	9.6	0.50	3.1	0.80	5.2
	2023/12	0.30	-0.10	2.5	0.20	1.9	0.70	4.7
	2024/01	0.20	-0.10	1.9	0.30	0.70	0.50	1.6
	2024/02	0.10	0.0	1.3	0.10	0.90	0.40	2.0
	2024/03	0.90	-0.10	5.0	0.40	1.3	0.40	3.1
	2024/04	4.2	-0.10	11.3	1.9	4.3	0.40	7.5
	2024/05	10.1	1.9	18.2	1.0	10.3	6.7	13.0
	2024/06	13.8	7.9	18.6	1.2	13.2	10.3	15.8
	2024/07	14.8	11.0	19.0	1.3	15.4	13.0	18.3
	2024/08	14.2	10.4	18.1	0.70	15.1	12.8	17.7
	2024/09	11.8	7.3	17.3	4.5	14.3	13.5	15.3
Flow	2023/10	7.7	3.9	41.1	2.2	6.0	3.4	10.7
	2023/11	6.8	4.2	23.1	2.5	3.6	2.7	5.9
	2023/12	6.7	4.6	18.9	1.6	2.9	2.7	4.0
	2024/01	5.6	3.5	13.2	1.8	NA	NA	NA
	2024/02	5.7	2.8	15.5	1.8	NA	NA	NA
	2024/03	8.2	3.1	56.7	3.0	3.8	2.9	7.1
	2024/04	14.9	5.2	44.5	2.5	12.9	12.9	12.9
	2024/05	8.3	4.4	59.9	2.5	NA	NA	NA
	2024/06	5.7	3.0	27.4	1.1	12.8	6.4	33.5
	2024/07	4.6	2.8	9.9	0.40	4.9	4.1	6.1
	2024/08	4.8	2.8	28.0	1.1	4.9	3.9	8.9
	2024/09	5.2	2.8	24.0	2.2	6.1	5.8	6.5
Specific Conductivity	2023/10	87.3	56.0	140	9.2	98.4	96.0	99.0
	2023/11	87.1	59.0	96.0	4.2	94.4	93.0	97.0
	2023/12	84.7	61.0	95.0	11.6	93.5	93.0	94.0
	2024/01	91.3	67.0	97.0	1.6	NA	NA	NA
	2024/02	94.5	58.0	103	3.5	NA	NA	NA
	2024/03	88.6	44.0	105	8.1	91.3	85.0	96.0
	2024/04	69.5	33.0	105	12.6	85.0	85.0	85.0
	2024/05	85.6	37.0	114	9.2	105	100	108
	2024/06	88.5	57.0	116	14.3	105	91.0	112
	2024/07	97.1	82.0	114	6.2	107	95.3	113
	2024/08	101	70.0	119	9.2	114	111	117
	2024/09	81.3	57.0	130	48.8	116	114	117

2024 Water Year
Continuous Monitoring Results
Surface Water Location STRM005
Eagle Mine

STRM005								
Parameter	Month	Background MEAN	Background Min	Background MAX	Background SD	Water Year MEAN	Water Year MIN	Water Year MAX
Temperature	2023/10	7.9	2.6	15.5	2.4	8.9	2.8	15.7
	2023/11	3.1	0.0	7.6	0.20	3.1	0.20	5.6
	2023/12	0.30	-0.10	2.2	0.20	2.0	0.30	5.2
	2024/01	0.30	-0.10	2.6	0.20	0.40	0.10	1.5
	2024/02	0.0	-0.10	1.4	0.10	0.90	0.20	2.4
	2024/03	0.50	-0.10	3.7	0.30	1.6	0.20	4.0
	2024/04	4.2	0.10	11.1	1.4	5.4	1.3	9.2
	2024/05	10.4	2.1	17.5	1.0	11.3	7.3	14.0
	2024/06	15.4	9.2	20.5	1.0	14.3	11.4	17.4
	2024/07	17.2	11.9	21.3	1.1	16.7	14.4	19.9
	2024/08	16.6	12.7	21.1	0.40	16.0	13.6	18.7
	2024/09	13.1	9.2	18.7	1.1	14.2	11.5	17.0
Flow	2023/10	64.2	29.2	347	29.2	40.3	29.7	85.2
	2023/11	52.8	29.2	189	24.1	42.3	31.4	79.5
	2023/12	55.7	33.6	131	17.6	34.9	30.0	58.7
	2024/01	44.9	38.0	83.3	2.7	NA	NA	NA
	2024/02	59.6	40.7	119	0.0	NA	NA	NA
	2024/03	126	36.0	456	115	59.9	42.9	147
	2024/04	127	41.7	459	21.5	75.2	44.2	175
	2024/05	67.2	32.5	782	28.7	46.5	32.3	83.8
	2024/06	40.5	26.3	164	9.9	46.9	30.7	120
	2024/07	29.8	24.0	52.0	22.0	32.6	28.5	40.5
	2024/08	28.8	23.2	82.0	4.0	31.9	27.9	45.5
	2024/09	38.6	21.8	156	14.2	31.6	28.5	51.9
Specific Conductivity	2023/10	112	29.0	147	26.8	120	101	132
	2023/11	124	65.0	143	15.9	130	83.7	153
	2023/12	127	79.0	145	8.4	128	85.8	163
	2024/01	129	99.0	145	4.7	142	105	165
	2024/02	128	91.0	143	5.3	123	94.9	156
	2024/03	119	55.0	141	9.4	102	60.1	121
	2024/04	77.5	36.0	121	11.3	82.1	63.3	91.8
	2024/05	113	30.0	141	8.1	131	129	134
	2024/06	131	78.0	149	4.2	139	107	166
	2024/07	143	111	161	8.4	135	119	155
	2024/08	145	101	163	11.4	162	153	167
	2024/09	133	90.0	150	15.7	162	145	167

2024 Water Year
Continuous Monitoring Results
Surface Water Location YDRM002
Eagle Mine

YDRM002								
Parameter	Month	Background MEAN	Background Min	Background MAX	Background SD	Water Year MEAN	Water Year MIN	Water Year MAX
Temperature	2023/10	8.5	2.7	17.2	1.9	9.0	2.4	17.0
	2023/11	2.4	0.0	9.3	0.50	2.2	0.10	4.3
	2023/12	0.10	0.0	1.4	0.0	0.80	-0.10	3.7
	2024/01	0.0	-0.10	1.0	0.10	0.0	-0.10	0.10
	2024/02	0.0	0.0	0.20	0.0	0.20	-0.10	1.1
	2024/03	0.40	-0.10	4.9	0.30	0.90	0.0	3.0
	2024/04	4.3	0.0	11.4	2.1	4.4	-0.10	8.7
	2024/05	11.5	0.8	21.6	1.4	12.8	7.7	16.0
	2024/06	16.5	9.8	22.2	1.2	15.8	12.3	18.8
	2024/07	18.6	12.4	23.6	1.4	17.9	15.7	21.2
	2024/08	17.9	11.7	23.2	0.90	17.2	14.5	20.5
	2024/09	14.3	8.5	21.0	0.70	NA	NA	NA
Flow	2023/10	34.6	7.1	215	25.4	21.4	12.3	36.5
	2023/11	26.8	10.0	94.0	9.9	24.5	18.4	33.4
	2023/12	21.1	10.6	74.0	6.9	20.3	17.2	28.6
	2024/01	18.4	10.0	41.1	4.1	NA	NA	NA
	2024/02	16.8	12.2	29.7	2.9	NA	NA	NA
	2024/03	25.7	11.4	173	11.1	32.2	21.5	66.6
	2024/04	91.8	14.9	306	29.0	78.1	27.3	170
	2024/05	47.2	8.1	204	22.2	28.8	18.8	45.4
	2024/06	21.2	8.0	61.2	8.6	29.1	14.3	82.2
	2024/07	11.6	6.2	32.6	1.9	19.1	11.3	30.7
	2024/08	9.0	4.3	45.6	2.7	14.2	8.8	28.5
	2024/09	13.1	5.5	68.5	5.9	NA	NA	NA
Specific Conductivity	2023/10	61.3	30.0	102	18.8	78.5	68.5	85.5
	2023/11	53.1	32.0	74.0	7.6	61.1	56.3	67.0
	2023/12	62.0	32.0	91.0	9.0	61.1	53.0	69.0
	2024/01	64.6	52.0	76.0	5.8	54.3	52.1	57.9
	2024/02	69.6	55.0	79.0	5.6	52.7	50.7	56.3
	2024/03	57.0	28.0	75.0	12.4	48.1	43.0	56.8
	2024/04	35.2	19.0	72.0	7.1	41.1	36.7	45.5
	2024/05	45.9	20.0	92.0	11.7	45.9	38.4	60.0
	2024/06	67.1	44.0	94.0	4.6	62.7	55.2	71.4
	2024/07	81.6	53.0	105	7.7	66.9	56.5	80.4
	2024/08	87.4	47.0	107	10.2	83.9	66.7	91.0
	2024/09	80.3	42.0	103	11.0	NA	NA	NA

Source: North Jackson Company, REACH System (mean daily values)

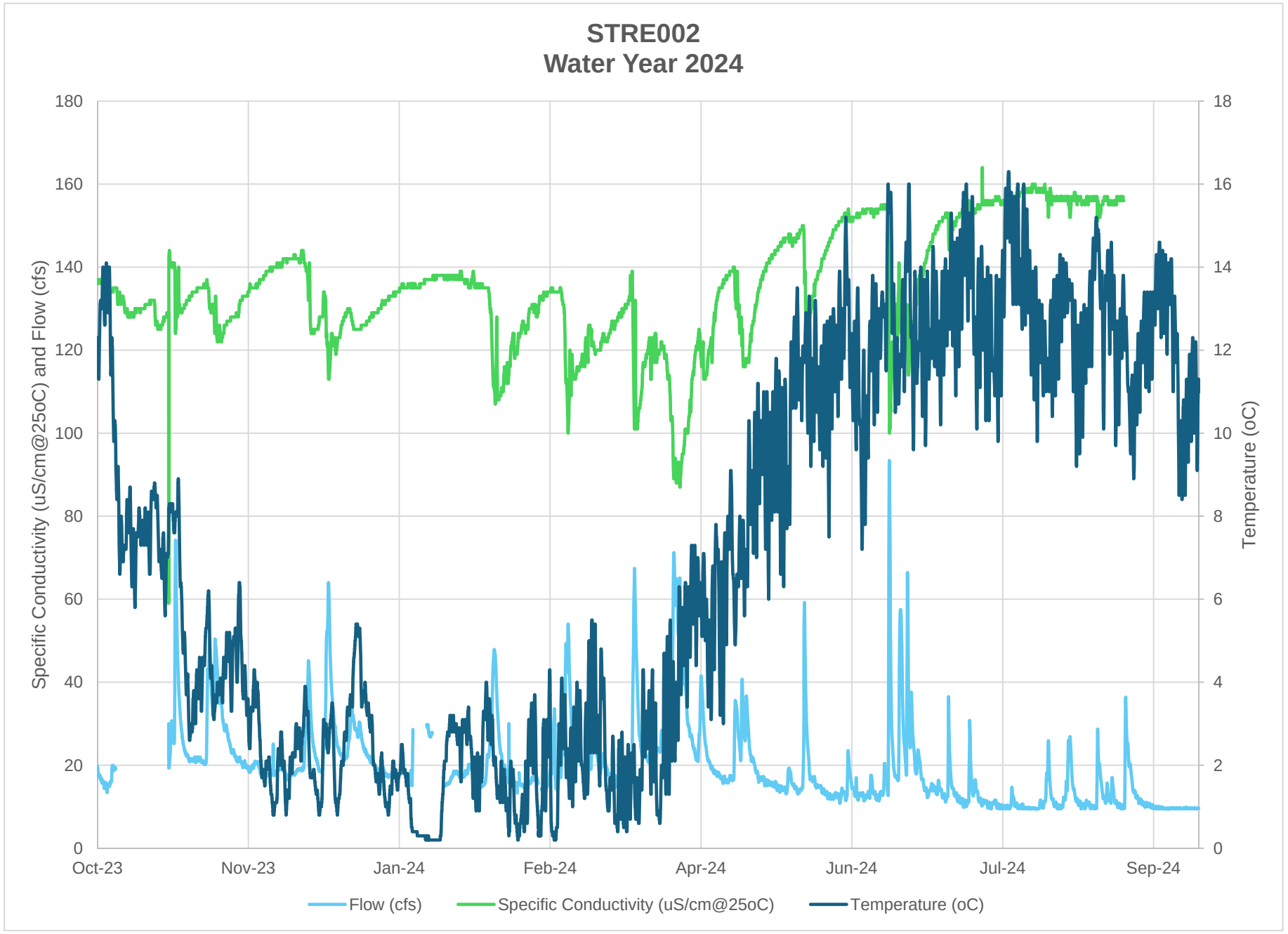
NA =Continuous record suppressed where >50% of values missing or data failed to meet quality control measures (e.g., due to ice or beaver activity).

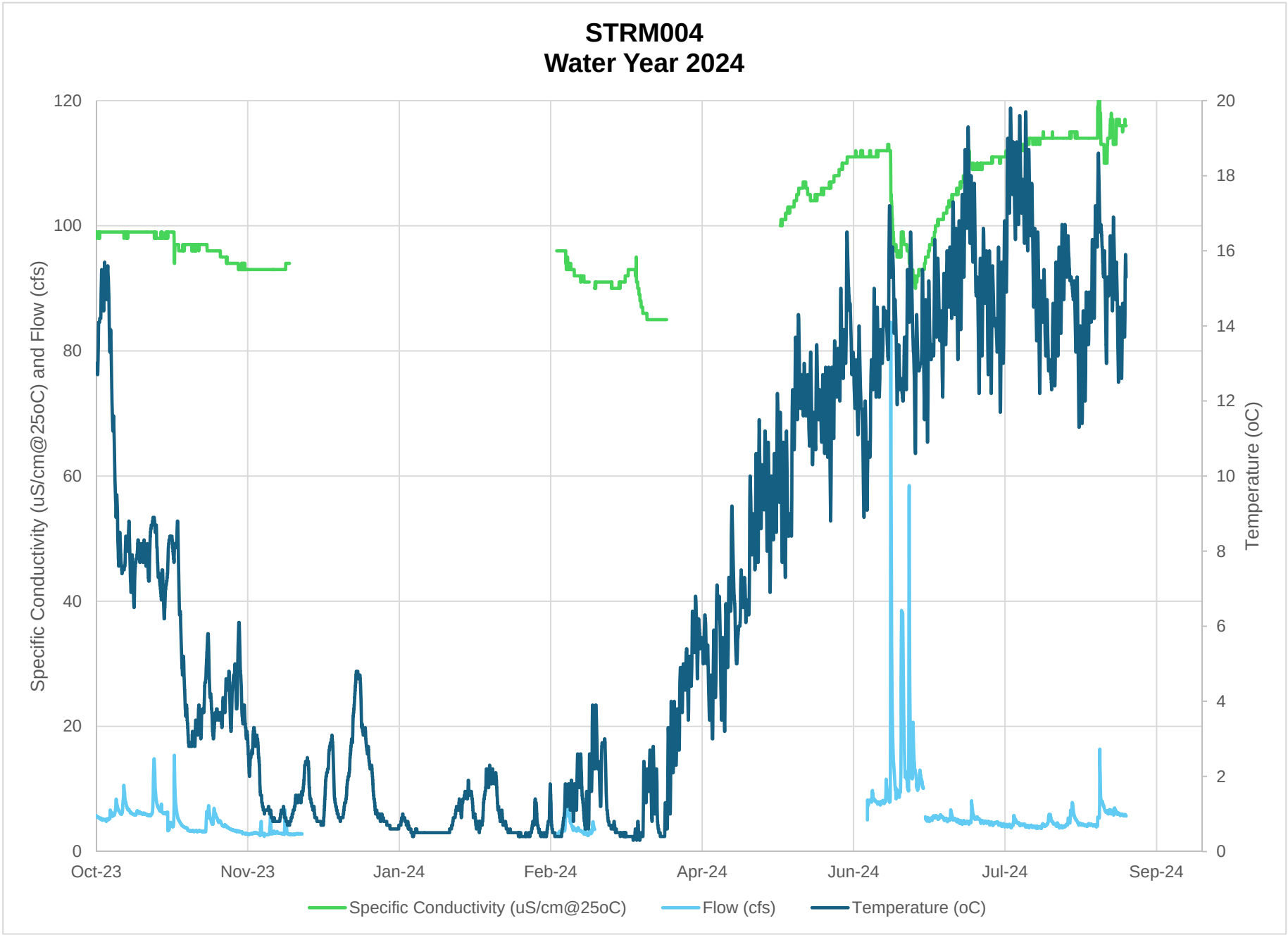
Results in red indicate mean monthly value is outside background range.

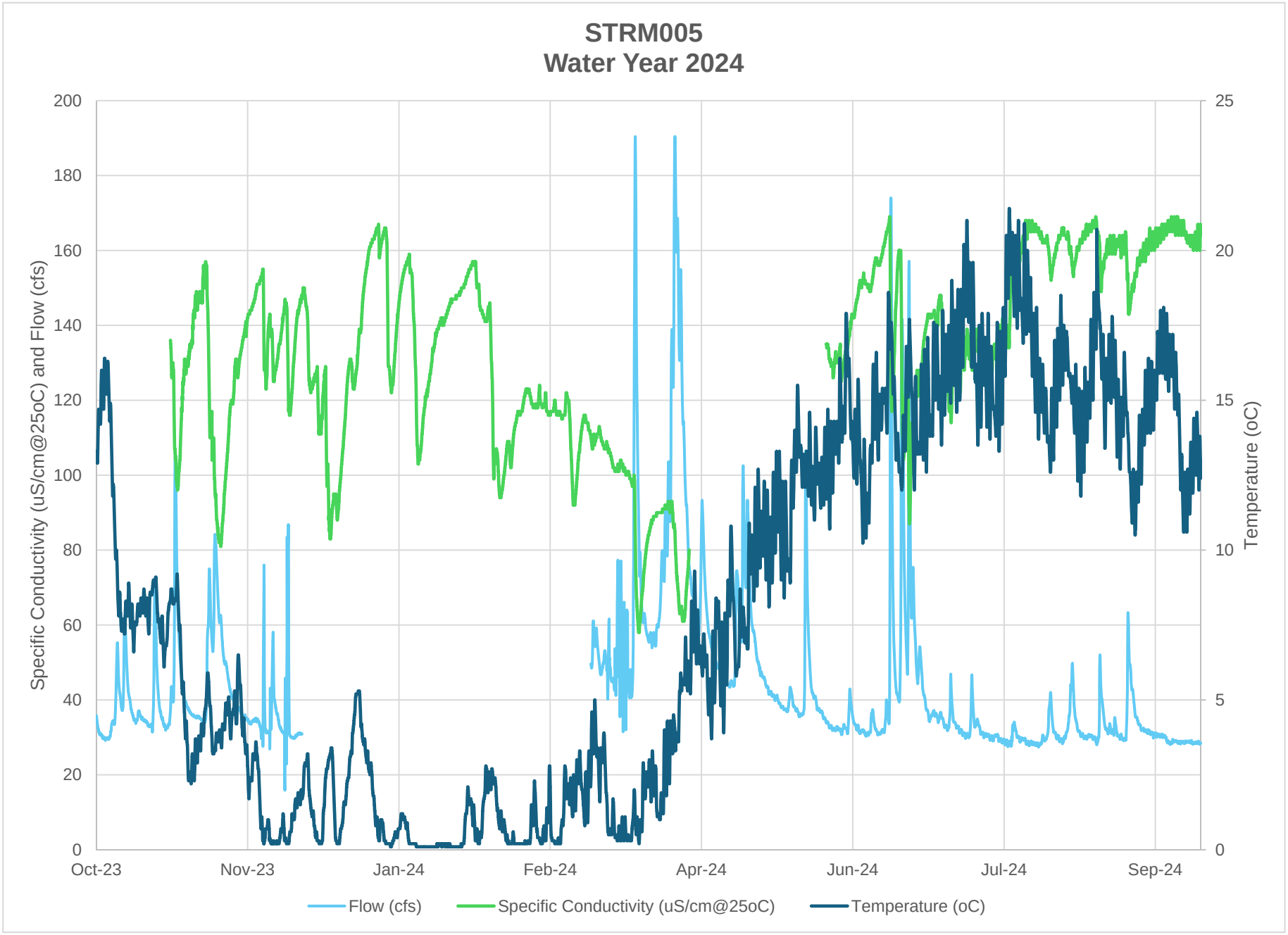
Appendix S

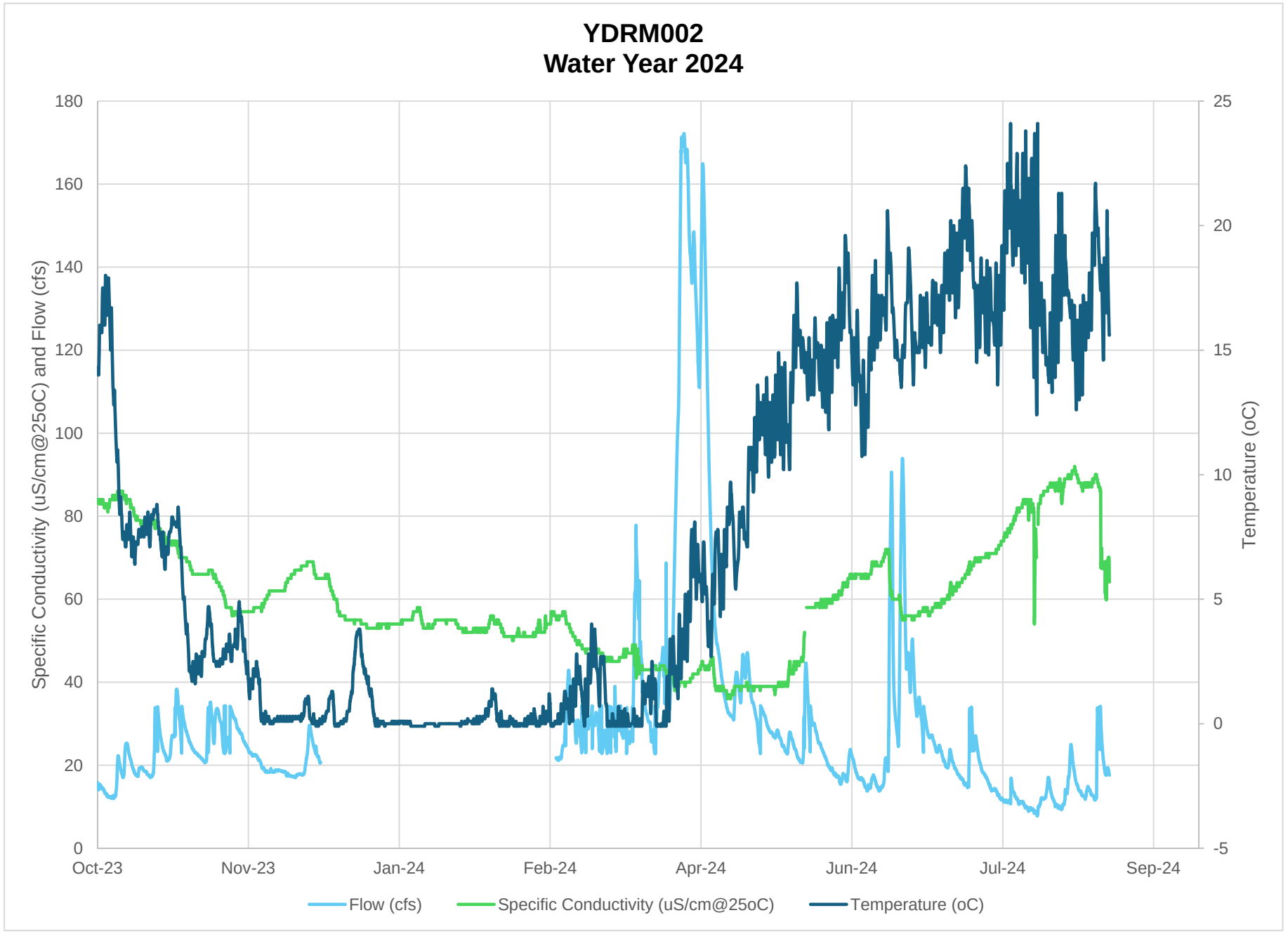
Eagle Mine

Surface Water Hydrographs


STRE002
Water Year 2024
Specific Conductivity (uS/cm@25oC) and Flow (cfs)
Temperature (oC)
180
160
140
120
100
80
60
40
20
0
18
16
14
12
10
8
6
4
2
0
Oct-23
Nov-23
Jan-24
Feb-24
Apr-24
Jun-24
Jul-24
Sep-24
Flow (cfs)
Specific Conductivity (uS/cm@25oC)
Temperature (oC)


STRM004
Water Year 2024
Specific Conductivity (uS/cm@25oC) and Flow (cfs)
Temperature (oC)
120
100
80
60
40
20
0
20
18
16
14
12
10
8
6
4
2
0
Oct-23
Nov-23
Jan-24
Feb-24
Apr-24
Jun-24
Jul-24
Sep-24
Specific Conductivity (uS/cm@25oC)
Flow (cfs)
Temperature (oC)


STRM005
Water Year 2024
Specific Conductivity (uS/cm@25oC) and Flow (cfs)
Temperature (oC)
200
180
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
Oct-23
Nov-23
Jan-24
Feb-24
Apr-24
Jun-24
Jul-24
Sep-24
Flow (cfs)
Specific Conductivity (uS/cm@25oC)
Temperature (oC)


YDRM002
Water Year 2024
Specific Conductivity (uS/cm@25oC) and Flow (cfs)
Temperature (oC)
180
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
-5
Oct-23
Nov-23
Jan-24
Feb-24
Apr-24
Jun-24
Jul-24
Sep-24
Flow (cfs)
Specific Conductivity (uS/cm@25oC)
Temperature (oC)