South Dakota Spill Report Form

PRCF #: **Case #:** 2025.021

Reported (MM/DD/YY): 2/26/25	Time:	Recorded By: J. McGuire

A. REPORTER

Reported By: Ben Evans		
Organization Name: Wharf Resources Inc.	☑ Discharger ☐ Public ☐ State ☐ Local ☐ Federal	
Phone: 6055844112	Email:	
Address: 10928 Wharf Road		
City: Lead	State: SD	Zip: 57754

B. DISCHARGER (Responsible Party) ☒ As Above in A

Name:		
Address:		
City:	State:	Zip:
Phone:	Email:	

C. INCIDENT DATE & LOCATION ☒ As Above In B

Spill Date: (MM/DD/YY) 2/25/25	Spill Time:		
Street or Approx. Location:			
Survey Description:			
City:	County:	State:	Zip:

D. MATERIAL

Material type (Code/Name): ☐ Hazardous Substance ☐ Oil ☐ Material Unknown ☐ Other	Quantity Spilled	Spilled in Water	Units (Check one)	
Contaminated water (arsenic)	~6,000		☐ lb. ☐ bbl.	☑ gal. ☐ oth.
			☐ lb. ☐ bbl.	☐ gal. ☐ oth.
			☐ lb. ☐ bbl.	☐ gal. ☐ oth.

E. SOURCE

Source of Spill: ☐ AST ☐ UST ☐ Railway ☐ Transport ☐ Fixed Facility ☐ Pipeline ☐ Highway ☑ Other

Description: water treatment line

Regulated Tank Facility: ☐ Tank Facility ID #:

F. MEDIUM

Medium Affected: ☐ Air ☑ Land ☐ Water ☑ Groundwater ☐ Within Facilities Only

Waterway Affected: n/a

G. CAUSE

Reported Cause: ☐ Transportation Accident ☐ Operational Error ☐ Dumping ☑ Equipment Failure ☐ Natural Phenomenon ☐ Unknown ☐ Other

Description: Failed valve

H. DAMAGES

# of Injuries:	# of Fatalities:

I. ACTIONS

Response Action Taken:

Failed valve caused water to surface. The line was shut off and the water seeped back down into the ground.

K. NOTIFIED

Responding Agency: ☑ DANR ☐ Local ☑ Discharger ☐ Federal ☐ EPA ☐ Other

Agencies Notified:

K. COMMENTS

Comments:

A water sample was collected from the pooled product and will be analyzed for nitrates and arsenic.

Department of Agriculture and Natural Resources
Inspection, Compliance, and Remediation Program
523 East Capitol Avenue
Pierre, South Dakota 57501

Business Hours M – F 8:00-5:00 pm
Normal Business Hours- (605)773-3296
After Business Hours- (605) 773-3231

DEPARTMENT of AGRICULTURE and NATURAL RESOURCES
JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

Ben Evans
Wharf Resources Inc.
10928 Wharf Road
Lead, SD 57754

February 27, 2025

Subject: Department of Agriculture and Natural Resources File Number 2025.021: pertaining to a treated water release, Wharf Mine, 10928 Wharf Road, Lead, South Dakota.

Dear Mr. Evans:

The Department of Agriculture and Natural Resources (DANR) is contacting you regarding the event noted above. A copy of the initial spill report form is enclosed for your review. Based on the information provided, an estimate of 6,000 gallons of treated water were released due to a valve failure. The release occurred within the Juno/Foley groundwater discharge plan. Wharf Resources staff collected a water sample after observing the release. The line was closed until the valve could be repaired, and the pooled water seeped back into the ground. The procedures for the response to spills such as this were developed to protect water resources of the state of South Dakota. In this instance, DANR requires the following:

- Provide the results of the water sample to this office. As a reminder, the nitrate and arsenic amounts associated with this release must be added to the Juno/Foley loading limit checkbooks;
- Continue with quarterly monitoring as indicated in your ground water discharge plan; and
- By March 27, 2025 complete the attached Written Contamination Incident Follow Up Report form (this is a standard form, please skip sections that do not apply to this situation). Summarize any measures taken to prevent future releases.

Jackie McGuire has been assigned as the project manager for this case. She will review the information provided and will contact you if further action is necessary. If you have any questions or need additional information, please do not hesitate to contact her at 605.773.3296. Thank you for your cooperation in this matter.

Sincerely,

Trish Kindt
Inspection, Compliance, & Remediation Program
Trish.Kindt@state.sd.us
(605) 773-3296

Cc: Paul Thomson, Lawrence County Emergency Manager
Barbara Baker, Lawrence County
Matt Hicks, DANR Water Quality Program
Roberta Hudson, DANR Minerals, Mining, & Superfund Program

INCIDENT FOLLOW-UP REPORT

DANR CASE FILE #: 2025.021

RETURN COMPLETED FORM TO:

SOUTH DAKOTA DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES (DANR)
INSPECTION, COMPLIANCE, AND REMEDIATION PROGRAM
JOE FOSS BUILDING
523 EAST CAPITOL AVENUE
PIERRE SD 57501-3182

NAME/TYPE OF PRODUCT SPILLED: Treated Water

TOTAL AMOUNT OF PRODUCT SPILLED: 6000 Gallons

POUNDS OF ACTIVE INGREDIENT SPILLED (fertilizer/pesticide spills): _____

AMOUNT OF PRODUCT RECOVERED: 0

WAS SURFACE WATER OR GROUND WATER IMPACTED BY THE SPILL?: _____

SPILL DATE: 02.25.25 DATE CLEANUP OCCURRED: _____

SPILL LOCATION (physical address, directions, distance to nearest intersection or landmark, etc.): _____
Wharf Resources

LATITUDE/LONGITUDE: 44.345900, -103.859255

LAND USE (Residential, Commercial, Agricultural, Industrial, Other – describe): _____

RESPONSIBLE PARTY: Wharf Resources

MAILING ADDRESS: 10928 Wharf Road

CITY/STATE: Lead, SD TELEPHONE NUMBER: 6055844112

PROPERTY OWNER: _____

MAILING ADDRESS: _____

CITY/STATE: _____ TELEPHONE NUMBER: _____

CONSULTANT / CLEANUP CONTRACTOR (if applicable): _____

MAILING ADDRESS _____

CITY/STATE: _____ TELEPHONE NUMBER: _____

INSURANCE PROVIDER (if applicable): _____

NAME OF INSURED: _____

POLICY NUMBER: _____ CLAIM NUMBER: _____

MAILING ADDRESS: _____

CITY/STATE: _____ TELEPHONE NUMBER: _____

INCIDENT FOLLOW-UP REPORT (Page 2 of 2)

DANR CASE FILE #: 2025.021

WAS SOIL EXCAVATED?: No DIMENSIONS OF EXCAVATION: _____

CUBIC YARDS EXCAVATED: _____

DISPOSAL SITE (Name of Facility): _____

DISPOSAL DATE: _____ ***If soil was disposed, attach copies of disposal receipts***

FERTILIZER/PESTICIDE SPILLS ONLY

WAS CONTAMINATED SOIL/MATERIAL LAND APPLIED?: _____

APPLICATION DATE _____ ***Requires DANR Pre-Approval***

WAS SPILL CONTAINED TO IMMEDIATE AREA?: _____

DISTANCE TO AND NAME OF NEAREST SURFACE WATER (include currently dry perennial streams): _____

DISTANCE TO NEAREST WATER WELL (if applicable): _____

OWNER OF NEAREST WATER WELL (if applicable): _____

DESCRIBE RESPONSE ACTION AND ADDITIONAL WORK PLANNED: _____

See attached Cover Letter

FORM COMPLETED BY: Ben Evans DATE: 03/04/2025

E-MAIL ADDRESS: bevans@coeur.com

Original – DANR
Copy – Keep for your records.

DEPARTMENT of AGRICULTURE and NATURAL RESOURCES
JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

April 11, 2025

Ben Evans
Wharf Resources Inc.
10928 Wharf Road
Lead, SD 57754

Re: Closure designation for DANR File# 2025.021: pertaining to a treated water release due to a failed valve, Wharf Mine, 10928 Wharf Road, Lead, South Dakota.

Dear Mr. Evans:

The Department of Agriculture and Natural Resources (DANR) has reviewed the available information regarding the treated water release and determined further investigation is unwarranted. Based on the information provided, there is no current risk to human health or further risk to the environment.

The release occurred within the Perimeter of Operational Pollution Zone of the Juno/Foley groundwater discharge plan and was not recoverable. Although this was not an approved release, monitoring will be handled under the groundwater discharge plan. The nitrate and arsenic amounts associated with this release have been added to the Juno/Foley load limit checkbooks. If any future problems arise related to this event, Wharf Resources may be responsible to perform assessment and cleanup. Please continue with groundwater monitoring as directed in the groundwater discharge plan.

The Closure designation will be recorded in DANR's release database and can be found at https://apps.sd.gov/NR42InteractiveMap. If you have questions or concerns about this site's Closure designation, please contact Jaclyn McGuire of my staff at 605.773.3296. Thank you for your cooperation in this matter.

Sincerely,

Terry Florentz, P.E.
Administrator
Inspection, Compliance, and Remediation Program

cc: Paul Thomson, Lawrence County Emergency Manager
Barbara Baker, Lawrence County
Matt Hicks, DANR Water Quality Program
Roberta Hudson, DANR Minerals, Mining, & Superfund Program

COEUR WHARF™

Wharf Resources (USA), Inc.

March 18, 2025

Ms. Jackie McGuire
Surface Water Quality Program
SD DANR
Joe Foss Building
523 East Capitol Avenue
Pierre, South Dakota 57501

RE: DANR File Number 2025.021: pertaining to a treated water release, Wharf Mine, 10928 Wharf Road, Lead, South Dakota.

Dear Ms. McGuire:

Please find attached to this letter sample results from the solution that was released due to a valve failure. As required, the nitrate and arsenic amounts associated with this release will be added to the Juno/Foley loading limit checkbooks. Additionally, quarterly monitoring will continue as indicated in the groundwater discharge plan.

Please also find attached completed Written Contamination Incident Follow Up Report form. The valve in question has been replaced, which will prevent this issue from occurring again in the future.

Please contact me at 605-584-4112 if you require additional information.

Sincerely,

DocuSigned by:
Ben Evans
1400D8415F6141A...

Ben Evans
Environmental Coordinator

10928 Wharf Road • Lead, South Dakota 57754-9710
Telephone (605) 584-1441 • Fax (605) 584-4188

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Sample Site: RV Holding Pond
Sampled: 02/26/25 at 08:15 AM by Sheeder, Merkel, Thompson
Sample Matrix: Water

Lab ID#: 20250305401
Received: 03/04/25 at 04:40 PM by Josh Bucknall
Account: W1002 - WHARF RESOURCES(USA),INC

JASMINE MCCAULEY
WHARF RESOURCES(USA),INC.
10928 WHARF ROAD
LEAD, SD 577549710

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst/Date
Physical Properties							
Electrical Conductivity	1730	µmhos/cm	1	0.168	5.00	SM 2510B	JAM 03/05/25
pH	8.87	S.U.	1			SM 4500-H+ B	JAM 03/05/25
Total Dissolved Solids	970	mg/L	100ml	12.7	50.0	SM 2540 C	IBS 03/05/25
Non-Metallics							
Bicarbonate	324	mg/L	1	0.598	10.0	SM 2320 B	JAM 03/06/25
Carbonate	69.6	mg/L	1	0.245	5.00	SM 2320 B	JAM 03/06/25
Chloride (Cl-)	117	mg/L	5	0.816	2.50	SM 4500-Cl E	BLL 03/05/25
Cyanide, WAD	0.010	mg/L	1	0.00081	0.010	Kelada 01	TMN 03/05/25
Fluoride	4.90	mg/L	1	0.004	0.050	SM 4500 F-C	IBS 03/06/25
Nitrogen, Ammonia (NH3)	41.4	mg/L	10	0.038	0.500	Timberline-001	IBS 03/06/25
Nitrogen, Nitrate (NO3)	7.57	mg/L	20	0.177	1.00	SM 4500-NO3 F	BLL 03/05/25
Nitrogen, Nitrite (NO2)	3.61	mg/L	4	0.017	0.200	SM 4500-NO2 B	BLL 03/05/25
Sulfate (SO4)	296	mg/L	10	6.07	100	SM 4500-SO4 E	BLL 03/05/25
Metals - Dissolved							
Arsenic (As)	1.35	mg/L	10	0.0004	0.005	EPA 200.8	TNA 03/05/25
Barium (Ba)	0.045	mg/L	10	0.00013	0.005	EPA 200.8	TNA 03/05/25
Cadmium (Cd)	0.003	mg/L	10	0.00041	0.001	EPA 200.8	TNA 03/05/25
Calcium (Ca)	48.3	mg/L	1	0.049	1.00	SM 3111 B	GRT 03/05/25
Chromium (Cr)	0.010	mg/L	10	0.00016	0.001	EPA 200.8 DRC	TNA 03/05/25
Copper (Cu)	0.339	mg/L	10	0.00047	0.005	EPA 200.8	TNA 03/05/25
Lead (Pb)	0.0081	mg/L	10	0.000022	0.0010	EPA 200.8	TNA 03/05/25
Magnesium (Mg)	4.02	mg/L	1	0.069	0.500	SM 3111 B	GRT 03/05/25
Potassium (K)	26.4	mg/L	3	0.162	1.50	SM 3111 B	GRT 03/05/25
Selenium (Se)	0.032	mg/L	10	0.00048	0.005	EPA 200.8	TNA 03/05/25
Silver (Ag)	0.029	mg/L	10	0.000074	0.001	EPA 200.8	TNA 03/05/25
Sodium (Na)	278	mg/L	11	2.57	11.0	SM 3111 B	GRT 03/05/25
Metals - Total							
Mercury (Hg)	0.0003	mg/L	1	0.000045	0.0002	EPA 245.1	GRT 03/05/25
Anion - Cation Balance							
Anions	18.1	meq/L	1			Calculation	TMN 03/07/25
Anion - Cation Balance	-0.893	%	1			Calculation	TMN 03/07/25

Report of Analysis for: **WHARF RESOURCES(USA),INC** Sample Site: **RV Holding Pond**

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst/Date
Anion - Cation Balance							
Cations	17.8	meq/L	1			Calculation	TMN 03/07/25

Report Approved By:

Report Approved On: 3/7/2025 11:34:21 AM

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Lab Numbers: 20250305401 - 20250305401

QC Sample Report

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Spike								
TDS	0305401	2030	970	1000	100ml	105.8 %	(90.31) - (112.2)	SM 2540 C
TDS	0305107	1610	562	1000	100ml	105.0 %	(90.31) - (112.2)	SM 2540 C
Alkalinity	0305312	207	107	106	1	94.7 %	(92.30) - (105.1)	SM 2320 B
Chloride	0305310	176	151	5.00	5	100.2 %	(87.07) - (116.3)	SM 4500-Cl E
CN, WAD	0305401	0.028	0.010	0.020	1	90.0 %	(63.58) - (116.6)	Kelada 01
Fluoride	0305905	1.73	0.787	1.00	1	94.3 %	(83.12) - (107.9)	SM 4500 F-C
Fluoride	0304844	1.58	0.667	1.00	1	91.4 %	(83.12) - (107.9)	SM 4500 F-C
N, Ammonia	0305209	2.12	< 0.050	2.00	1	106.0 %	(92.99) - (116.6)	Timberline-001
N, Ammonia	0305312	2.11	< 0.050	2.00	1	105.5 %	(92.99) - (116.6)	Timberline-001
N, Nitrate	0305312	19.5	15.8	0.400	10	91.4 %	(84.34) - (110.9)	SM 4500-NO3 F
N, Nitrate	0304203	0.587	0.191	0.400	1	99.0 %	(84.34) - (110.9)	SM 4500-NO3 F
N, Nitrate	0303826	5.24	3.24	0.400	5	99.85%	(84.34) - (110.9)	SM 4500-NO3 F
N, Nitrate	0305206	0.512	0.111	0.400	1	100.3 %	(84.34) - (110.9)	SM 4500-NO3 F
N, Nitrate	0304908	0.737	0.334	0.400	1	100.8 %	(84.34) - (110.9)	SM 4500-NO3 F
N, Nitrite	0304103	0.394	0.001	0.400	1	98.3 %	(88.59) - (103.2)	SM 4500-NO2 B
N, Nitrite	0305308	0.400	0.015	0.400	1	96.3 %	(88.59) - (103.2)	SM 4500-NO2 B
Nitrate+Nitrite	0305312	19.5	15.8	0.400	10	91.4 %	(85.16) - (111.3)	SM 4500-NO3F
Nitrate+Nitrite	0304908	0.737	0.334	0.400	1	100.8 %	(85.16) - (111.3)	SM 4500-NO3F
Nitrate+Nitrite	0305206	0.512	0.111	0.400	1	100.3 %	(85.16) - (111.3)	SM 4500-NO3F
Nitrate+Nitrite	0304203	0.587	0.191	0.400	1	99.0 %	(85.16) - (111.3)	SM 4500-NO3F
Nitrate+Nitrite	0303826	5.24	3.24	0.400	5	99.85%	(85.16) - (111.3)	SM 4500-NO3F
Sulfate	0305401	473	296	19.2	10	98.4 %	(87.80) - (109.8)	SM 4500-SO4 E
Sulfate	0305208	58.6	40.5	19.2	1	102.5 %	(87.80) - (109.8)	SM 4500-SO4 E
Arsenic - D	0305404	1.53	1.30	0.025	10	91.8 %	(82.68) - (109.0)	EPA 200.8
Arsenic - D	0305301	2.01	1.79	0.025	10	89.0 %	(82.68) - (109.0)	EPA 200.8
Barium - D	0305301	0.274	0.037	0.025	10	95.0 %	(80.53) - (107.9)	EPA 200.8
Cadmium - D	0305301	0.256	0.002	0.025	10	101.4 %	(88.62) - (107.4)	EPA 200.8
Calcium - D	0305310	161	59.3	10.0	10	101.8 %	(79.59) - (118.4)	SM 3111 B
Chromium - D	0305404	0.266	0.010	0.025	10	102.4 %	(87.27) - (110.8)	EPA 200.8 DRC
Chromium - D	0305301	0.263	0.010	0.025	10	101.1 %	(87.27) - (110.8)	EPA 200.8 DRC
Copper - D	0305301	1.12	0.894	0.025	10	90.2 %	(86.57) - (102.4)	EPA 200.8
Lead - D	0305301	0.2585	< 0.0010	0.025	10	103.4 %	(87.56) - (107.8)	EPA 200.8
Lead - D	0305404	0.2621	0.0103	0.025	10	100.7 %	(87.56) - (107.8)	EPA 200.8
Magnesium - D	0305310	19.1	9.73	10.0	1	93.9 %	(86.11) - (102.9)	SM 3111 B
Potassium - D	0305310	51.1	22.2	3.00	10	96.2 %	(88.44) - (112.4)	SM 3111 B
Selenium - D	0305301	1.26	0.036	0.125	10	97.7 %	(86.86) - (107.1)	EPA 200.8
Selenium - D	0305404	1.25	0.034	0.125	10	97.0 %	(86.86) - (107.1)	EPA 200.8
Silver - D	0305301	0.280	0.050	0.025	10	92.0 %	(66.51) - (117.1)	EPA 200.8

Lab Numbers: **20250305401 - 20250305401**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Spike									
Sodium - D	0305310	276	224	5.00	10	105.0 %	(81.11) - (112.2)	SM 3111 B	
Arsenic - T	0305311	0.319	0.076	0.025	10	97.2 %	(81.55) - (111.8)	EPA 200.8	
Chromium - T	0305311	0.256	< 0.001	0.025	10	102.6 %	(79.09) - (123.5)	EPA 200.8 DRC	
Lead - T	0305311	0.2563	0.0011	0.025	10	102.1 %	(91.96) - (108.5)	EPA 200.8	
Mercury - T	0305107	0.0020	< 0.0002	0.002	1	97.5 %	(87.63) - (115.1)	EPA 245.1	
Mercury - T	0305310	0.0020	< 0.0002	0.002	1	100.0 %	(87.63) - (115.1)	EPA 245.1	
Selenium - T	0305311	1.21	0.013	0.125	10	95.4 %	(84.95) - (107.7)	EPA 200.8	
Arsenic - TR	0305105	0.249	0.006	0.025	10	97.0 %	(90.05) - (102.3)	EPA 200.8	
Barium - TR	0305105	0.253	0.243	0.025	10	3.74%	(87.50) - (102.6)	EPA 200.8	X
- Result is within QC guidelines of 70 - 130%									
Barium - TR	0305105	0.243	0.011	0.025	10	93.0 %	(87.50) - (102.6)	EPA 200.8	
Cadmium - TR	0305105	0.249	< 0.001	0.025	10	99.5 %	(87.81) - (105.4)	EPA 200.8	
Chromium - TR	0305105	0.2382	< 0.0010	0.025	10	95.3 %	(81.38) - (109.9)	EPA 200.8 DRC	
Copper - TR	0305105	0.246	< 0.005	0.025	10	98.5 %	(83.67) - (106.5)	EPA 200.8	
Lead - TR	0305105	0.2516	< 0.0010	0.025	10	100.6 %	(88.44) - (105.5)	EPA 200.8	
Selenium - TR	0305105	1.23	< 0.005	0.125	10	98.2 %	(87.30) - (106.5)	EPA 200.8	
Silver - TR	0305105	0.2387	< 0.0010	0.025	10	95.5 %	(79.72) - (105.3)	EPA 200.8	
Matrix Spike Duplicate									
Chloride	0305310	176	176		5	0.182%	(-8.452) - (10.29)	SM 4500-Cl E	
CN, WAD	0305401	0.028	0.028	0.020	1	0.00%	(-8.555) - (6.323)	Kelada 01	
Fluoride	0305905	1.72	1.73		1	-0.638%	(-4.562) - (4.704)	SM 4500 F-C	
Fluoride	0304844	1.59	1.58		1	0.693%	(-4.562) - (4.704)	SM 4500 F-C	
N, Ammonia	0305209	2.13	2.12		1	0.471%	(-2.064) - (2.591)	Timberline-001	
N, Ammonia	0305312	2.10	2.11		1	-0.475%	(-2.064) - (2.591)	Timberline-001	
N, Nitrate	0305312	19.1	19.5		10	-2.21%	(-4.182) - (2.504)	SM 4500-NO3 F	
N, Nitrate	0305206	0.517	0.512		1	0.972%	(-4.182) - (2.504)	SM 4500-NO3 F	
N, Nitrate	0304908	0.741	0.737		1	0.541%	(-4.182) - (2.504)	SM 4500-NO3 F	
N, Nitrate	0303826	5.23	5.24		5	-0.172%	(-4.182) - (2.504)	SM 4500-NO3 F	
N, Nitrate	0304203	0.593	0.587		1	1.02%	(-4.182) - (2.504)	SM 4500-NO3 F	
N, Nitrite	0304103	0.401	0.394		1	1.76%	(-3.967) - (5.431)	SM 4500-NO2 B	
N, Nitrite	0305308	0.412	0.400		1	2.96%	(-3.967) - (5.431)	SM 4500-NO2 B	
Nitrate+Nitrite	0305312	19.1	19.5		10	-2.21%	(-3.889) - (2.790)	SM 4500-NO3F	
Nitrate+Nitrite	0304908	0.741	0.737		1	0.541%	(-3.889) - (2.790)	SM 4500-NO3F	
Nitrate+Nitrite	0305206	0.517	0.512		1	0.972%	(-3.889) - (2.790)	SM 4500-NO3F	
Nitrate+Nitrite	0304203	0.593	0.587		1	1.02%	(-3.889) - (2.790)	SM 4500-NO3F	
Nitrate+Nitrite	0303826	5.23	5.24		5	-0.172%	(-3.889) - (2.790)	SM 4500-NO3F	
Sulfate	0305208	59.2	58.6		1	1.04%	(-4.457) - (6.893)	SM 4500-SO4 E	
Sulfate	0305401	475	473		10	0.217%	(-4.457) - (6.893)	SM 4500-SO4 E	
Arsenic - D	0305404	1.52	1.53		10	-0.410%	(-5.003) - (5.356)	EPA 200.8	
Arsenic - D	0305301	1.99	2.01		10	-1.01%	(-5.003) - (5.356)	EPA 200.8	
Barium - D	0305301	0.272	0.274		10	-0.956%	(-5.285) - (4.541)	EPA 200.8	
Cadmium - D	0305301	0.253	0.256		10	-1.08%	(-5.014) - (5.379)	EPA 200.8	
Calcium - D	0305310	154	161		10	-4.69%	(-10.50) - (8.886)	SM 3111 B	
Chromium - D	0305404	0.267	0.266		10	0.312%	(-6.327) - (7.211)	EPA 200.8 DRC	
Chromium - D	0305301	0.261	0.263		10	-0.549%	(-6.327) - (7.211)	EPA 200.8 DRC	

Lab Numbers: **20250305401 - 20250305401**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Matrix Spike Duplicate									
Copper - D	0305301	1.11	1.12		10	-0.800%	(-4.719) - (4.456)	EPA 200.8	
Lead - D	0305404	0.2614	0.2621		10	-0.256%	(-2.892) - (4.328)	EPA 200.8	
Lead - D	0305301	0.2560	0.2585		10	-0.960%	(-2.892) - (4.328)	EPA 200.8	
Magnesium - D	0305310	19.1	19.1		1	0.105%	(-3.050) - (2.474)	SM 3111 B	
Potassium - D	0305310	51.1	51.1		10	0.020%	(-2.861) - (3.046)	SM 3111 B	
Selenium - D	0305404	1.24	1.25		10	-0.219%	(-2.968) - (3.247)	EPA 200.8	
Selenium - D	0305301	1.25	1.26		10	-0.554%	(-2.968) - (3.247)	EPA 200.8	
Silver - D	0305301	0.277	0.280		10	-1.01%	(-4.968) - (5.616)	EPA 200.8	
Sodium - D	0305310	271	276		10	-2.10%	(-2.832) - (3.434)	SM 3111 B	
Arsenic - T	0305311	0.317	0.319		10	-0.613%	(-6.344) - (7.770)	EPA 200.8	
Chromium - T	0305311	0.257	0.256		10	0.346%	(-6.816) - (8.394)	EPA 200.8 DRC	
Lead - T	0305311	0.2594	0.2563		10	1.19%	(-6.124) - (7.881)	EPA 200.8	
Mercury - T	0305310	0.0019	0.0020		1	-4.60%	(-10.71) - (6.903)	EPA 245.1	
Mercury - T	0305107	0.0020	0.0020		1	3.03%	(-10.71) - (6.903)	EPA 245.1	
Selenium - T	0305311	1.20	1.21		10	-0.450%	(-5.692) - (7.965)	EPA 200.8	
Arsenic - TR	0305105	0.251	0.249	0.025	10	1.09%	(-5.183) - (4.978)	EPA 200.8	
Cadmium - TR	0305105	0.259	0.249	0.025	10	4.13%	(-4.373) - (5.253)	EPA 200.8	
Chromium - TR	0305105	0.2528	0.2382	0.025	10	5.93%	(-4.686) - (6.053)	EPA 200.8 DRC	
Copper - TR	0305105	0.250	0.246	0.025	10	1.66%	(-3.730) - (4.220)	EPA 200.8	
Lead - TR	0305105	0.2587	0.2516	0.025	10	2.81%	(-3.457) - (4.344)	EPA 200.8	
Selenium - TR	0305105	1.22	1.23	0.125	10	-0.798%	(-5.104) - (6.046)	EPA 200.8	
Silver - TR	0305105	0.2482	0.2387	0.025	10	3.89%	(-4.159) - (6.311)	EPA 200.8	
Duplicate									
Conductivity	0305310	1660	1660		1	0.00%	(-0.7930) - (0.8558)	SM 2510B	
Conductivity	0305301	1630	1630		1	0.00%	(-0.7930) - (0.8558)	SM 2510B	
Conductivity	0305107	908	903		1	0.552%	(-0.7930) - (0.8558)	SM 2510B	
pH	0305401	8.93	8.87		1	0.674%	(-1.463) - (2.501)	SM 4500-H+ B	
pH	0305305	7.96	7.81		1	1.90%	(-1.463) - (2.501)	SM 4500-H+ B	
TDS	0305203	269	289		100ml	-7.17%	(-12.14) - (13.42)	SM 2540 C	
TDS	0305310	860	895		100ml	-3.99%	(-12.14) - (13.42)	SM 2540 C	
TDS	0305105	2090	2110		100ml	-1.14%	(-12.14) - (13.42)	SM 2540 C	
Alkalinity	0305401	377	382		1	-1.32%	(-4.947) - (3.965)	SM 2320 B	
Bicarbonate	0305401	329	324		1	1.53%	(-4.161) - (3.210)	SM 2320 B	
Carbonate	0305401	64.6	69.6		1	-7.45%	(-13.89) - (12.17)	SM 2320 B	
Chloride	0305310	151	149		5	0.959%	(-7.522) - (8.364)	SM 4500-Cl E	
N, Ammonia	0305208	< 0.050	< 0.050		1	0.00%	(-7.772) - (6.446)	Timberline-001	
N, Ammonia	0305401	42.0	41.4		10	1.44%	(-7.772) - (6.446)	Timberline-001	
N, Nitrite	0305308	0.015	0.016		1	-6.45%	(-2.909) - (3.434)	SM 4500-NO2 B	X
- Recovery was within 10% of expected value									
N, Nitrite	0304103	- 0.001	0.001		1	0.00%	(-2.909) - (3.434)	SM 4500-NO2 B	
Sulfate	0305401	279	296		10	-5.88%	(-10.33) - (8.422)	SM 4500-SO4 E	
Sulfate	0305208	40.3	40.5		1	-0.569%	(-10.33) - (8.422)	SM 4500-SO4 E	
Initial Calibration Verification									
Conductivity		1410	1410		1	-0.212%	(-6.448) - (4.282)	SM 2510B	

Lab Numbers: **20250305401 - 20250305401**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Initial Calibration Verification								
pH		6.93	7.00		1	-1.00%	(-2.125) - (2.211)	SM 4500-H+ B
TDS		983	1000		100ml	-1.70%	(-11.48) - (3.410)	SM 2540 C
Chloride		24.5	25.0		1	-2.16%	(-5.508) - (11.75)	SM 4500-Cl E
CN, WAD		0.103	0.100		1	3.00%	(-14.04) - (15.54)	Kelada 01
Fluoride		2.94	3.00		1	-1.93%	(-10.28) - (8.881)	SM 4500 F-C
Fluoride		0.388	0.400		1	-3.00%	(-10.28) - (8.881)	SM 4500 F-C
N, Ammonia		2.50	2.50		1	0.00%	(-7.601) - (10.12)	Timberline-001
N, Ammonia		10.3	10.0		1	3.00%	(-7.601) - (10.12)	Timberline-001
N, Nitrate		1.01	1.00		1	0.900%	(-4.646) - (7.516)	SM 4500-NO3 F
N, Nitrite		1.01	1.00		1	0.600%	(-3.302) - (2.312)	SM 4500-NO2 B
Nitrate+Nitrite		1.01	1.00		1	0.900%	(-6.393) - (10.52)	SM 4500-NO3F
Sulfate		50.6	50.0		1	1.14%	(-0.3866) - (8.345)	SM 4500-SO4 E
Arsenic - D		0.049	0.050		1	-2.36%	(-10.79) - (8.888)	EPA 200.8
Barium - D		0.050	0.050		1	-0.520%	(-7.029) - (5.389)	EPA 200.8
Cadmium - D		0.049	0.050		1	-2.18%	(-7.795) - (7.885)	EPA 200.8
Chromium - D		0.048	0.050		1	-3.32%	(-7.328) - (11.07)	EPA 200.8 DRC
Copper - D		0.049	0.050		1	-2.58%	(-6.297) - (7.727)	EPA 200.8
Lead - D		0.0498	0.0500		1	-0.340%	(-5.443) - (8.965)	EPA 200.8
Selenium - D		0.242	0.250		1	-3.23%	(-9.551) - (8.399)	EPA 200.8
Silver - D		0.050	0.050		1	-0.100%	(-4.580) - (8.548)	EPA 200.8
Mercury - T		0.0031	0.0030		1	2.33%	(-9.926) - (16.39)	EPA 245.1
Continuing Calibration Verification								
Conductivity		1400	1410		1	-1.13%	(-3.124) - (1.383)	SM 2510B
pH		4.04	4.00		1	1.00%	(-2.777) - (2.075)	SM 4500-H+ B
pH		4.01	4.00		1	0.250%	(-2.777) - (2.075)	SM 4500-H+ B
pH		9.99	10.0		1	-0.100%	(-2.777) - (2.075)	SM 4500-H+ B
pH		9.99	10.0		1	-0.100%	(-2.777) - (2.075)	SM 4500-H+ B
pH		7.03	7.00		1	0.429%	(-2.777) - (2.075)	SM 4500-H+ B
pH		10.0	10.0		1	0.00%	(-2.777) - (2.075)	SM 4500-H+ B
Alkalinity		103	106		1	-3.26%	(-6.977) - (1.574)	SM 2320 B
Alkalinity		102	106		1	-3.64%	(-6.977) - (1.574)	SM 2320 B
Alkalinity		104	106		1	-1.51%	(-6.977) - (1.574)	SM 2320 B
Chloride		24.6	25.0		1	-1.44%	(-4.913) - (7.809)	SM 4500-Cl E
Chloride		24.8	25.0		1	-0.760%	(-4.913) - (7.809)	SM 4500-Cl E
CN, WAD		0.105	0.100		1	5.00%	(-12.66) - (13.56)	Kelada 01
Fluoride		0.387	0.400		1	-3.25%	(-10.85) - (12.34)	SM 4500 F-C
Fluoride		2.88	3.00		1	-3.93%	(-10.85) - (12.34)	SM 4500 F-C
N, Ammonia		0.100	0.100		1	-0.200%	(-11.46) - (12.60)	Timberline-001
N, Ammonia		2.49	2.50		1	-0.400%	(-11.46) - (12.60)	Timberline-001
N, Ammonia		0.047	0.050		1	-6.20%	(-11.46) - (12.60)	Timberline-001
N, Ammonia		2.51	2.50		1	0.400%	(-11.46) - (12.60)	Timberline-001
N, Nitrate		1.02	1.00		1	2.30%	(-8.090) - (11.94)	SM 4500-NO3 F
N, Nitrate		1.06	1.00		1	5.80%	(-8.090) - (11.94)	SM 4500-NO3 F
N, Nitrate		1.06	1.00		1	6.20%	(-8.090) - (11.94)	SM 4500-NO3 F
N, Nitrate		1.02	1.00		1	2.10%	(-8.090) - (11.94)	SM 4500-NO3 F

Lab Numbers: **20250305401 - 20250305401**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Continuing Calibration Verification									
N, Nitrate		1.05	1.00		1	4.70%	(-8.090) - (11.94)	SM 4500-NO3 F	
N, Nitrite		1.02	1.00		1	1.90%	(-3.289) - (4.729)	SM 4500-NO2 B	
N, Nitrite		1.01	1.00		1	0.700%	(-3.289) - (4.729)	SM 4500-NO2 B	
Nitrate+Nitrite		1.02	1.00		1	2.30%	(-9.975) - (13.48)	SM 4500-NO3F	
Nitrate+Nitrite		1.02	1.00		1	2.10%	(-9.975) - (13.48)	SM 4500-NO3F	
Nitrate+Nitrite		1.06	1.00		1	6.20%	(-9.975) - (13.48)	SM 4500-NO3F	
Nitrate+Nitrite		1.06	1.00		1	5.80%	(-9.975) - (13.48)	SM 4500-NO3F	
Nitrate+Nitrite		1.05	1.00		1	4.80%	(-9.975) - (13.48)	SM 4500-NO3F	
Sulfate		52.2	50.0		1	4.42%	(0.1332) - (10.09)	SM 4500-SO4 E	
Sulfate		51.2	50.0		1	2.42%	(0.1332) - (10.09)	SM 4500-SO4 E	
Arsenic - D		0.050	0.050		1	-0.860%	(-12.75) - (8.650)	EPA 200.8	
Arsenic - D		0.051	0.050		1	1.32%	(-12.75) - (8.650)	EPA 200.8	
Arsenic - D		0.050	0.050		1	-0.180%	(-12.75) - (8.650)	EPA 200.8	
Arsenic - D		0.050	0.050		1	-0.620%	(-12.75) - (8.650)	EPA 200.8	
Arsenic - D		0.052	0.050		1	3.98%	(-12.75) - (8.650)	EPA 200.8	
Arsenic - D		0.049	0.050		1	-1.14%	(-12.75) - (8.650)	EPA 200.8	
Arsenic - D		0.049	0.050		1	-2.38%	(-12.75) - (8.650)	EPA 200.8	
Barium - D		0.050	0.050		1	-0.180%	(-10.86) - (5.246)	EPA 200.8	
Barium - D		0.049	0.050		1	-1.92%	(-10.86) - (5.246)	EPA 200.8	
Barium - D		0.049	0.050		1	-1.88%	(-10.86) - (5.246)	EPA 200.8	
Barium - D		0.050	0.050		1	-0.760%	(-10.86) - (5.246)	EPA 200.8	
Cadmium - D		0.050	0.050		1	-0.860%	(-6.734) - (3.603)	EPA 200.8	
Cadmium - D		0.051	0.050		1	2.80%	(-6.734) - (3.603)	EPA 200.8	
Cadmium - D		0.050	0.050		1	-0.840%	(-6.734) - (3.603)	EPA 200.8	
Cadmium - D		0.052	0.050		1	3.24%	(-6.734) - (3.603)	EPA 200.8	
Calcium - D		23.6	25.0		1	-5.60%	(-10.38) - (-2.459)	SM 3111 B	
Calcium - D		23.6	25.0		1	-5.80%	(-10.38) - (-2.459)	SM 3111 B	
Calcium - D		23.4	25.0		1	-6.48%	(-10.38) - (-2.459)	SM 3111 B	
Calcium - D		23.4	25.0		1	-6.60%	(-10.38) - (-2.459)	SM 3111 B	
Chromium - D		0.053	0.050		1	5.48%	(-7.108) - (13.84)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	1.14%	(-7.108) - (13.84)	EPA 200.8 DRC	
Chromium - D		0.053	0.050		1	5.64%	(-7.108) - (13.84)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	2.42%	(-7.108) - (13.84)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	1.26%	(-7.108) - (13.84)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	1.84%	(-7.108) - (13.84)	EPA 200.8 DRC	
Chromium - D		0.052	0.050		1	3.64%	(-7.108) - (13.84)	EPA 200.8 DRC	
Copper - D		0.052	0.050		1	3.28%	(-5.183) - (5.297)	EPA 200.8	
Copper - D		0.050	0.050		1	0.740%	(-5.183) - (5.297)	EPA 200.8	
Copper - D		0.050	0.050		1	-0.920%	(-5.183) - (5.297)	EPA 200.8	
Copper - D		0.052	0.050		1	4.10%	(-5.183) - (5.297)	EPA 200.8	
Lead - D		0.0522	0.0500		1	4.48%	(-3.406) - (3.534)	EPA 200.8	X
- Recovery was within 10% of expected value									
Lead - D		0.0517	0.0500		1	3.42%	(-3.406) - (3.534)	EPA 200.8	
Lead - D		0.0512	0.0500		1	2.46%	(-3.406) - (3.534)	EPA 200.8	
Lead - D		0.0512	0.0500		1	2.46%	(-3.406) - (3.534)	EPA 200.8	
Lead - D		0.0526	0.0500		1	5.10%	(-3.406) - (3.534)	EPA 200.8	X
- Recovery was within 10% of expected value									

Lab Numbers: **20250305401 - 20250305401**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Continuing Calibration Verification								
Lead - D		0.0505	0.0500		1	1.08%	(-3.406) - (3.534)	EPA 200.8
Lead - D		0.0510	0.0500		1	2.08%	(-3.406) - (3.534)	EPA 200.8
Magnesium - D		24.9	25.0		1	-0.440%	(-3.172) - (2.736)	SM 3111 B
Magnesium - D		24.7	25.0		1	-1.28%	(-3.172) - (2.736)	SM 3111 B
Magnesium - D		24.8	25.0		1	-0.840%	(-3.172) - (2.736)	SM 3111 B
Magnesium - D		25.2	25.0		1	0.840%	(-3.172) - (2.736)	SM 3111 B
Potassium - D		4.89	5.00		1	-2.20%	(-8.089) - (12.99)	SM 3111 B
Potassium - D		4.87	5.00		1	-2.60%	(-8.089) - (12.99)	SM 3111 B
Potassium - D		4.83	5.00		1	-3.40%	(-8.089) - (12.99)	SM 3111 B
Selenium - D		0.252	0.250		1	0.896%	(-11.37) - (5.967)	EPA 200.8
Selenium - D		0.242	0.250		1	-3.01%	(-11.37) - (5.967)	EPA 200.8
Selenium - D		0.246	0.250		1	-1.75%	(-11.37) - (5.967)	EPA 200.8
Selenium - D		0.247	0.250		1	-1.14%	(-11.37) - (5.967)	EPA 200.8
Selenium - D		0.247	0.250		1	-1.36%	(-11.37) - (5.967)	EPA 200.8
Selenium - D		0.241	0.250		1	-3.43%	(-11.37) - (5.967)	EPA 200.8
Selenium - D		0.245	0.250		1	-2.18%	(-11.37) - (5.967)	EPA 200.8
Silver - D		0.050	0.050		1	0.380%	(-5.032) - (5.054)	EPA 200.8
Silver - D		0.052	0.050		1	3.32%	(-5.032) - (5.054)	EPA 200.8
Silver - D		0.052	0.050		1	4.04%	(-5.032) - (5.054)	EPA 200.8
Silver - D		0.050	0.050		1	0.300%	(-5.032) - (5.054)	EPA 200.8
Sodium - D		14.9	15.0		1	-0.933%	(-11.55) - (4.038)	SM 3111 B
Sodium - D		14.7	15.0		1	-1.80%	(-11.55) - (4.038)	SM 3111 B
Sodium - D		14.3	15.0		1	-4.67%	(-11.55) - (4.038)	SM 3111 B
Sodium - D		14.4	15.0		1	-3.73%	(-11.55) - (4.038)	SM 3111 B
Mercury - T		0.0020	0.0020		1	-0.500%	(-7.708) - (5.288)	EPA 245.1
Mercury - T		0.0019	0.0020		1	-4.50%	(-7.708) - (5.288)	EPA 245.1
Mercury - T		0.0048	0.0050		1	-3.40%	(-7.708) - (5.288)	EPA 245.1
Mercury - T		0.0009	0.0010		1	-6.00%	(-7.708) - (5.288)	EPA 245.1
Mercury - T		0.0019	0.0020		1	-4.50%	(-7.708) - (5.288)	EPA 245.1
Mercury - T		0.0019	0.0020		1	-5.50%	(-7.708) - (5.288)	EPA 245.1
Initial Calibration Blank								
Conductivity		0.400	0.00		1	0.4	(0.0495) - (1.031)	SM 2510B
TDS		0.00	0.00		100ml	0	(-2.879) - (4.779)	SM 2540 C
Alkalinity		1.86	0.00		1	1.86	(-1.051) - (5.853)	SM 2320 B
Chloride		0.440	0.00		1	0.44	(-0.1801) - (0.8991)	SM 4500-Cl E
CN, WAD		0.001	0.00		1	0.001	(-0.0015) - (0.0034)	Kelada 01
Fluoride		0.006	0.00		1	0.006	(0.0027) - (0.0105)	SM 4500 F-C
N, Ammonia		- 0.001	0.00		1	0.0009	(-0.0070) - (0.0159)	Timberline-001
N, Nitrate		0.012	0.00		1	0.012	(-0.0136) - (0.0272)	SM 4500-NO3 F
N, Nitrite		- 0.003	0.00		1	0.003	(-0.0117) - (0.0135)	SM 4500-NO2 B
Nitrate+Nitrite		0.012	0.00		1	0.012	(-0.0175) - (0.0316)	SM 4500-NO3F
Sulfate		1.46	0.00		1	1.46	(0.4368) - (1.561)	SM 4500-SO4 E
Mercury - T		-0.0001	0.000		1	-0.00008	(-0.0003) - (0.0002)	EPA 245.1

Lab Numbers: **20250305401 - 20250305401**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Continuing Calibration Blank								
Conductivity		0.500	0.00		1	0.5	(-0.0750) - (1.145)	SM 2510B
Alkalinity		2.64	0.00		1	2.64	(-0.0015) - (5.496)	SM 2320 B
Alkalinity		2.14	0.00		1	2.14	(-0.0015) - (5.496)	SM 2320 B
Chloride		0.330	0.00		1	0.33	(-0.0295) - (0.7755)	SM 4500-Cl E
Chloride		0.320	0.00		1	0.32	(-0.0295) - (0.7755)	SM 4500-Cl E
CN, WAD		0.00	0.00		1	0	(-0.0018) - (0.0036)	Kelada 01
Fluoride		0.006	0.00		1	0.006	(0.0024) - (0.0096)	SM 4500 F-C
Fluoride		0.005	0.00		1	0.005	(0.0024) - (0.0096)	SM 4500 F-C
N, Ammonia		- 0.002	0.00		1	0.0022	(-0.0055) - (0.0113)	Timberline-001
N, Ammonia		- 0.001	0.00		1	0.0013	(-0.0055) - (0.0113)	Timberline-001
N, Nitrate		0.016	0.00		1	0.016	(-0.0178) - (0.0296)	SM 4500-NO3 F
N, Nitrate		0.018	0.00		1	0.018	(-0.0178) - (0.0296)	SM 4500-NO3 F
N, Nitrate		0.019	0.00		1	0.019	(-0.0178) - (0.0296)	SM 4500-NO3 F
N, Nitrate		0.010	0.00		1	0.01	(-0.0178) - (0.0296)	SM 4500-NO3 F
N, Nitrate		- 0.001	0.00		1	0.001	(-0.0178) - (0.0296)	SM 4500-NO3 F
N, Nitrite		- 0.001	0.00		1	0.001	(-0.0136) - (0.0310)	SM 4500-NO2 B
N, Nitrite		0.004	0.00		1	0.004	(-0.0136) - (0.0310)	SM 4500-NO2 B
Nitrate+Nitrite		0.019	0.00		1	0.019	(-0.0179) - (0.0369)	SM 4500-NO3F
Nitrate+Nitrite		0.010	0.00		1	0.01	(-0.0179) - (0.0369)	SM 4500-NO3F
Nitrate+Nitrite		0.018	0.00		1	0.018	(-0.0179) - (0.0369)	SM 4500-NO3F
Nitrate+Nitrite		0.016	0.00		1	0.016	(-0.0179) - (0.0369)	SM 4500-NO3F
Nitrate+Nitrite		- 0.001	0.00		1	0.001	(-0.0179) - (0.0369)	SM 4500-NO3F
Sulfate		0.980	0.00		1	0.98	(-0.6295) - (2.933)	SM 4500-SO4 E
Sulfate		1.03	0.00		1	1.03	(-0.6295) - (2.933)	SM 4500-SO4 E
Arsenic - D		0.000	0.00		1	-0.00001	(-0.0001) - (0.0001)	EPA 200.8
Barium - D		0.00	0.00		1	0	(0.0000) - (0.0000)	EPA 200.8
Cadmium - D		0.000	0.00		1	0.00001	(0.0000) - (0.0000)	EPA 200.8
Calcium - D		-0.020	0.00		1	-0.02	(-0.0757) - (0.1287)	SM 3111 B
Calcium - D		0.040	0.00		1	0.04	(-0.0757) - (0.1287)	SM 3111 B
Calcium - D		0.040	0.00		1	0.04	(-0.0757) - (0.1287)	SM 3111 B
Calcium - D		0.050	0.00		1	0.05	(-0.0757) - (0.1287)	SM 3111 B
Chromium - D		0.00	0.00		1	0	(0.0000) - (0.0001)	EPA 200.8 DRC
Copper - D		0.00	0.00		1	0	(0.0000) - (0.0000)	EPA 200.8
Lead - D		0.000	0.000		1	0	(0.0000) - (0.0000)	EPA 200.8
Magnesium - D		0.010	0.00		1	0.01	(-0.0256) - (0.0676)	SM 3111 B
Magnesium - D		0.020	0.00		1	0.02	(-0.0256) - (0.0676)	SM 3111 B
Magnesium - D		0.030	0.00		1	0.03	(-0.0256) - (0.0676)	SM 3111 B
Magnesium - D		0.020	0.00		1	0.02	(-0.0256) - (0.0676)	SM 3111 B
Potassium - D		-0.010	0.00		1	-0.01	(-0.0190) - (0.0140)	SM 3111 B
Potassium - D		-0.010	0.00		1	-0.01	(-0.0190) - (0.0140)	SM 3111 B
Potassium - D		-0.010	0.00		1	-0.01	(-0.0190) - (0.0140)	SM 3111 B
Selenium - D		0.000	0.00		1	0.00008	(-0.0001) - (0.0005)	EPA 200.8
Silver - D		0.00	0.00		1	0	(-0.0002) - (0.0003)	EPA 200.8
Sodium - D		-0.010	0.00		1	-0.01	(-0.1583) - (0.1183)	SM 3111 B
Sodium - D		-0.040	0.00		1	-0.04	(-0.1583) - (0.1183)	SM 3111 B
Sodium - D		-0.080	0.00		1	-0.08	(-0.1583) - (0.1183)	SM 3111 B

Lab Numbers: **20250305401 - 20250305401**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Continuing Calibration Blank								
Sodium - D		-0.070	0.00		1	-0.07	(-0.1583) - (0.1183)	SM 3111 B
Mercury - T		-0.0001	0.000		1	-0.00009	(-0.0001) - (0.0000)	EPA 245.1
Mercury - T		-0.0001	0.000		1	-0.00009	(-0.0001) - (0.0000)	EPA 245.1
Mercury - T		-0.0001	0.000		1	-0.0001	(-0.0001) - (0.0000)	EPA 245.1

Approved By:

MID-CONTINENT TESTING LABORATORIES, INC.

Verified

2100 S. 7th, Suite 211 · P.O. Box 3388 · Rapid City, SD 57709 · (605) 348-0111

COMPANY: Wharf Resources

SAMPLE LOCATION:	401 RVHP	PAD 4 301
SAMPLING DATE:	2-26-25	2-26-25
SAMPLING TIME:	815	840

Discharge
DPD
sunshine
DP pit
other

Please RUSH RVHP!

CHECK THE TESTS TO BE PERFORMED

PHYSICAL PROPERTIES

- [X] CONDUCTIVITY
- [ ] HARDNESS
- [X] pH
- [X] SOLIDS, DISSOLVED
- [ ] SOLIDS, SUSPENDED
- [ ] TURBIDITY

INORGANIC & NONMETALIC

- [ ] ALKALINITY
- [X] BICARBONATE
- [X] CARBONATE
- [X] CHLORIDE
- [ ] CYANIDE - TOTAL
- [X] CYANIDE - WAD

METALS

	DISS.	TOTAL	TOTAL RECOV
ALUMINUM	[ ]	[ ]	[ ]
ANTIMONY	[ ]	[ ]	[ ]
ARSENIC	[X]	[ ]	[ ]
BARIUM	[X]	[ ]	[ ]
BERYLLIUM	[ ]	[ ]	[ ]
BORON		[ ]	
CADMIUM	[X]	[ ]	[ ]
CALCIUM	[X]		
CHROMIUM	[X]	[ ]	[ ]
COBALT	[ ]	[ ]	[ ]
COPPER	[X]	[ ]	[ ]
GOLD	[ ]	[ ]	[ ]
IRON	[ ]	[ ]	[ ]

[X]				
[ ]	CYANIDE - FREE	[X]	[ ]	[ ] LEAD
[X]	FLUORIDE	[ ]	[ ]	[ ] LITHIUM
[X]	NITROGEN, AMMONIA	[X]		MAGNESIUM
[X]	NITROGEN, NITRATE	[ ]	[ ]	[ ] MANGANESE
[X]	NITROGEN, NITRITE		[X]	MERCURY
[X]	SULFATE	[ ]	[ ]	[ ] MOLYBDENUM
	SPECIAL TESTS	[ ]	[ ]	[ ] NICKEL
[ ]	ACIDITY	[X]		POTASSIUM
[ ]	BOD	[X]	[ ]	[ ] SELENIUM
[ ]	PHOSPHORUS, DISSOLVED	[ ]	[ ]	[ ] SILICON
[ ]	PHOSPHORUS, TOTAL	[X]	[ ]	[ ] SILVER
	FIELD PARAMETERS	[X]		SODIUM
	pH _____	[ ]	[ ]	[ ] STRONTIUM
	Conductivity _____	[ ]	[ ]	[ ] VANADIUM
	Temp _____	[ ]	[ ]	[ ] ZINC
	Water Level _____			
	Flow _____			
	DO _____			
	ORP _____			

From: Hicks, Matt
To: McGuire, Jaclyn
Cc: Hudson, Roberta
Subject: FW: [EXT] Water Release
Date: Tuesday, March 18, 2025 1:23:51 PM
Attachments: 2025.021 Follow-up to DANR (3.18.25).pdf

Jaclyn,

The parameter concentrations are not out of line with the permitted limits on a spray or offload within the POP Zone. I'd recommend closure for the release case.

Thanks,

Matt

From: Ben Evans <bevans@coeur.com>
Sent: Tuesday, March 18, 2025 1:15 PM
To: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>
Cc: Hicks, Matt <Matt.Hicks@state.sd.us>; Hudson, Roberta <Roberta.Hudson@state.sd.us>
Subject: RE: [EXT] Water Release

Morning Jackie,

Please see attached follow-up report including sample results from this release. Let me know if you need anything further from us!

Thanks,
Ben

COEUR WHARF™

Ben Evans | Sr. Environmental Coordinator

Wharf Resources (USA), Inc. | 10928 Wharf Road | Lead, SD 57754
o: 605.584.4112 | c: 605.580.0212 | bevans@coeur.com
NYSE: CDE | www.coeur.com

From: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>
Sent: Wednesday, February 26, 2025 1:50 PM
To: Ben Evans <bevans@coeur.com>
Subject: Water Release

Hi Ben,
Please see the attached letter and a blank copy of our Incident Follow Up report. A hard copy

From: Hicks, Matt
To: Ward, Aaron; Anderson, Tom
Cc: McGuire, Jaclyn; Hudson, Roberta
Subject: FW: Treated water release at Wharf
Date: Wednesday, February 26, 2025 3:30:51 PM
Attachments: 2025.021_Wharf Letter.pdf

Aaron and Tom,

FYI. Looks like groundwater is the primary concern from the release as there was no reported runoff. Depending on the sample results, impacts would likely be similar to a short duration spray event with minimal appreciable change to water quality in the monitoring wells. Nitrate and arsenic will be added to the Juno/Foley checkbook and any groundwater monitoring will be handled under the GWDP. Additional cleanup actions are not anticipated.

Thanks,

Matt

From: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>
Sent: Wednesday, February 26, 2025 2:47 PM
To: Hicks, Matt <Matt.Hicks@state.sd.us>; Hudson, Roberta <Roberta.Hudson@state.sd.us>
Subject: RE: Treated water release at Wharf

FYI

From: Hicks, Matt <Matt.Hicks@state.sd.us>
Sent: Wednesday, February 26, 2025 10:58 AM
To: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>; Hudson, Roberta <Roberta.Hudson@state.sd.us>
Subject: RE: Treated water release at Wharf

This is within the Juno/Foley groundwater discharge plan. The release is not an approved release under the groundwater discharge plan, but the area is being actively monitored. Ongoing monitoring can be handled under it. The nitrate and arsenic that was release must be added to the Juno/Foley loading limit checkbooks.

From: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>
Sent: Wednesday, February 26, 2025 10:52 AM
To: Hicks, Matt <Matt.Hicks@state.sd.us>; Hudson, Roberta <Roberta.Hudson@state.sd.us>
Subject: RE: Treated water release at Wharf

Oh gosh I'm sorry, it's 44.345900, -103.859255

From: Hicks, Matt <Matt.Hicks@state.sd.us>
Sent: Wednesday, February 26, 2025 10:50 AM
To: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>; Hudson, Roberta <Roberta.Hudson@state.sd.us>
Subject: RE: Treated water release at Wharf

Can you double check those coordinates? It plots to a location not on the mine site.

From: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>
Sent: Wednesday, February 26, 2025 10:46 AM
To: Hicks, Matt <Matt.Hicks@state.sd.us>; Hudson, Roberta <Roberta.Hudson@state.sd.us>
Subject: Treated water release at Wharf

Hi,
I just got a call from Ben Evans who reported a treated water release at Wharf. The release is estimated at 6,000 gallons from their treated water line. The release occurred due to a failed valve. The valve and pooled water are located at 44.325900, -103.859255. The line was shut down and a water sample was collected. The water has since seeped back into the ground. Wharf will evaluate the water for arsenic and nitrates. Please let me know if you would like any additional parameters. I'm assuming we will handle this similar to their past water releases and not require anything additional than the sampling, but if either of you have additional concerns please let me know.

Thanks,
Jackie

Jackie McGuire | Environmental Scientist III
Inspection, Compliance, and Remediation Program
SD Department of Agriculture and Natural Resources
523 East Capitol Ave. Pierre, SD 57501
Office: 605.773.3296 | Cell: 605.295.4146
24-Hour Spill Reporting: 605.773.3231
Spills Reporting Info

From: Hicks, Matt
To: McGuire, Jaclyn
Cc: Hudson, Roberta
Subject: FW: [EXT] Water Release
Date: Tuesday, March 18, 2025 1:23:51 PM
Attachments: 2025.021 Follow-up to DANR (3.18.25).pdf

Jaclyn,

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Thanks,

Matt

From: Ben Evans <bevans@coeur.com>
Sent: Tuesday, March 18, 2025 1:15 PM
To: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>
Cc: Hicks, Matt <Matt.Hicks@state.sd.us>; Hudson, Roberta <Roberta.Hudson@state.sd.us>
Subject: RE: [EXT] Water Release

Morning Jackie,

Please see attached follow-up report including sample results from this release. Let me know if you need anything further from us!

Thanks,
Ben

COEUR WHARF™

Ben Evans | Sr. Environmental Coordinator

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o: 605.584.4112 | c: 605.580.0212 | bevans@coeur.com
NYSE: CDE | www.coeur.com

From: McGuire, Jaclyn <Jaclyn.McGuire@state.sd.us>
Sent: Wednesday, February 26, 2025 1:50 PM
To: Ben Evans <bevans@coeur.com>
Subject: Water Release

Hi Ben,
Please see the attached letter and a blank copy of our Incident Follow Up report. A hard copy

has been mailed to you as well. Please let me know if you have any questions.

Thanks,
Jackie

Jackie McGuire | Environmental Scientist III
Inspection, Compliance, and Remediation Program
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