PHOENIX | OPERATING COMPANY

March 2, 2026

Montana Board of Oil and Gas Conservation
2535 St. Johns Avenue
Billings, MT 59102

Attn: Mr. John Gizicki
UIC Program Manager

RE: Application for UIC Permit and Authorization to Drill a Class II Injection Well
Location of proposed Disposal Well & Facility: ORIGAMI 1 SWD
Lot 1, Section 3, Township 28N, Range 57E. P.M.M.
Roosevelt County, Montana

Dear Mr. Gizicki,

Phoenix Operating LLC (Phoenix) respectfully requests approval of an Underground Injection Control (UIC) permit for the referenced location and as described in the attached application. Phoenix has provided notice to the appropriate parties within ¼ mile area of review of the proposed well location and requests that the application be placed on the docket for the MBOGC hearing scheduled April 9th, 2026.

If you have any questions concerning the enclosed application, please do not hesitate to reach out.

Sincerely,

Tori Siemieniewski
Director – Bakken Regulatory
Phoenix Operating LLC
701-870-2961

David Scadden
Chief Operating Officer, Partner
Phoenix Operating LLC
307-214-7909

PHOENIX | OPERATING COMPANY

February 26, 2026

Montana Board of Oil and Gas Conservation
2535 St. Johns Avenue
Billings, MT 59102

Attn: Mr. John Gizicki
UIC Program Manager

RE: Application for UIC Permit and Authorization to Drill a Class II Injection Well
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Sincerely,

Tori Siemieniewski
Director – Bakken Regulatory
Phoenix Operating LLC
701-870-2961

FORM NO. 2 R 10/09

ARM 36.22.307, 601, 605, 1003, 1004, 1011, 1013, 1103, 1222, 1240, 1301, 1306, 1309, and 1417

Submit In Quadruplicate To:

MONTANA BOARD OF OIL AND GAS CONSERVATION
2535 ST. JOHNS AVENUE
BILLINGS, MONTANA 59102

SUNDRY NOTICES AND REPORT OF WELLS

Operator PHOENIX OPERATING LLC

Address 4643 SOUTH ULSTER STREET, SUITE 1510

City DENVER State CO Zip Code 80237

Telephone 303-548-1953 Fax

Lease Name: ORIGAMI

Type (Private/State/Federal/Tribal/Allotted): Private

Well Number: 1 SWD

Location of well (1/4-1/4 section and footage measurements):
Lot 1 Section 3, T28N, R57E, 516' FNL & 905' FEL

Unit Agreement Name:

Field Name or Wildcat: Elm Coulee NE

Township, Range, and Section: Section 3, T28N, R57E

API Number: 25 | | |
State County Well

Well Type (oil, gas, injection, other): INJECTION

County: Roosevelt

Indicate below with an X the nature of this notice, report, or other data:

Notice of Intention to Change Plans	☐	Subsequent Report of Mechanical Integrity Test	☐
Notice of Intention to Run Mechanical Integrity Test	☐	Subsequent Report of Stimulation or Treatment	☐
Notice of Intention to Stimulate or to Chemically Treat	☐	Subsequent Report of Perforation or Cementing	☐
Notice of Intention to Perforate or to Cement	☐	Subsequent Report of Well Abandonment	☐
Notice of Intention to Abandon Well	☐	Subsequent Report of Pulled or Altered Casing	☐
Notice of Intention to Pull or Alter Casing	☐	Subsequent Report of Drilling Waste Disposal	☐
Notice of Intention to Change Well Status	☐	Subsequent Report of Production Waste Disposal	☐
Supplemental Well History	☐	Subsequent Report of Change in Well Status	☐
Other (specify) Intent to drill and complete a	☒	Subsequent Report of Gas Analysis (ARM 36.22.1222)	☐
Class II Injection Well	☐		☐

Describe Proposed or Completed Operations:

Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as necessary. Indicate the intended starting date for proposed operations or the completion date for completed operations.

Phoenix respectfully requests approval to drill and complete a disposal well at the above-referenced location for the injection of Class II E&P waste. Notice has been provided to all parties within the quarter mile area of review. An application for hearing has been docketed with the Montana Board of Oil and Gas Conservation and is scheduled for April 2026.

Phoenix requests a variance from running open hole logs on the subject well. Offset logs can be found for the ROGNEY 4-17 (API#25085213880000).

BOARD USE ONLY

Approved _____
Date

Name Title

The undersigned hereby certifies that the information contained on this application is true and correct:

2/26/2026 _____
Date Signed (Agent)

Megan Griffith, Regulatory Specialist
Print Name and Title

Telephone: 720-250-8737

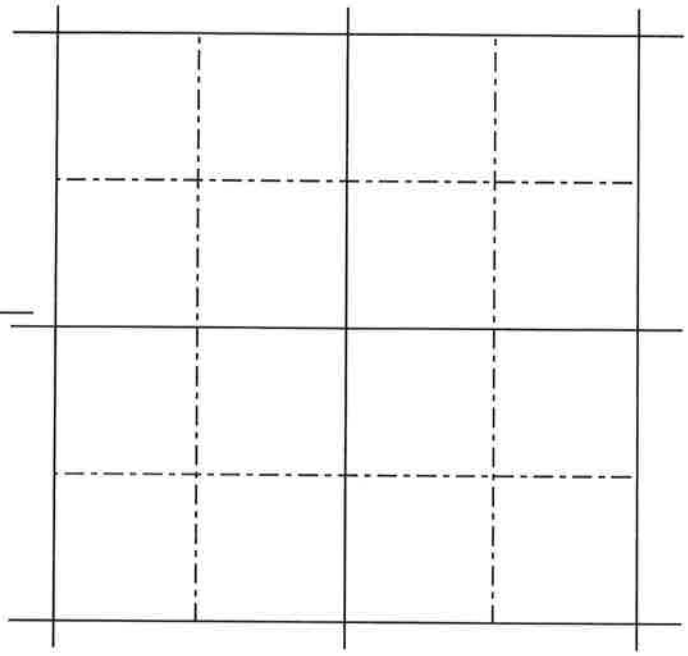
SUPPLEMENTAL INFORMATION

NOTE: Additional information or attachments may be required by Rule or by special request.

Plot the location of the well or site that is the subject of this notice or report.

Range _____

Township _____



BOARD USE ONLY	CONDITIONS OF APPROVAL

The operator must comply with the following condition(s) of approval:

Failure to comply with the conditions of approval may void this permit.

UIC Plan
ORIGAMI 1 SWD

1. Operator Description

Phoenix Operating LLC
4643 South Ulster Street, Suite 1510
Denver, CO 80237

2. Proposed Well Location

Well Name:	ORIGAMI 1 SWD
Location:	516' FNL & 905' FEL, Section 3, T28N, R57E, Roosevelt County.
Field:	Elm Coulee NE
Ungraded Ground Elevation:	2253'
Finished Pad Elevation:	2246'

3. Lithologic Description of the Proposed Injection & Confining Zone

Injection Zone: Inyan Kara Formation

Estimated Top: 5175' TVD
Estimated Thickness: 628'
Description: consists of alternating fluvial deltaic sandstones, siltstones, and shales varying thickness and lateral extent. Stratigraphic variability in the Inyan Kara is generally interpreted to be the result of multiple episodes of erosion and subsequent channel-filling.

Upper Confining Zone: Mowry Formation

Estimated Top: 4773' TVD
Estimated Thickness: 402'
Description: medium to dark gray, soft, flaky, often bentonitic, shale. Lower Cretaceous Dakota Group consists of offshore marine shales and bentonitic claystone.

Lower Confining Zone: Swift Formation

Estimated Top: 5803' TVD
Estimated Thickness: 444'
Description: dark gray to greenish, fissile, waxy, silty, and often calcareous shale. The Jurassic Swift formation lies conformably below the Inyan Kara. The Swift is made up of shallow marine shale and siltstone.

*Offset geologic tops calculated from ROGNEY 4-17 (API#25085213880000).

4. Maximum Injection Pressure Calculation

Maximum injection pressure was determined utilizing the following formula in accordance with §146.23

MSIP = (Depth of Perf(TVD)) * (Frac. Grad.) - (Water Grad.)*(SG Injectate)*(Depth of Perf)

MSIP = Maximum Surface Injection Pressure (measured at surface)
Depth of Perf = Top Perf (TVD)
0.733 psi/ft = Fracture Gradient
0.433 psi/ft = Freshwater gradient, psi/ft.
SG Injectate = specific gravity (of injected fluid from produced water samples)
0.433 = freshwater gradient, psi/ft.

MSIP = (5489 *.733) - (0.433*1.21) * 5489
MSIP = 1148.63 psi

5. Proposed Injection Program

The Operator plans to drill a saltwater injection well and inject into the Inyan Kara formation of the Dakota Group. See above sections 4 and 5 for proposed injection volume and pressure maximums. The well has no plans to take third party volumes at this time. The proposed well is to be utilized by wells drilled from the same well pad. See appendix C for well list. No truck unloading is currently planned.

6. Facilities Design

The proposed tanks will be constructed of steel in accordance to industry specifications. The design and construction of each bulk storage container will be compatible with the characteristics of the product it contains including temperature and pressure conditions. Piping between fixed above ground bulk storage tanks will be supported to minimize stress.

A 3' high metal containment will be constructed around the tank battery. A geomembrane liner shall be installed that extends and overlaps the steel wall containment maintaining continuous impermeable surface. A site perimeter berm approximately 2' high will be installed as well.

Please note: The proposed well is located on site with planned oil wells. The SWD facilities and the oil facilities are co-located within the same berms.

7. Spill Prevention and Monitoring Controls:

In addition to the previously mentioned secondary and tertiary containment (#7), the Operated facilities are equipped with 24-hour SCADA (Supervisory Control and Data Acquisition) remote monitoring systems. Onsite alarms are routed to the local PLC/HMI (Programmable Logic Controller/Human-Machine Interface), and then transmitted to SCADA. This setup enables real-time communication of potential issues at remote production facilities, significantly reducing detection time. The system alerts Operations personnel, allowing them to respond promptly and mitigate any concerns before they escalate into incidents. Below are some of the associated alarms:

- Tank alarms: Each tank is equipped with a high-level alarm. If the fluid level continues to rise, an additional alarm is triggered to close the Emergency Shut Down Valve (ESDV) on the facility's inlet streams, preventing more fluid from entering the tank.

- Separator alarms: Each treater is fitted with a high-level alarm. Should the level continue rising, a secondary alarm will initiate closure of the ESDV on the facility's inlet streams to halt additional fluid inflow.

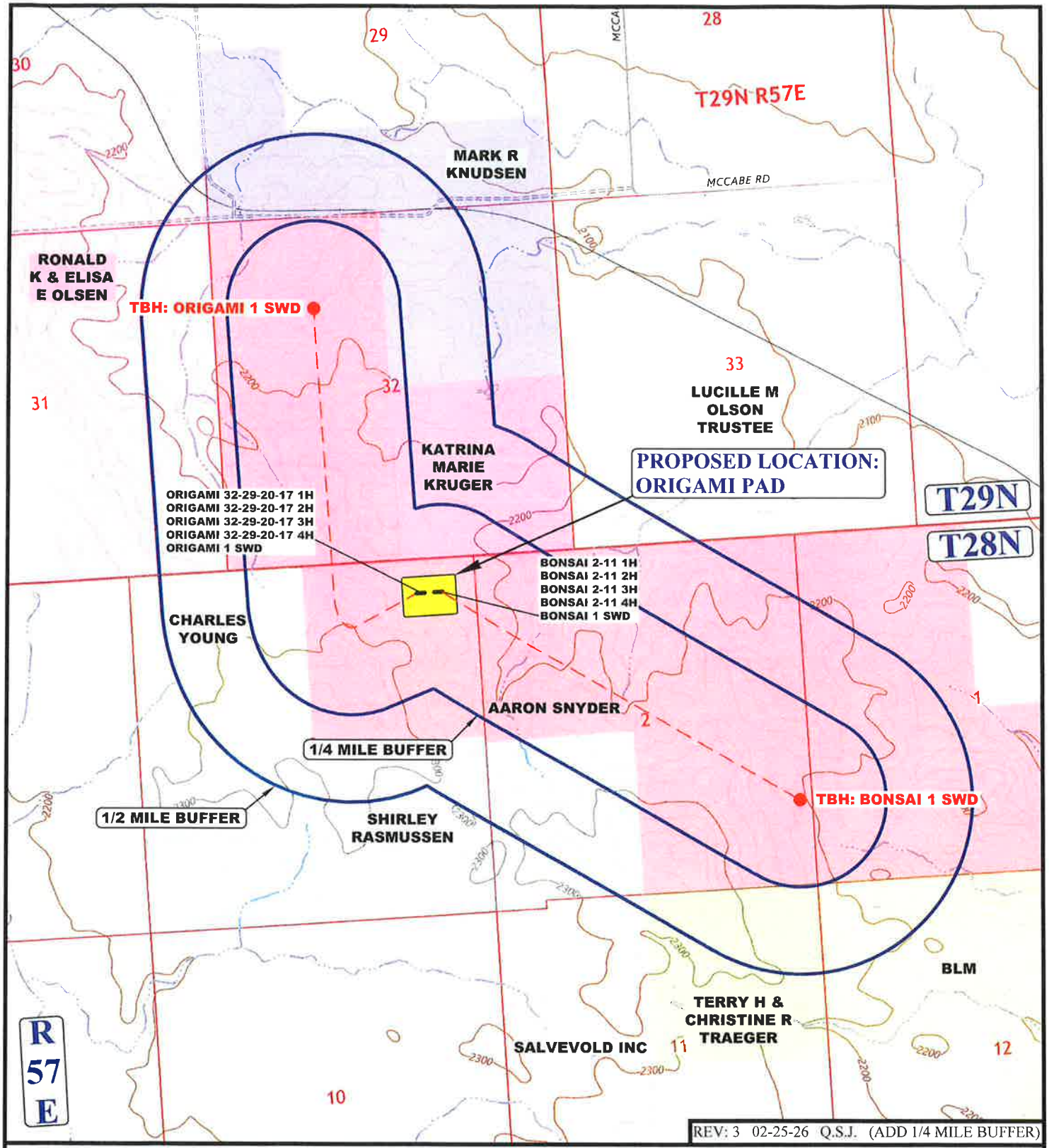
- Additional SCADA monitoring includes: tubing pressure, vibration monitoring, and low- and high-flow alarms, among others.

In accordance with EPA regulations, a SPCC (Spill Prevention, Control, and Countermeasure) Plan will be implemented within six months of commissioning. The plan evaluates site-specific measures for spill prevention and control, and outlines documented response protocols. The Operator currently conducts regular SPCC inspections to ensure compliance with applicable regulations. Additionally, annual SPCC training is mandatory for all personnel handling oil.

8. Appendices

i. AOR Maps
ii. FW SAMPLE ANALYSIS
iii REPRESENTATIVE LOG
iv. WATER ANALYSIS (2 SOURCE WELLS)
v. DRILLING & COMPLETIONS PLAN
vi. WBD
vii. LIST OF OWNERS (Surface & Mineral) WITHIN 1/4 MILE
viii. AFFIDAVIT OF MAILING
ix. EXAMPLE OF LANDOWNER NOFITICATIONS (SURFACE & MINERAL)

Appendix I
AOR MAP
ORIGAMI 1 SWD



REV: 3 02-25-26 Q.S.J. (ADD 1/4 MILE BUFFER)

NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

N

PHOENIX OPERATING LLC

ORIGAMI PAD
LOT 1, SECTION 3, T28N, R57E, P.M.M.
ROOSEVELT COUNTY, MONTANA

SURVEYED BY	C.B., D.D.	04-15-25	SCALE
DRAWN BY	D.J.G.	12-09-25	1 : 24,000
WELL PROXIMITY MAP			TOPO C

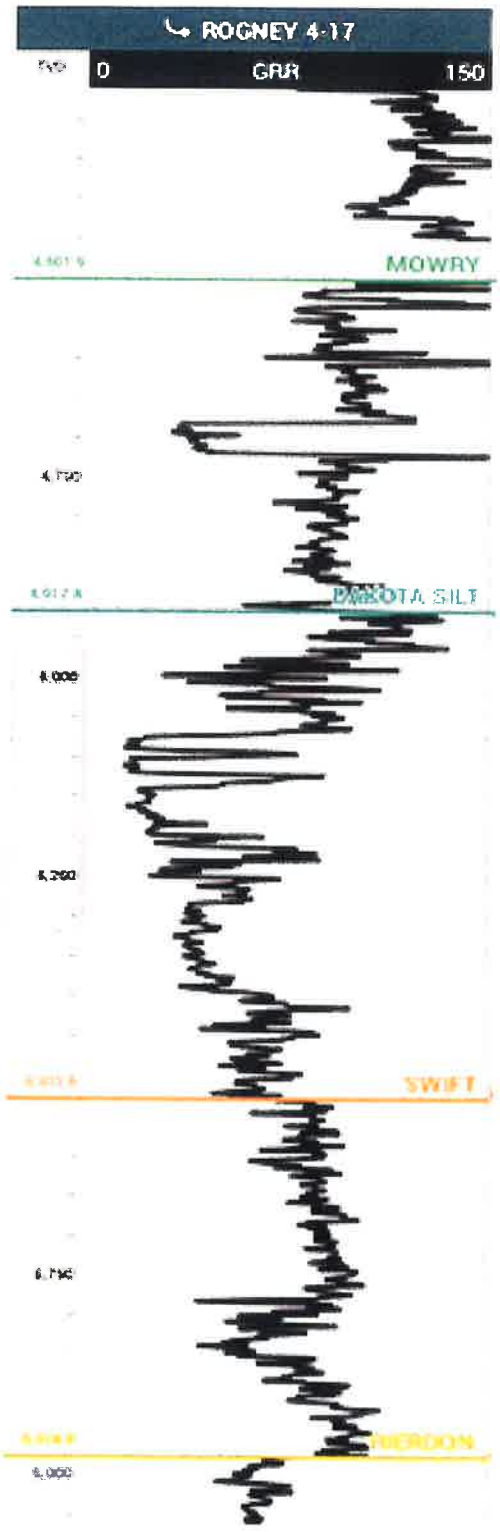
UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

Appendix II
FW SAMPLE ANALYSIS
ORIGAMI 1 SWD

Per conversations with MBOGC UIC, a representative sample is already on file. No submission needed.

Appendix III
REPRESENTATIVE LOG
ORIGAMI 1 SWD



Well: ROGNEY 4-17
API: 25085213880000

Appendix IV
WATER ANALYSIS (2 SOURCE WELLS)
ORIGAMI 1 SWD

See below for source well list. Phoenix Operating is currently permitting multiple wells on the same pad location as this proposed SWD. The Operator plans to only inject water from on pad wells. However, the sample included is representative of produced water in the area and was obtained from the nearby Milloy 10-3-24 #2H and Snyder 1-12 #1H wells.

File No:	Well Name:	Permit Status
TBD	ORIGAMI 32-29-20-17 1H	Submitted
TBD	ORIGAMI 32-29-20-17 2H	Submitted
TBD	ORIGAMI 32-29-20-17 3H	Submitted
TBD	ORIGAMI 32-29-20-17 4H	Submitted
TBD	BONSAI 2-11 1H	Submitted
TBD	BONSAI 2-11 2H	Submitted
TBD	BONSAI 2-11 3H	Submitted
TBD	BONSAI 2-11 4H	Submitted

MINNESOTA VALLEY TESTING LABORATORIES, INC.
1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Member ACIL

Account #: 23037 **Client:** Astro-Chem Laboratory, Inc.
Workorder: Milloy 10-3-24 #2H Well Pad (65921)

Brenda Benth
Astro-Chem
4102 2nd Ave W
Williston, ND 58801

Certificate of Analysis

Approval

All data reported has been reviewed and approved by:

Stacy Zander

Stacy Zander, Bismarck Assistant Lab Manager Bismarck, ND

Analyses performed under Minnesota Department of Health Accreditation conforms to the current TNI standards.

NEW ULM LAB CERTIFICATIONS:
MN LAB # 027-015-125 ND WW/DW # R-040

BISMARCK LAB CERTIFICATIONS:
MN LAB # 038-999-267 ND W/DW # ND-016 SD SDWA

Report Date: Wednesday October 2, 2024 4:29:04 PM

MINNESOTA VALLEY TESTING LABORATORIES, INC.
1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Member ACIL

Account #: 23037 **Client:** Astro-Chem Laboratory, Inc.

Analytical Results

Lab ID:	65921001	**Date Collected:**	09/21/2024 10:30	**Matrix:**	Groundwater
Sample ID:	Treater (Production Water)	**Date Received:**	09/27/2024 10:55	**Collector:**	Client

Temp @ Receipt (C): 21.0 **Received on Ice:** No

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: ASTM D1298							
Density	1.210 @ 65.0 F	g/cm3		1		10/01/2024 11:30	
Specific Gravity	1.210 @ 65.0 F	at 60/60F		1		10/01/2024 12:24	

Report Date: Wednesday October 2 2024 4 29 04 PM

MINNESOTA VALLEY TESTING LABORATORIES, INC.
1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.MVTL.com

Member ACIL

Account #: 23037 **Client:** Astro-Chem Laboratory, Inc.

Astro-Chem Lab
PO Box 972
Williston, ND 58802-0972

Chain of Custody & Analyt

www.astrochem

Astro – Chem Laboratory, I
WO: 65921

Page 1 of 1

Account Information (Billing Information)

Company/Name	Astro-Chem Lab, Inc.
Contact	Christina Jungels
Phone	701-572-7355
Mailing Address	PO Box 972
City, State, Zip	Williston, ND 58802-0972
Email	astrochem@midconetwork.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	Quote / Bottle Order

Report Information (if differer

Company/Name	Phoenix Operatin
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	astrochem@midconetwork.com
Receive Report	☐Hard Copy ☒Email

ents

Project Information

Project Name, PWSID, Permit, etc.	Milloy 10-3-24 #2H Well Pad
Sampler Name	Dave Scadden
Sampler Phone	303-548-1953
Sample Origin State	ND
EPA/State Compliance	☒ Yes ☐ No

Matrix Codes
A - Air
W - Water
S - Soils/ Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Astro-Chem Lab MUST be contacted prior to RUSH sample submittal for charges and scheduling!

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Specific Gravity	Density	See Attached	RUSH TAT	LAB ID (Laboratory Use Only)
1	Treater (Production Water)	09/21/2024	10:30 am	1	W	✓	✓			
2	(03616)									
3										
4										
5										
6										
7										
8										
9										

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Dave Scadden - Left in Vestibule	09/24/2024	D.S. Vestibule	Christina Jungels	09/24/2024	Christina Jungels
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					27Sep24@1055	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				21.0 °C	Y (N)	Y (N)			

In certain circumstances, samples submitted to Astro-Chem Lab, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

EII-COC-01/21 v.4

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

October 10, 2024

Christina Jungels
Astro-Chem Lab, Inc.
4102 2nd Ave. W.
Williston, ND 58801

RE: Project: Phoenix Operating, LLC
Pace Project No.: 10709475

Dear Christina Jungels:

Enclosed are the analytical results for sample(s) received by the laboratory on September 26, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis
- Pace Analytical Services - Ormond Beach

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Andrea Richardson

Andrea Richardson
andrea.richardson@pacelabs.com
(218)341-6080
Project Manager

Enclosures

cc: Accounts Payable, Astro-Chem Lab, Inc.

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
DoD Certification via A2LA #: 2926.01
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
GMP+ Certification #: GMP050884
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
ISO/IEC 17025 Certification via A2LA #: 2926.01
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification via A2LA #: 2926.01
USDA Permit #: P330-19-00208

Pace Analytical Services Ormond Beach
8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
California Certification# 3096
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
DoD-ANAB #:ADE-3199
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Massachusetts Certification #: M-FL1264
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

Pace Analytical Services Ormond Beach
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Utah FL NELAC Reciprocity
Utah
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10709475001	**Milloy 10-3-24 #2H Well Pad**	Water	09/21/24 10:30	09/26/24 08:50

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10709475001	**Milloy 10-3-24 #2H Well Pad**	EPA 6010D	DM	9	PASI-M
		SM 2320B	KEO	3	PASI-M
		SM 2540C	JKH	1	PASI-M
		SM 4500-H+B	KEO	1	PASI-M
		EPA 120.1 Resistivity	SWB	1	PASI-O
		SM 2510	KEO	1	PASI-M
		ASTM D5057	JKH	1	PASI-M
		EPA 300.0	JFP	2	PASI-M
		EPA 353.2	JFP	1	PASI-M

PASI-M = Pace Analytical Services - Minneapolis
PASI-O = Pace Analytical Services - Ormond Beach

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

Sample: Milloy 10-3-24 #2H Well Pad **Lab ID: 10709475001** Collected: 09/21/24 10:30 Received: 09/26/24 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Minneapolis							
Barium	**24000**	ug/L	500	10	09/30/24 13:03	10/01/24 12:05	7440-39-3	
Calcium	**16200000**	ug/L	25000	10	09/30/24 13:03	10/01/24 12:05	7440-70-2	
Chromium	ND	ug/L	500	10	09/30/24 13:03	10/01/24 12:05	7440-47-3	D3
Iron	**127000**	ug/L	2500	10	09/30/24 13:03	10/01/24 12:05	7439-89-6	
Magnesium	**1250000**	ug/L	25000	10	09/30/24 13:03	10/01/24 12:05	7439-95-4	
Potassium	**8070000**	ug/L	125000	10	09/30/24 13:03	10/01/24 12:05	7440-09-7	
Sodium	**89500000**	ug/L	500000	100	09/30/24 13:03	10/01/24 12:10	7440-23-5	
Strontium	**1310000**	ug/L	2500	100	09/30/24 13:03	10/01/24 12:10	7440-24-6	
Zinc	**17800**	ug/L	1000	10	09/30/24 13:03	10/01/24 12:05	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis							
Alkalinity, Total as CaCO3	**58.4**	mg/L	5.0	1		10/03/24 12:08		
Alkalinity,Bicarbonate (CaCO3)	**58.4**	mg/L	5.0	1		10/03/24 12:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		10/03/24 12:08		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Minneapolis							
Total Dissolved Solids	**295000**	mg/L	250	1		09/27/24 18:38		MW,PP
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Minneapolis							
pH at 25 Degrees C	**5.5**	Std. Units	0.10	1		10/08/24 12:45		H6
Resistivity	Analytical Method: EPA 120.1 Resistivity Pace Analytical Services - Ormond Beach							
Resistivity	**1.9**	ohms-cm	0.50	1		10/02/24 14:00		N2
SM2510 Specific Conductance	Analytical Method: SM 2510 Pace Analytical Services - Minneapolis							
Specific Conductance	**209000**	umhos/cm	5.0	1		10/01/24 14:36		
Specific Gravity	Analytical Method: ASTM D5057 Pace Analytical Services - Minneapolis							
Specific Gravity	**1.22**			1		10/09/24 22:12		N2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Minneapolis							
Chloride	**167000**	mg/L	6000	5000		10/07/24 10:02	16887-00-6	
Sulfate	**256**	mg/L	120	100		10/05/24 03:08	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2 Pace Analytical Services - Minneapolis							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		10/06/24 11:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 970670
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D Water
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10709475001

METHOD BLANK: 5072402 Matrix: Water
Associated Lab Samples: 10709475001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Barium	ug/L	ND	10.0	10/01/24 11:18	
Calcium	ug/L	ND	500	10/01/24 11:18	
Chromium	ug/L	ND	10.0	10/01/24 11:18	
Iron	ug/L	ND	50.0	10/01/24 11:18	
Magnesium	ug/L	ND	500	10/01/24 11:18	
Potassium	ug/L	ND	2500	10/01/24 11:18	
Sodium	ug/L	ND	1000	10/01/24 11:18	
Strontium	ug/L	ND	5.0	10/01/24 11:18	
Zinc	ug/L	ND	20.0	10/01/24 11:18	

LABORATORY CONTROL SAMPLE: 5072403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	993	99	80-120	
Calcium	ug/L	20000	19600	98	80-120	
Chromium	ug/L	1000	977	98	80-120	
Iron	ug/L	20000	20000	100	80-120	
Magnesium	ug/L	20000	19800	99	80-120	
Potassium	ug/L	20000	19900	100	80-120	
Sodium	ug/L	20000	20300	102	80-120	
Strontium	ug/L	1000	1020	102	80-120	
Zinc	ug/L	1000	1040	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5072404 5072405

Parameter	Units	10708927001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	18.0	1000	1000	1000	990	98	97	75-125	1	20	
Calcium	ug/L	85.3 mg/L	20000	20000	101000	97900	81	63	75-125	3	20	P6
Chromium	ug/L	ND	1000	1000	964	955	96	95	75-125	1	20	
Iron	ug/L	3480	20000	20000	22900	22600	97	96	75-125	1	20	
Magnesium	ug/L	125 mg/L	20000	20000	141000	136000	80	55	75-125	4	20	P6
Potassium	ug/L	14.1 mg/L	20000	20000	34600	33800	103	99	75-125	2	20	
Sodium	ug/L	56.1 mg/L	20000	20000	73300	70900	86	74	75-125	3	20	M1
Strontium	ug/L	559	1000	1000	1540	1510	98	96	75-125	2	20	
Zinc	ug/L	ND	1000	1000	1000	995	100	99	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 971542
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10709475001

METHOD BLANK: 5076911 Matrix: Water
Associated Lab Samples: 10709475001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	10/03/24 08:46	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	10/03/24 08:46	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	10/03/24 08:46	

LABORATORY CONTROL SAMPLE & LCSD: 5076912 5076913

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	44.0	42.6	110	106	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5076914 5076915

Parameter	Units	10709079009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	93.6	40	40	134	135	100	103	80-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5076916 5076917

Parameter	Units	10709141012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	170	40	40	201	202	76	80	80-120	1	20	P6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 970573
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10709475001

METHOD BLANK: 5072111 Matrix: Water
Associated Lab Samples: 10709475001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	09/27/24 18:37	

LABORATORY CONTROL SAMPLE: 5072112

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	992	99	80-120	

SAMPLE DUPLICATE: 5072113

Parameter	Units	10709141012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	206	196	5	10	

SAMPLE DUPLICATE: 5072114

Parameter	Units	10709194003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	157	151	4	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
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QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 972286
QC Batch Method: SM 4500-H+B
Analysis Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10709475001

LABORATORY CONTROL SAMPLE: 5081033

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	5.0	100	98-102	H6

SAMPLE DUPLICATE: 5081034

Parameter	Units	10709552003 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	4.3	4.2	1	3	H6

SAMPLE DUPLICATE: 5081035

Parameter	Units	10710487004 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.2	7.2	0	3	H6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 971086
QC Batch Method: SM 2510
Analysis Method: SM 2510
Analysis Description: SM2510 Specific Conductance
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10709475001

METHOD BLANK: 5074750 Matrix: Water
Associated Lab Samples: 10709475001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	5.0	10/01/24 13:16	

LABORATORY CONTROL SAMPLE: 5074751

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance	umhos/cm	1000	933	93	90-110	

SAMPLE DUPLICATE: 5074752

Parameter	Units	10708260023 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	882	817	8	20	

SAMPLE DUPLICATE: 5074753

Parameter	Units	10708260024 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	1170	1170	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Minneapolis, MN 55414
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QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 972576
QC Batch Method: ASTM D5057
Analysis Method: ASTM D5057
Analysis Description: Spec.Gravity/ASTM D5057
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10709475001

SAMPLE DUPLICATE: 5082528

Parameter	Units	10709912001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Gravity		1.22	1.22	0	20	N2

SAMPLE DUPLICATE: 5082529

Parameter	Units	10709914001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Gravity		1.22	1.22	0	20	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 971880
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10709475001

METHOD BLANK: 5078609 Matrix: Water
Associated Lab Samples: 10709475001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.2	10/04/24 23:06	
Sulfate	mg/L	ND	1.2	10/04/24 23:06	

LABORATORY CONTROL SAMPLE: 5078610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.2	100	90-110	
Sulfate	mg/L	50	50.4	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5078611 5078612

Parameter	Units	50383317002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	42600 ug/L	50	50	79.6	84.4	74	84	80-120	6	20	M1
Sulfate	mg/L	28200 ug/L	50	50	68.7	72.9	81	89	80-120	6	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

QC Batch: 971645
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10709475001

METHOD BLANK: 5077223 Matrix: Water
Associated Lab Samples: 10709475001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/06/24 11:11	

LABORATORY CONTROL SAMPLE: 5077224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	1	1.1	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5077225 5077226

Parameter	Units	10709141012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	1	1	1.1	1.1	108	106	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5077227 5077228

Parameter	Units	10709145001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	1	1	1.1	1.1	107	106	90-110	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H6	Analysis initiated outside of the 15 minute EPA required holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MW	Due to matrix interference, achieving a constant weight is not possible.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
PP	The mass of dried residue obtained did not meet the test method requirements based on volume used.

Pace Analytical Services, LLC
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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Phoenix Operating, LLC
Pace Project No.: 10709475

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10709475001	**Milloy 10-3-24 #2H Well Pad**	EPA 3010A	970670	EPA 6010D	971065
10709475001	**Milloy 10-3-24 #2H Well Pad**	SM 2320B	971542		
10709475001	**Milloy 10-3-24 #2H Well Pad**	SM 2540C	970573		
10709475001	**Milloy 10-3-24 #2H Well Pad**	SM 4500-H+B	972286		
10709475001	**Milloy 10-3-24 #2H Well Pad**	EPA 120.1 Resistivity	1045614		
10709475001	**Milloy 10-3-24 #2H Well Pad**	SM 2510	971086		
10709475001	**Milloy 10-3-24 #2H Well Pad**	ASTM D5057	972576		
10709475001	**Milloy 10-3-24 #2H Well Pad**	EPA 300.0	971880		
10709475001	**Milloy 10-3-24 #2H Well Pad**	EPA 353.2	971645		

ASTRO-CHEM LAB, INC.
4102 2nd Ave. W.
P.O. Box 972
Williston, ND 58801
701-572-7355
www.astrochemlab.com

CHAIN of CUSTODY

Page 1 of 1

Client: Phoenix Operating, LLC.
Project: Milloy 10-3-24 #2H Well Pad
Project Manager: Mark Johnson
Telephone No.
Fax No.
Method of Shipment: FEDEX OVERNIGHT
Special Detection Limit/Reporting

ACL "Oilfield Water"

Container Preservative **: 1 U U 2

**Preservative Types: (1) nitric acid (2) sulfuric acid (3) hydrochloric acid (4) sodium hydroxide (5) zinc acetate (6) methanol (7) sodium bisulfate (8) sodium thiosulfate (9) hexane (A) ascorbic acid (B) ammonium sulfate (C) ammonium hydroxide (D) TSP (U) unpreserved (O) Other:

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Water	Air	Other	Sampling Date	Sampling Time	Analysis Requested: Ca, Mg, Na, Fe, Cr, Ba, K, Sr, Zn	Chloride, Sulfate, pH, Conductivity, Resistivity, Total Dissolved Solids	Specific Gravity, Alkalinity (Carbonate & Bicarbonate)	Nitrate+Nitrite	Turn Around Time (working days)
Milloy 10-3-24 #2H Well Pad (Treater)	(3615)	4		X			9/21/24	10:30 AM	X	X	X	X	

WO# : 10709475
10709475

REMARKS:
astrochem@midconetwork.com
www.astrochemlab.com

Sample Received Intact: Yes No
Temperature received: Ice No ice

	Date	Time		
Relinq. by sampler: D.S. (Vestibule)	9/24/24		Received by (Signature): Brenda Benth Brenda Benth	
Relinquished by: Brenda Benth Brenda Benth	9/25/24	2:00 pm	Received by: [signature]	9/26/24 850
Relinquished by	Date	Time	Received by	
Relinquished by	Date	Time	Received by laboratory	Date Time

Lab Work No.

Methods for Analysis (ACL OIL WATER GUIDELINES)

Alkalinity (2320B)
- Alkalinity, Bicarbonate (CaCO3)
- Alkalinity, Carbonate (CaCO3)
- Alkalinity, Total as CaCO3

Nitrate + Nitrite (353.2)
- Nitrogen, NO2 plus NO3

pH, Electrometric (4500H+B)
8 Metals-Barium, Chromium, Iron, Zinc, Calcium, Magnesium, Sodium, Potassium (6010D MET ICP)
Chloride & Sulfate (300.0 IC Anions)
Resistivity (D1125-14)
Specific Conductance (SM2510)
Specific Gravity (ASTM D5057)
Strontium (6020B MET ICPMS)
Total Dissolved Solids (2540C)

ENV-FRM-MIN4-0150 v17_Sample Condition Upon Receipt

CLIENT NAME: Astro-Chem Lab, Inc PROJECT #:

WO#: 10709475

PM: AR4 Due Date: 10/10/24

CLIENT: 11 Astro Che

COURIER: ☐ Client ☐ Commercial ☐ FedEx ☐ Pace ☐ SpeeDee ☐ UPS ☐ USPS

TRACKING NUMBER: 7788 1470 3365 ☐ See Exceptions form ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present: ☐ YES ☑ NO Seals Intact: ☐ YES ☑ NO Biological Tissue Frozen: ☐ YES ☐ NO ☑ N/A

Packing Material: ☐ Bubble Bags ☐ Bubble Wrap ☑ None ☐ Other Temp Blank: ☑ YES ☐ NO Type of Ice: ☐ Blue ☐ Dry ☑ Wet ☐ Melted ☐ None

Thermometer: ☐ T1 (0461) ☐ T2 (0436) ☐ T3 (0459) ☐ T4 (0402) ☐ T5 (0178) ☐ T6 (0235) ☐ T7 (0042) ☐ T8 (0775) ☑ T9 (0727) ☐ 01339252 (1710)

Did Samples Originate in West Virginia: ☐ YES ☑ NO	Were All Container Temps taken: ☐ YES ☐ NO ☑ N/A
Correction Factor: -0.1 Cooler Temp Read w/Temp Blank: 0.9 °C Cooler Temp Corrected w/Temp Blank: 0.8 °C	Average Corrected Temp (no Temp Blank Only): ____ °C
NOTE: Temp should be above freezing to 6°C.	☐ See Exceptions Form ENV-FRM-MIN4-0142 ☐ 1 Container
USDA Regulated Soil: ☑ N/A / Water Sample/Other (describe): ____	Initials & Date of Person Examining Contents: JMW 9/26/24
Did Samples originate from one of the following states (check maps) – AL, AR, AZ, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA: ☐ YES ☑ NO	Did samples originate from a foreign source (international, including Hawaii and Puerto Rico): ☐ YES ☑ NO
NOTE: If YES to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.	

LOCATION (check one): ☐ DULUTH ☑ MINNEAPOLIS ☐ VIRGINIA	YES	NO	N/A	COMMENT(S)
Chain of Custody Present and Filled Out?	☑	☐		1.
Chain of Custody Relinquished?	☑	☐		2.
Sampler Name and/or Signature on COC?	☐	☐	☑	3.
Samples Arrived within Hold Time?	☑	☐		4. If Fecal: ☐ <8 hrs ☐ >8 hr, <24 hr ☐ No
Short Hold Time Analysis (<72 hr)?	☐	☑		5. ☐ BOD / cBOD ☐ Fecal coliform ☐ Hex Chrom ☐ HPC ☐ Nitrate ☐ Nitrite ☐ Ortho Phos ☐ Total coliform/*E. coli* ☐ Other: ____
Rush Turn Around Time Requested?	☐	☑		6.
Sufficient Sample Volume?	☑	☐		7.
Correct Containers Used?	☑	☐	☐	8.
-- Pace Containers Used?	☑	☐		
Containers Intact?	☑	☐		9.
Field Filtered Volume Received for Dissolved Tests?	☐	☐	☑	10. Is sediment visible in the dissolved container: ☐ YES ☐ NO
Is sufficient information available to reconcile the samples to the COC? **NOTE:** If ID/Date/Time don't match fill out section 11. Matrix: ☐ Oil ☐ Soil ☑ Water ☐ Other	☑	☐		11. **If NO, write ID/Date/Time of container below:** NO label on Sample id only match with Lab Sample number ☐ See Exceptions form ENV-FRM-MIN4-0142
All containers needing acid/base preservation have been checked?	☐	☐	☐	12. Sample #: 001
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, < 2 pH, NaOH > 9 Sulfide, NaOH > 10 Cyanide)	☑	☐	☐	Y/N ☑ HNO_3 Y/N ☑ H_2SO_4 ☐ NaOH ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC, Oil & Grease, DRO/8015 (water) and Dioxins/PFAS	☐	☐	☑	Positive for Residual Chlorine: ☐ YES ☐ NO
NOTE: If adding preservation to the container, **verify with the PM first.** Clients may require adding preservative to the field and equipment blanks when this occurs.				pH Paper Lot # (Residual Chlorine / 0-6 Roll: 205224 / 0-6 Strip / 0-14 Strip) ☐ See Exceptions form ENV-FRM-MIN4-0142
Headspace in Methyl Mercury Container?	☐	☐	☑	13.
Extra labels present on soil VOA or WIDRO containers?	☐	☐	☑	14.
Headspace in VOA Vials (greater than 6mm)?	☐	☐	☑	☐ See Exceptions form ENV-FRM-MIN4-0140
Trip Blanks Present?	☐	☑	☐	15.
Trip Blank Custody Seals Present?	☐	☐	☑	Pace Trip Blank Lot # (if purchased): ____

CLIENT NOTIFICATION / RESOLUTION **FIELD DATA REQUIRED:** ☐ YES ☐ NO

Person Contacted: ____ Date & Time: ____

Comments / Resolution: ____

Project Manager Review: Anchea Richardson **Date:** 9/27/24

NOTE: *When there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEQ Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Labeled By: JMW **Line:** 2

Internal Transfer Chain of Custody

Workorder: 10709475 Workorder Name: Phoenix Operating, LLC

☐ Rush Multiplier____X

☒ Samples Pre-Logged into eCOC

State Of Origin: ND

Cert. Needed: ☒ Yes ☐ No

Owner Received Date: 9/26/2024 Results Requested By: 10/10/2024

Pace

Report To	Subcontract To
Andrea Richardson Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (218)341-6080	Pace Analytical Ormond Beach 8 East Tower Circle Ormond Beach, FL 32174 Phone (386)672-5668

WO# : 35908965

35908965

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: BP2U1/1	Resistivity	Requested Analysis	LAB USE ONLY
1	Milloy 10-3-24 #2H Well Pad	PS	9/21/2024 10:30	10709475001	Water	1	X		
2									
3									
4									
5									

Transfers	Released By	Date/Time	Received By	Date/Time
1	Mick U/Pace	9/27/24 1020	R Pace	10/1/24 1120
2				
3				

Comments: 1.6

Cooler Temperature on Receipt ____ °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace

Sample Condition Upon Receipt Form

WO# : 35908965
PM: JMW1 Due Date: 10/11/24
CLIENT: PACMIN

Project #

Project Manager:

Client:

Date and Initials of person Examining contents: BP

Verifying pH: _____

Thermometer Used: T419 Date: 10/01/24 Time: 1143 Initials: KAM1

State of Origin _____

☐ For WV projects all containers verified to <6 °C

Cooler #1 Temp.°C	1.5 (Visual)	+0.1 (Correction Factor)	1.6 (Actual)	☐Samples on ice, cooling process has begun
Cooler #2 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #3 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #4 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #5 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #6 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Recheck for OOT °C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	Time: _____ Initials: _____

Courier: ☑Fed Ex ☐UPS ☐USPS ☐Client ☐Commercial ☐Pace ☐Other: _____

Shipping Method: ☐Standard Overnight ☐First Overnight ☑Priority Overnight ☐Ground ☐International Priority ☐Other: _____

Billing: ☐Recipient ☑Sender ☐Third Party ☐Credit Card ☐Unknown

Tracking # 6476 5646 1809

Custody Seal Present: ☐Yes ☐No Seal properly placed and intact: ☐Yes ☐No

Ice: ☑Wet ☐Blue ☐Dry ☐None ☐Melted

Packing Material: ☐Bubble Wrap ☐Bubble Bags ☑None ☐Other:

Samples shorted to lab: ☐Yes ☐No (If yes, complete the following)
Shorted Date: _____ Shorted Time: _____
Bottle Quantity / Type: _____

Chain of Custody:	Present ☑Yes ☐No | Filled Out: ☑Yes ☐No ☐N/A | Sampler Name: ☑Yes ☐No ☐N/A			
	Relinquished To Pace: ☑Yes ☐No ☐N/A | Sampling Date(s): ☑Yes ☐No ☐N/A | Sampling Time(s): ☑Yes ☐No ☐N/A			
Samples Arrived within Hold Time	☑Yes	☐No	☐N/A	Comments
Rush Turnaround Requested on COC	☐Yes	☑No	☐N/A	Comments
Sufficient Volume	☑Yes	☐No	☐N/A	Comments
Correct Containers Used	☑Yes	☐No	☐N/A	Comments
Containers Intact	☑Yes EAS1	☐No	☐N/A	Comments
Sample Labels Match COC (Sample ID, Date/Time of Collection)	☑Yes 10/1	☐No	☐N/A	Comments
All containers needing acid / base preservation have been checked	☐Yes	☐No	☑N/A	Preservation Information: Preservative: _____ Date: _____
All containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: Vials, Microbiology, O&G, PFAS	☐Yes	☐No	☑N/A	Lot / Trace: _____ Time: _____ Amount added (mL): _____ Initials: _____
Headspace in Volatile Vials? (>6mm)	☐Yes	☐No	☑N/A	
Trip Blank Present	☐Yes	☐No	☑N/A	

Comments / Resolutions (use back for additional comments): NO Client label on Container matched by ID label

Labeled by: BP Reviewed by: EAS1 Delivered by: Fed Ex

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

November 07, 2024

Christina Jungels
Astro-Chem Lab, Inc.
4102 2nd Ave. W.
Williston, ND 58801

RE: Project: Phoenix Operating
Pace Project No.: 10713009

Dear Christina Jungels:

Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis
- Pace Analytical Services - Ormond Beach

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Andrea Richardson

Andrea Richardson
andrea.richardson@pacelabs.com
(218)341-6080
Project Manager

Enclosures

cc: Accounts Payable, Astro-Chem Lab, Inc.

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: Phoenix Operating
Pace Project No.: 10713009

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
DoD Certification via A2LA #: 2926.01
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
GMP+ Certification #: GMP050884
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
ISO/IEC 17025 Certification via A2LA #: 2926.01
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification via A2LA #: 2926.01
USDA Permit #: P330-19-00208

Pace Analytical Services Ormond Beach
8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
California Certification# 3096
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
DoD-ANAB #:ADE-3199
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Massachusetts Certification #: M-FL1264
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: Phoenix Operating
Pace Project No.: 10713009

Pace Analytical Services Ormond Beach
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Utah FL NELAC Reciprocity
Utah
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: Phoenix Operating
Pace Project No.: 10713009

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10713009001	**Snyder 1-12 #1H**	Water	10/21/24 16:00	10/23/24 09:45

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: Phoenix Operating
Pace Project No.: 10713009

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10713009001	**Snyder 1-12 #1H**	EPA 6010D	IP	9	PASI-M
		SM 2320B	KEO	3	PASI-M
		SM 2540C	JFP	1	PASI-M
		SM 4500-H+B	KEO	1	PASI-M
		EPA 120.1 Resistivity	SWB	1	PASI-O
		SM 2510	KEO	1	PASI-M
		ASTM D5057	JKH	1	PASI-M
		EPA 300.0	AR3	2	PASI-M
		EPA 353.2	JFP	1	PASI-M

PASI-M = Pace Analytical Services - Minneapolis
PASI-O = Pace Analytical Services - Ormond Beach

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: Phoenix Operating
Pace Project No.: 10713009

Sample: Snyder 1-12 #1H **Lab ID: 10713009001** Collected: 10/21/24 16:00 Received: 10/23/24 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Minneapolis							
Barium	**7870**	ug/L	100	10	10/24/24 09:41	10/27/24 14:20	7440-39-3	
Calcium	**12500000**	ug/L	25000	50	10/24/24 09:41	10/27/24 14:25	7440-70-2	
Chromium	ND	ug/L	100	10	10/24/24 09:41	10/27/24 14:20	7440-47-3	D3
Iron	**25500**	ug/L	500	10	10/24/24 09:41	10/27/24 14:20	7439-89-6	
Magnesium	**1210000**	ug/L	5000	10	10/24/24 09:41	10/27/24 14:20	7439-95-4	
Potassium	**6480000**	ug/L	125000	50	10/24/24 09:41	10/27/24 14:25	7440-09-7	
Sodium	**74300000**	ug/L	1000000	1000	10/24/24 09:41	10/27/24 14:54	7440-23-5	
Strontium	**962000**	ug/L	5000	1000	10/24/24 09:41	10/27/24 14:54	7440-24-6	
Zinc	**237**	ug/L	200	10	10/24/24 09:41	10/27/24 14:20	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis							
Alkalinity, Total as CaCO3	**108**	mg/L	5.0	1		11/01/24 15:43		
Alkalinity,Bicarbonate (CaCO3)	**108**	mg/L	5.0	1		11/01/24 15:43		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		11/01/24 15:43		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Minneapolis							
Total Dissolved Solids	**260000**	mg/L	1250	1		10/28/24 15:39		PP
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Minneapolis							
pH at 25 Degrees C	**6.0**	Std. Units	0.10	1		11/01/24 13:49		H6
Resistivity	Analytical Method: EPA 120.1 Resistivity Pace Analytical Services - Ormond Beach							
Resistivity	**1.9**	ohms-cm	0.50	1		10/29/24 13:16		N2
SM2510 Specific Conductance	Analytical Method: SM 2510 Pace Analytical Services - Minneapolis							
Specific Conductance	**203000**	umhos/cm	5.0	1		11/05/24 12:58		
Specific Gravity	Analytical Method: ASTM D5057 Pace Analytical Services - Minneapolis							
Specific Gravity	**1.19**			1		10/24/24 17:03		N2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Minneapolis							
Chloride	**120000**	mg/L	6000	5000		11/07/24 07:03	16887-00-6	
Sulfate	**196**	mg/L	120	100		11/06/24 13:16	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2 Pace Analytical Services - Minneapolis							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		10/31/24 12:15		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 975588
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D Water
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10713009001

METHOD BLANK: 5099349 Matrix: Water
Associated Lab Samples: 10713009001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Barium	ug/L	ND	10.0	10/27/24 13:50	
Calcium	ug/L	ND	500	10/27/24 13:50	
Chromium	ug/L	ND	10.0	10/27/24 13:50	
Iron	ug/L	ND	50.0	10/27/24 13:50	
Magnesium	ug/L	ND	500	10/27/24 13:50	
Potassium	ug/L	ND	2500	10/27/24 13:50	
Sodium	ug/L	ND	1000	10/27/24 13:50	
Strontium	ug/L	ND	5.0	10/27/24 13:50	
Zinc	ug/L	ND	20.0	10/27/24 13:50	

LABORATORY CONTROL SAMPLE: 5099350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	1020	102	80-120	
Calcium	ug/L	20000	19300	96	80-120	
Chromium	ug/L	1000	1020	102	80-120	
Iron	ug/L	20000	20500	102	80-120	
Magnesium	ug/L	20000	19800	99	80-120	
Potassium	ug/L	20000	20300	101	80-120	
Sodium	ug/L	20000	19900	99	80-120	
Strontium	ug/L	1000	1030	103	80-120	
Zinc	ug/L	1000	1020	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5099351 5099352

Parameter	Units	10712883001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	216	1000	1000	1240	1230	103	102	75-125	1	20	
Calcium	ug/L	335000	20000	20000	357000	354000	107	95	75-125	1	20	
Chromium	ug/L	42.6	1000	1000	1080	1080	104	103	75-125	1	20	
Iron	ug/L	8610	20000	20000	29300	29200	104	103	75-125	1	20	
Magnesium	ug/L	31100	20000	20000	52000	51500	105	102	75-125	1	20	
Potassium	ug/L	149000	20000	20000	171000	169000	110	102	75-125	1	20	
Sodium	ug/L	61800	20000	20000	82300	81200	102	97	75-125	1	20	
Strontium	ug/L	350	1000	1000	1370	1350	102	100	75-125	1	20	
Zinc	ug/L	1500	1000	1000	2460	2440	97	95	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 977280
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10713009001

METHOD BLANK: 5107575 Matrix: Water
Associated Lab Samples: 10713009001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	11/01/24 12:27	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	11/01/24 12:27	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	11/01/24 12:27	

LABORATORY CONTROL SAMPLE & LCSD: 5107576 5107577

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	43.0	42.3	108	106	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5107578 5107579

Parameter	Units	10712881001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	168	40	40	211	214	107	116	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5107580 5107581

Parameter	Units	10712881002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	227	40	40	273	270	113	107	80-120	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 976301
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10713009001

METHOD BLANK: 5102892 Matrix: Water
Associated Lab Samples: 10713009001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10/28/24 15:38	

LABORATORY CONTROL SAMPLE: 5102893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1020	102	80-120	

SAMPLE DUPLICATE: 5102894

Parameter	Units	10712612006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	101	101	0	10	

SAMPLE DUPLICATE: 5102895

Parameter	Units	10712842001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	20300	18000	12	10	D6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 977285
QC Batch Method: SM 4500-H+B
Analysis Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10713009001

LABORATORY CONTROL SAMPLE: 5107588

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	5.1	102	98-102	H6

SAMPLE DUPLICATE: 5107589

Parameter	Units	10712469003 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.2	6.2	1	3	H6

SAMPLE DUPLICATE: 5107590

Parameter	Units	10712469004 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.9	7.0	1	3	H6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 1051690
QC Batch Method: EPA 120.1 Resistivity
Analysis Method: EPA 120.1 Resistivity
Analysis Description: Resistivity
Laboratory: Pace Analytical Services - Ormond Beach

Associated Lab Samples: 10713009001

SAMPLE DUPLICATE: 5781375

Parameter	Units	10713018001 Result	Dup Result	RPD	Max RPD	Qualifiers
Resistivity	ohms-cm	1.9	1.9	0	20	N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 977841
QC Batch Method: SM 2510
Analysis Method: SM 2510
Analysis Description: SM2510 Specific Conductance
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10713009001

METHOD BLANK: 5110532 Matrix: Water
Associated Lab Samples: 10713009001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	5.0	11/05/24 12:45	

LABORATORY CONTROL SAMPLE: 5110534

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance	umhos/cm	1000	904	90	90-110	

SAMPLE DUPLICATE: 5110535

Parameter	Units	10712921001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	630	627	0	20	

SAMPLE DUPLICATE: 5110538

Parameter	Units	10712960001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	450	447	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 975834
QC Batch Method: ASTM D5057
Analysis Method: ASTM D5057
Analysis Description: Spec.Gravity/ASTM D5057
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10713009001

SAMPLE DUPLICATE: 5100343

Parameter	Units	10713018001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Gravity		1.19	1.19	0	20	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 978010
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10713009001

METHOD BLANK: 5111297 Matrix: Water
Associated Lab Samples: 10713009001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.2	11/06/24 09:30	
Sulfate	mg/L	ND	1.2	11/06/24 09:30	

LABORATORY CONTROL SAMPLE: 5111298

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.6	99	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5111299 5111300

Parameter	Units	10712898005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	<445 ug/L	50	50	45.4	45.6	90	90	80-120	0	20	
Sulfate	mg/L	166000 ug/L	250	250	426	426	104	104	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5111301 5111302

Parameter	Units	10713075001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	205	250	250	410	410	82	82	80-120	0	20	
Sulfate	mg/L	173	250	250	388	388	86	86	80-120	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Phoenix Operating
Pace Project No.: 10713009

QC Batch: 977090
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10713009001

METHOD BLANK: 5106369 Matrix: Water
Associated Lab Samples: 10713009001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/31/24 11:58	

LABORATORY CONTROL SAMPLE: 5106370

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	1	1.1	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5106371 5106372

Parameter	Units	10712898010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	<33.7 ug/L	1	1	1.2	1.2	112	112	90-110	0	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5106373 5106374

Parameter	Units	10712921001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	19.0	10	10	29.1	28.3	101	93	90-110	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: Phoenix Operating
Pace Project No.: 10713009

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H6	Analysis initiated outside of the 15 minute EPA required holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
PP	The mass of dried residue obtained did not meet the test method requirements based on volume used.

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Phoenix Operating
Pace Project No.: 10713009

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10713009001	**Snyder 1-12 #1H**	EPA 3010A	975588	EPA 6010D	975895
10713009001	**Snyder 1-12 #1H**	SM 2320B	977280		
10713009001	**Snyder 1-12 #1H**	SM 2540C	976301		
10713009001	**Snyder 1-12 #1H**	SM 4500-H+B	977285		
10713009001	**Snyder 1-12 #1H**	EPA 120.1 Resistivity	1051690		
10713009001	**Snyder 1-12 #1H**	SM 2510	977841		
10713009001	**Snyder 1-12 #1H**	ASTM D5057	975834		
10713009001	**Snyder 1-12 #1H**	EPA 300.0	978010		
10713009001	**Snyder 1-12 #1H**	EPA 353.2	977090		

CHAIN of CUSTODY

ASTRO-CHEM LAB, INC.
4102 2nd Ave. W.
P.O. Box 972
Williston, ND 58801
701-572-7355
www.astrochemlab.com

Client: Phoenix Operating
Project: Snyder 1-12 #1H
Project Manager: Steve Phipps
Telephone No.: 406-853-5091
Fax No.:

ACL "Oilfield Water"

Container Preservative **: 1 | U | U | 2

**Preservative Types: (1) nitric acid (2) sulfuric acid (3) hydrochloric acid (4) sodium hydroxide (5) zinc acetate (6) methanol (7) sodium bisulfate (8) sodium thiosulfate (9) hexane (A) ascorbic acid (B) ammonium sulfate (C) ammonium hydroxide (D) TSP (U) unpreserved (O) Other:

Method of Shipment: FEDEX OVERNIGHT

Special Detection Limit/Reporting:

WO# : 10713009

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Water	Air	Other	Sampling Date	Sampling Time	Ca, Mg, Na, Fe, Cr, Ba, K, Sr, Zn	Chloride, Sulfate, pH, Conductivity, Resistivity, Total Dissolved Solids	Specific Gravity, Alkalinity (Carbonate & Bicarbonate)	Nitrate+Nitrite	Turn Around Time
Snyder 1-12 #1H	4030	4		X			10/21/24	1600	X	X	X	X	(X)

REMARKS:
astrochem@midconetwork.com
www.astrochemlab.com

Sample Received Intact: (Yes) No
Temperature received: 1.2 (Ice) No ice

Relinq. by sampler	Date	Time	Received by (Signature)
Mark Andrews Mark Andrews	10/21/24	1600	Brenda Bentz Brenda Bentz
Relinquished by: Brenda Bentz Brenda Bentz	10/22/24	2:00 pm	Received by: PACE
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory: Date 10/23/24 Time 9:45

Lab Work No.:

Methods for Analysis (ACL OIL WATER GUIDELINES)

Alkalinity (2320B)
- Alkalinity, Bicarbonate (CaCO3)
- Alkalinity, Carbonate (CaCO3)
- Alkalinity, Total as CaCO3

Nitrate + Nitrite (353.2)
- Nitrogen, NO2 plus NO3

pH, Electrometric (4500H+B)

8 Metals-Barium, Chromium, Iron, Zinc, Calcium, Magnesium, Sodium, Potassium (6010D MET ICP)

Chloride & Sulfate (300.0 IC Anions)

Resistivity (D1125-14)

Specific Conductance (SM2510)

Specific Gravity (ASTM D5057)

Strontium (6020B MET ICPMS)

Total Dissolved Solids (2540C)

ENV-FRM-MIN4-0150 v17_Sample Condition Upon Receipt

CLIENT NAME: Astro-Chem Lab **PROJECT #:** WO#:10713009

PM: AR4 Due Date: 11/06/24

CLIENT: 11 Astro Che

COURIER: ☐ Client ☐ Commercial ☑ FedEx ☐ Pace ☐ SpeeDee ☐ UPS ☐ USPS

TRACKING NUMBER: 7792 4238 3190 ☐ See Exceptions form ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present: ☐ YES ☑ NO **Seals Intact:** ☐ YES ☑ NO **Biological Tissue Frozen:** ☐ YES ☐ NO ☑ N/A

Packing Material: ☐ Bubble Bags ☑ Bubble Wrap ☐ None ☐ Other **Temp Blank:** ☑ YES ☐ NO **Type of Ice:** ☐ Blue ☐ Dry ☑ Wet ☐ Melted ☐ None

Thermometer: ☐ T1 (0461) ☐ T2 (0436) ☐ T3 (0459) ☐ T4 (0402) ☐ T5 (0178) ☐ T6 (0235) ☐ T7 (0042) ☐ T8 (0775) ☑ T9 (0727) ☐ 01339252 (1710)

Did Samples Originate in West Virginia: ☐ YES ☑ NO	**Were All Container Temps taken:** ☐ YES ☐ NO ☑ N/A
Correction Factor: 0.2 **Cooler Temp Read w/Temp Blank:** 1.4 °C **Cooler Temp Corrected w/Temp Blank:** 1.2 °C	**Average Corrected Temp (no Temp Blank Only):** ____ °C
NOTE: *Temp should be above freezing to 6°C.*	☐ See Exceptions Form ENV-FRM-MIN4-0142 ☐ 1 Container
USDA Regulated Soil: ☑ N/A - Water Sample/Other (describe): ____	**Initials & Date of Person Examining Contents:** 10/23/24
Did Samples originate from one of the following states (check maps) – AL, AR, AZ, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA: ☐ YES ☐ NO	Did samples originate from a foreign source (international, including Hawaii and Puerto Rico): ☐ YES ☐ NO
NOTE: If YES to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.	

LOCATION (check one): ☐ DULUTH ☐ MINNEAPOLIS ☐ VIRGINIA	YES	NO	N/A	COMMENT(S)
Chain of Custody Present and Filled Out?	☑	☐		1.
Chain of Custody Relinquished?	☑	☐		2.
Sampler Name and/or Signature on COC?	☑	☐	☐	3.
Samples Arrived within Hold Time?	☑	☐		4. If Fecal: ☐ <8 hrs ☐ >8 hr, <24 hr ☐ No
Short Hold Time Analysis (<72 hr)?	☐	☑		5. ☐ BOD / cBOD ☐ Fecal coliform ☐ Hex Chrom ☐ HPC ☐ Nitrate ☐ Nitrite ☐ Ortho Phos ☐ Total coliform/*E. coli* ☐ Other: ____
Rush Turn Around Time Requested?	☐	☑		6.
Sufficient Sample Volume?	☑	☐		7.
Correct Containers Used? – Pace Containers Used?	☑ ☑	☐ ☐	☐	8.
Containers Intact?	☑	☐		9.
Field Filtered Volume Received for Dissolved Tests?	☐	☐	☑	10. Is sediment visible in the dissolved container: ☐ YES ☐ NO
Is sufficient information available to reconcile the samples to the COC? **NOTE:** If ID/Date/Time don't match fill out section 11. Matrix: ☐ Oil ☐ Soil ☑ Water ☐ Other	☑	☐		11. **If NO, write ID/Date/Time of container below:** ☐ See Exceptions form ENV-FRM-MIN4-0142
All containers needing acid/base preservation have been checked?	☑	☐	☐	12. Sample #: 001 1/1 001 1/1
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, < 2 pH, NaOH > 9 Sulfide, NaOH > 10 Cyanide)	☑	☐	☐	☑ HNO_3 ☑ H_2SO_4 ☐ NaOH ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC, Oil & Grease, DRO/8015 (water) and Dioxins/PFAS	☐	☐	☑	Positive for Residual Chlorine: ☐ YES ☐ NO
NOTE: If adding preservation to the container, **verify with the PM first.** Clients may require adding preservative to the field and equipment blanks when this occurs.				**pH Paper Lot #**
				Residual Chlorine: 0-6 Roll 205224; 0-6 Strip; 0-14 Strip
				☐ See Exceptions form ENV-FRM-MIN4-0142
Headspace in Methyl Mercury Container?	☐	☐	☑	13.
Extra labels present on soil VOA or WIDRO containers?	☐	☐	☑	14.
Headspace in VOA Vials (greater than 6mm)?	☐	☐	☑	☐ See Exceptions form ENV-FRM-MIN4-0140
Trip Blanks Present?	☐	☐	☑	15.
Trip Blank Custody Seals Present?	☐	☐	☑	Pace Trip Blank Lot # (if purchased): ____

CLIENT NOTIFICATION / RESOLUTION **FIELD DATA REQUIRED:** ☐ YES ☐ NO

Person Contacted: ____ Date & Time: ____

Comments / Resolution: ____

Project Manager Review: Anchea Richardson **Date:** 10/24/24

NOTE: *When there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEQ Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Labeled By: JMW **Line:** 3

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier____X
☒ Samples Pre-Logged into eCOC

State Of Origin: ND
Cert. Needed: ☒ Yes ☐ No
Owner Received Date: 10/23/2024 **Results Requested By:** 11/6/2024

Workorder: 10713009 **Workorder Name:** Phoenix Operating

Report To	Subcontract To
Andrea Richardson Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (218)341-6080	Pace Analytical Ormond Beach 8 East Tower Circle Ormond Beach, FL 32174 Phone (386)672-5668

Requested Analysis

WO# : 35914692

35914692

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: BP2U2/2	Resistivity	LAB USE ONLY
1	Snyder 1-12 #1H	PS	10/21/2024 16:00	10713009001	Water	1	X	
2								
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	Nicki V/Pace 10/24	24 1440	AMT	10-25-24 1200
2				
3				

Comments

Cooler Temperature on Receipt 4.6 °C | **Custody Seal** (Y) or N | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace

Sample Condition Upon Receipt Form (SCUR)

WO# : 35914692

Project #

Project Manager: PM: JMW1 **Due Date:** 11/06/24

Client: CLIENT: PACMIN

Date and Initials of person:

Examining contents: BP

Verifying pH: _____

Thermometer Used: T-409 Date: 10-25-24 Time: 1223 Initials: AKS

State of Origin: _____

☐ For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp.°C	4.6 (Visual)	0 (Correction Factor)	4.6 (Actual)	☐Samples on ice, cooling process has begun
Cooler #2 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #3 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #4 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #5 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Cooler #6 Temp.°C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun
Recheck for OOT °C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	☐Samples on ice, cooling process has begun

Time: _____ **Initials:** _____

Courier: ☑Fed Ex ☐UPS ☐USPS ☐Client ☐Commercial ☐Pace ☐Other

Shipping Method: ☐Standard Overnight ☐First Overnight ☑Priority Overnight ☐Ground ☐International Priority ☐Other: _____

Billing: ☐Recipient ☑Sender ☐Third Party ☐Credit Card ☐Unknown

Tracking # 4243 5575 7160

Custody Seal Present: ☐Yes ☐No **Seal properly placed and intact:** ☑Yes ☐No

Ice: ☑Wet ☐Blue ☐Dry ☐None ☐Melted

Packing Material: ☐Bubble Wrap ☐Bubble Bags ☑None ☐Other: _____

Samples shorted to lab: ☐Yes ☐No (If yes, complete the following)

Shorted Date: _____ **Shorted Time:** _____

Bottle Quantity / Type: _____

Chain of Custody:	**Present:** ☑Yes ☐No | **Filled Out:** ☑Yes ☐No ☐N/A | **Sampler Name:** ☑Yes ☐No ☐N/A			
	Relinquished To Pace: ☑Yes ☐No ☐N/A | **Sampling Date(s):** ☑Yes ☐No ☐N/A | **Sampling Time(s):** ☑Yes ☐No ☐N/A			
Samples Arrived within Hold Time	☑Yes	☐No	☐N/A	Comments:
Rush Turnaround Requested on COC	☐Yes	☑No	☐N/A	Comments:
Sufficient Volume	☑Yes	☐No	☐N/A	Comments:
Correct Containers Used	☑Yes	☐No	☐N/A	Comments:
Containers Intact	☑Yes	☐No	☐N/A	Comments:
Sample Labels Match COC (Sample ID, Date/Time of Collection)	☑Yes	☐No	☐N/A	Comments:
All containers needing acid / base preservation have been checked	☐Yes	☐No	☑N/A	**Preservation Information**
All containers needing preservation are found to be in compliance with EPA recommendation: (Exceptions: Vials, Microbiology, O&G, PFAS)	☐Yes	☐No	☑N/A	**Preservative:** _____ **Date:** _____ **Lot / Trace:** _____ **Time:** _____ **Amount added (mL):** _____ **Initials:** _____
Headspace in Volatile Vials? (>6mm):	☐Yes	☐No	☑N/A	
Trip Blank Present:	☐Yes	☐No	☑N/A	

Comments / Resolutions (use back for additional comments): NO Client labels on containers

Labeled by: BP **Reviewed by:** CAR1 **Delivered by:** FedEx

Appendix VIII
AFFIDAVIT OF MAILING
ORIGAMI 1 SWD

AFFIDAVIT OF MAILING

STATE OF COLORADO §
§
COUNTY OF DENVER §

The undersigned, Paula Frisbee, of lawful age, first duly sworn on her oath states that she is a duly authorized agent of Phoenix Operating LLC, does hereby certify that she has sent (via certified mail) a Notice of Application for Fluid Injection to the surface and lease owners within a radius of ¼ mile from the location of proposed ORIGAMI 1 SWD and BONSAI 1 SWD wells, Lot 1 of Section 3, Township 28 North, Range 57 East, Roosevelt County, MT.
The following contains the address and legal description of the land ownership for surface and lease owners.

Surface Owner:	Legal Description:
RONALD AND ELISA OLSEN 1495 RO 2 Drive Culbertson, MT 59218	E2 Sec. 31 & SE Sec. 30 T29N, R57E Roosevelt County, MT
MARK R KNUDSEN 3206 Crocus Ave Bismarck, ND 58501	NE Sec. 32 & NWSW, SWSW, SESW, SESE, SWSE Sec 29 T29N, R57E Roosevelt County, MT
LUCILLE M OLSON P.O. Box 1446 Williston, ND 58802	S2 Sec. 33 T29N, R57E Roosevelt County, MT
KATRINA MARIE KRUGER P.O. Box 90 Joliet, MT 59041	SE Sec. 32 T29N, R57E Roosevelt County, MT
CHARLES YOUNG 4397 Road 1020 Froid, MT 59226	NW Sec. 3 T28N, R57E Roosevelt County, MT
AARON SNYDER P.O. Box 796 Culbertson, MT 59218	E2 Sec. 32, T29N, R57E; NE Sec. 3, NW & E2 Sec. 2, W2 Sec. 1, T29N, R57E Roosevelt County, MT
SHIRLEY RASMUSSEN c/o Julane Poland P.O.A. P.O. Box 622 Culbertson, MT 59218	S2 Sec. 3, SW Sec. 2 T28N, R57E Roosevelt County, MT
TERRY H & CHRISTINE TRAEGER 1218 Road 2060 Bainville, MT 59212	NE Sec. 11 T28N, R57E Roosevelt County, MT
SALVEVOLD INC. P.O. Box 417 Culbertson, MT 59218	W2 Sec. 11 T28N, R57E Roosevelt County, MT

Lease Owner:	Legal Description:
BNSF Railway Company 2500 Lou Menk Drive, AOB-3 Fort Worth, TX 76131	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Christina Veal 9905 Essex Avenue Oklahoma City, OK 73120	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Darin Jon Mosier 6260 East Jester Circle North Prescott Valley, AZ 86314	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Edward Stephon Mosier 821 Village Meadow Drive Ballwin, MO 63021	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Eric R. Larson 3138 South Abigail Way Boise, ID 83706	NE Sec. 32 T29N, R57E Roosevelt County, MT
John Edd Mosier 3033 North Windsong, Suite 202 Prescott Valley, AZ 86314	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Joshua Patterson 2023 Wilkinson Avenue Panama City Beach, FL 32408	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Joy D. Collett 11951 Clonlee Avenue Grenada Hills, CA 91344	NE Sec. 32 T29N, R57E Roosevelt County, MT
Kaleb Mosier 9905 Essex Avenue Oklahoma City, OK 73120	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Terrie Pitts 13444 Pitts Road Garfield, AR 72732	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
The Marie C. Boyle Revocable Trust 138 South Pinecrest Street Wichita, KS 67218	W2SW, SESW, SWSE Sec. 29 T29N, R57E Roosevelt County, MT
Wildcat Oil and Gas, LLC P.O. Box 2221 Bismarck, ND 58502	SE Sec. 3 T28N, R57E Roosevelt County, MT

By: _____ Dated: 02.27.2026

Paula Frisbee, Director of Land and Administration
Phoenix Operating LLC

ACKNOWLEDGMENT

STATE OF COLORADO §
§
COUNTY OF DENVER §

On this 27th day of February, 2026 before me, a Notary Public, personally appeared Paula Frisbee, Director of Land and Administration known to me to be the person whose name is subscribed to the foregoing instrument as an agent of Phoenix Operating LLC and acknowledged to me that they executed the same as her free act and deed for the purposes therein expressed, in the capacity stated, and as the act and deed of said company.

_____
Notary Public

(Seal)

CALINA BOWMAN
Notary Public
State of Colorado
Notary ID # 20244011315
My Commission Expires 03-20-2028

My Commission Expires: 3/20/2028

Appendix IX
LANDOWNER NOTIFICATION LETTERS
ORIGAMI 1 SWD

Examples of Landowner Notification Letters (Surface, Lease & Operator)

PHOENIX | OPERATING COMPANY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

February 26, 2026

To: Surface Owner
Address
City, State Zip

From: Phoenix Operating LLC
4643 South Ulster Street Suite 1510
Denver, Colorado 80237

Re: Proposed Private Saltwater Disposal Well – ORIGAMI 1 SWD
Surface Hole: 516' FNL & 905' FEL, Lot 1
Section 3, Township 28 North, Range 57 East, Roosevelt County, MT
Bottom Hole: 1380' FNL & 1560' FWL, SENW
Section 32, Township 29 North, Range 57 East, Roosevelt County, MT

This letter is to advise you that Phoenix Operating LLC (Phoenix) plans to drill and complete the subject well into a Class II saltwater disposal well. Water will be injected into the Dakota group for the purpose of disposal operations.

In accordance with the rules and regulations of the Montana Board of Oil & Gas Conservation (MBOG), Phoenix is required to give notice that it has made an application to perform this work to each surface owner within a one-quarter mile radius of the injection site. The MBOGC will conduct a hearing regarding this application. For the hearing date, please contact the MBOGC by phone at (406) 656-0040, or visit their website at https://dnrc.mt.gov/BOGC/. Your comments or objections regarding this application may be directed to the MBOGC at that time.

Written comments or objections may be submitted prior to the hearing to the following address:

Montana Board of Oil & Gas Conservation
2535 St. Johns Avenue
Billings, MT 59102

Please direct any and all of your communication regarding this proposed project, including more information about the upcoming hearing, to Mr. John Gizicki with the MBOGC at (406) 656-0040 or to me with Phoenix Operating LLC at (701) 770-8484.

Respectfully,

Ashleigh Borud

Ashleigh Borud
Surface Land Lead – Firebird Services, LLC
aborud@phoenixenergy.com

PHOENIX | OPERATING COMPANY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

February 26, 2026

To: Lease Owner
Address
City, State Zip

From: Phoenix Operating LLC
4643 South Ulster Street Suite 1510
Denver, Colorado 80237

Re: Proposed Private Saltwater Disposal Well – ORIGAMI 1 SWD
Surface Hole: 516' FNL & 905' FEL, Lot 1
Section 3, Township 28 North, Range 57 East, Roosevelt County, MT
Bottom Hole: 1380' FNL & 1560' FWL, SENW
Section 32, Township 29 North, Range 57 East, Roosevelt County, MT

This letter is to advise you that Phoenix Operating LLC (Phoenix) plans to drill and complete the subject well into a Class II saltwater disposal well. Water will be injected into the Dakota group for the purpose of disposal operations.

In accordance with the rules and regulations of the Montana Board of Oil & Gas Conservation (MBOG), Phoenix is required to give notice that it has made an application to perform this work to each lease owner within a one-quarter mile radius of the injection site. The MBOGC will conduct a hearing regarding this application. For the hearing date, please contact the MBOGC by phone at (406) 656-0040, or visit their website at https://dnrc.mt.gov/BOGC/. Your comments or objections regarding this application may be directed to the MBOGC at that time.

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Please direct any and all of your communication regarding this proposed project, including more information about the upcoming hearing, to Mr. John Gizicki with the MBOGC at (406) 656-0040 or to me with Phoenix Operating LLC at (701) 770-8484.

Respectfully,

Ashleigh Borud

Ashleigh Borud
Surface Land Lead – Phoenix Operating LLC
aborud@phoenixenergy.com

PHOENIX | OPERATING COMPANY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

February 26, 2026

To: BNSF Railway Company
2500 Lou Menk Drive, AOB-3
Fort Worth, TX 76131

From: Phoenix Operating LLC
4643 South Ulster Street Suite 1510
Denver, Colorado 80237

Re: Proposed Private Saltwater Disposal Well – BONSAI 1 SWD
Surface Hole: 516' FNL & 515' FEL, Lot 1
Section 3, Township 28 North, Range 57 East, Roosevelt County, MT
Bottom Hole: 1278' FSL & 158' FEL, Lot 6
Section 2, Township 28 North, Range 57 East, Roosevelt County, MT

Proposed Private Saltwater Disposal Well – ORIGAMI 1 SWD
Surface Hole: 516' FNL & 905' FEL, Lot 1
Section 3, Township 28 North, Range 57 East, Roosevelt County, MT
Bottom Hole: 1380' FNL & 1560' FWL, SENW
Section 32, Township 29 North, Range 57 East, Roosevelt County, MT

This letter is to advise you that Phoenix Operating LLC (Phoenix) plans to drill and complete the subject wells into Class II saltwater disposal wells. Water will be injected into the Dakota group for the purpose of disposal operations.

In accordance with the rules and regulations of the Montana Board of Oil & Gas Conservation (MBOGC), Phoenix is required to give notice that it has made an application to perform this work to each lease owner within a one-quarter mile radius of the injection site. The MBOGC will conduct a hearing regarding this application. For the hearing date, please contact the MBOGC by phone at (406) 656-0040, or visit their website at https://dnrc.mt.gov/BOGC/. Your comments or objections regarding this application may be directed to the MBOGC at that time.

Written comments or objections may be submitted prior to the hearing to the following address:

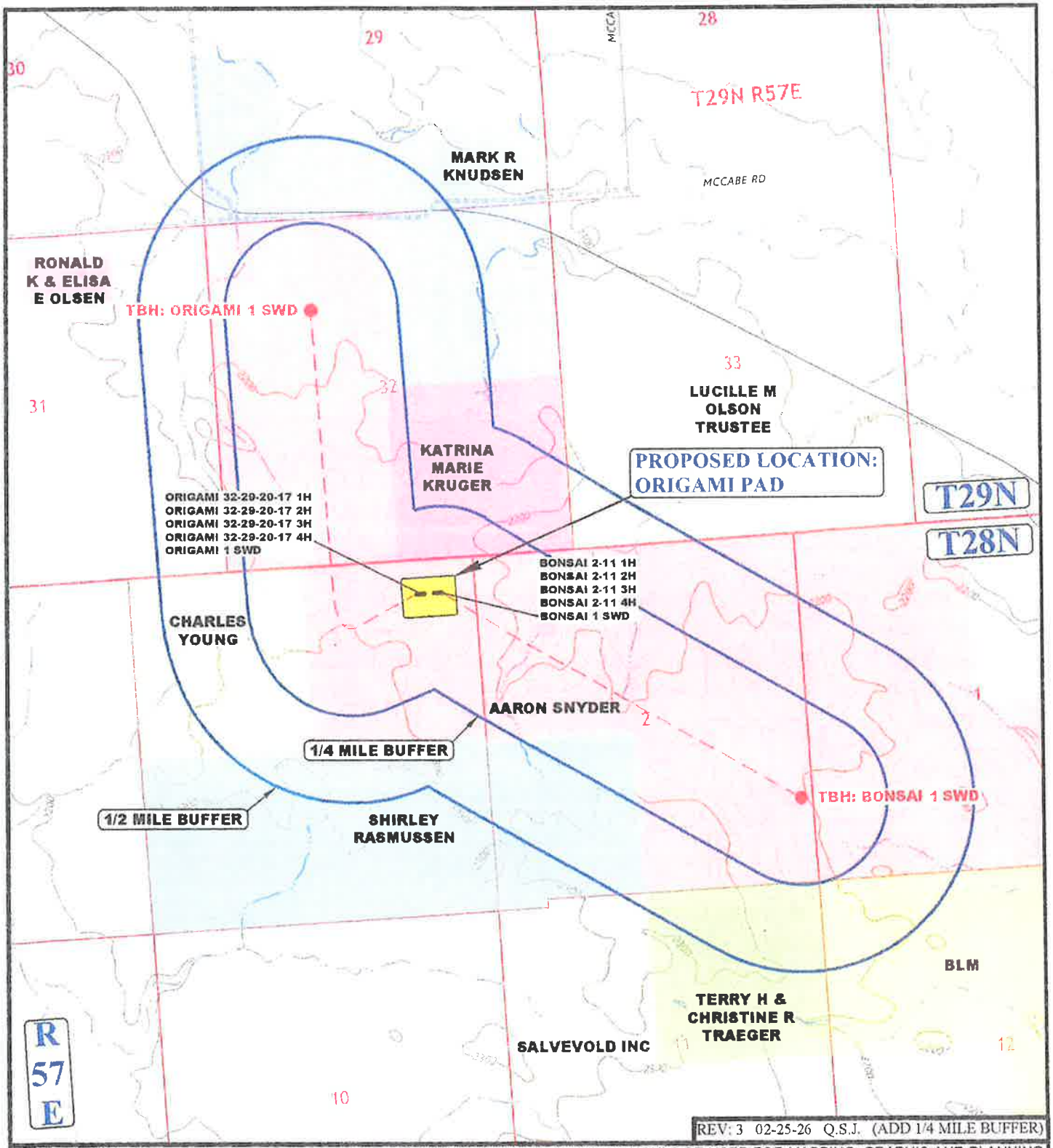
Montana Board of Oil & Gas Conservation
2535 St. Johns Avenue
Billings, MT 59102

Please direct any and all of your communication regarding this proposed project, including more information about the upcoming hearing, to Mr. John Gizicki with the MBOGC at (406) 656-0040 or to me with Phoenix Operating LLC at (855) 565-4244 or ownerinquiry@phoenixenergy.com..

Respectfully,

Paula Frisbee

Paula Frisbee
Director of Land and Administration



REV: 3 02-25-26 Q.S.J. (ADD 1/4 MILE BUFFER)

NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

N

PHOENIX OPERATING LLC

ORIGAMI PAD
LOT 1, SECTION 3, T28N, R57E, P.M.M.
ROOSEVELT COUNTY, MONTANA

SURVEYED BY	C.B., D.D.	04-15-25	SCALE
DRAWN BY	D.J.G.	12-09-25	1 : 24,000
WELL PROXIMITY MAP			TOPO C

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017