APPENDIX B
NMOSE WELLS REPORT

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 07942		RA	ED	4	2	2	13	19S	23E	533987	3614242*	1114	2900		
RA 07466		RA	ED			2	13	19S	23E	533686	3614137*	1396	627	480	147
RA 07466 CLW		RA	ED			2	13	19S	23E	533686	3614137*	1396	288		
RA 06777		RA	ED		4	1	07	19S	24E	534686	3615577*	1617	800		
RA 12972 POD1		RA	ED	3	2	1	13	19S	23E	532998	3614250	2092	321	285	36

Average Depth to Water: **382 feet**

Minimum Depth: **285 feet**

Maximum Depth: **480 feet**

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 535076.34 **Northing (Y):** 3614007.63 **Radius:** 2500

***UTM location was derived from PLSS - see Help**

5/25/22 5:42 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

APPENDIX C
CORRESPONDENCE

From: Enviro, OCD, EMNRD
To: Lynn Acosta
Cc: Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD
Subject: RE: [EXTERNAL] Antelope Sink Well #1 nAPP2205926232
Date: Tuesday, December 13, 2022 8:15:31 AM
Attachments: image001.jpg
image002.png
image003.png
image004.png
image005.png

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Lynn Acosta <lynn.acosta@soudermiller.com>
Sent: Tuesday, December 13, 2022 5:13 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Antelope Sink Well #1 nAPP2205926232

Good Morning,

Souder Miller and Associates (SMA) would like to notify you that SMA will commence confirmation sampling at the Antelope Sink Well #1 for incident nAPP2205926232. SMA personnel are scheduled to arrive on Thursday, December 15th, 2022, to conduct the confirmation sampling at 8:00 am.

If there are any questions/concerns, please feel free to reach out to me.

–

Lynn Acosta,
Staff Scientist

Mobile: 505-516-7469

Stronger Communities by Design

www.soudermiller.com

201 W. Halagueno St
Carlsbad, NM 88220

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Friday, December 9, 2022 8:57 AM
To: Lynn Acosta <lynn.acosta@soudermiller.com>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Antelope Sink Well #1 nAPP2205926232

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Lynn Acosta <lynn.acosta@soudermiller.com>
Sent: Friday, December 9, 2022 5:24 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Antelope Sink Well #1 nAPP2205926232

All,

Due to some unforeseen circumstances during excavation. Confirmation sampling has been moved to next week, there will be another email sent out as soon as there is a confirmed date of the confirmation sampling. I just viewed this email and responded to the original notice I sent out so there might be two emails saying this.

Thank you for clarifying on the notice requirements.

Please let me know if you have any questions/concerns.

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, December 8, 2022 8:30 AM
To: Lynn Acosta <lynn.acosta@soudermiller.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Antelope Sink Well #1 nAPP2205926232

Please be aware that notification requirements are **two business days**, per rule. Please proceed on your schedule. Also, please include this, and all correspondence, in the closure report to insure inclusion in the project file.

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Lynn Acosta <lynn.acosta@soudermiller.com>
Sent: Wednesday, December 7, 2022 7:06 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Karen Charles <kcharles@faulenergy.com>; Lupe Mendoza <lmendoza@faulenergy.com>; Chris Nakvinda <cnakvinda@faulenergy.com>; Heather Woods <Heather.Woods@soudermiller.com>
Subject: [EXTERNAL] Antelope Sink Well #1 nAPP2205926232

All,

Souder Miller and Associates (SMA) would like to notify you that SMA will commence confirmation

sampling at the Antelope Sink Well #1 for incident nAPP2205926232. SMA personnel are scheduled to arrive on Friday, December 9th, 2022, to conduct the confirmation sampling at 8:00 am.

If there are any questions/concerns, please feel free to reach out to me.

Best Regards,

_

Lynn Acosta,
Staff Scientist

Mobile: 505-516-7469

201 W. Halagueno St
Carlsbad, NM 88220

Stronger Communities by Design

www.soudermiller.com

TABLES

Table 2:
NMOCD Closure Criteria

FE-NM, LLC
Antelope Sink Unit #001

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	285	New Mexico Office of the State Engineer
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	None	United States Geological Survey
Hortizontal Distance to Nearest Significant Watercourse (ft)	2554	Unnamed tributary of the Fourmile Draw

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		**Closure Criteria (units in mg/kg)**				
		Chloride *numerical limit or background, whichever is greater	**TPH**	**GRO + DRO**	**BTEX**	**Benzene**
< 50' BGS	X	600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'		20000	2500	1000	50	10
Surface Water	**yes or no**	**if yes, then**				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	No(Med.Risk)					
within a 100-year floodplain?	No					

Table 3:
Summary of Confirmation Sample Results

FE-NM, LLC
Antelope Sink Well #1

Sample ID	Sample Date	Depth of Sample (feet bgs)	Action Taken	Method 8021B		Method 8015D				Method 300.0
				BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl-
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOCD Closure Criteria				50	10	-			100	600
CBS1	12/15/2022	5'	In-Situ	<0.217	<0.024	<4.8	<15	<50	<69.8	<60
CBS2			In-Situ	<0.220	<0.024	<4.9	<9.3	<47	<69.9	<60
CBS3			In-Situ	<0.220	<0.024	<4.9	<13	<43	<60.9	<60
CBS4			In-Situ	<0.217	<0.024	<4.8	<13	<43	<60.8	<60
CBS5			In-Situ	<0.220	<0.024	<4.9	<15	<48	<67.9	<60
CBS6			In-Situ	<0.220	<0.024	<4.9	<9.6	<48	<62.9	<60
CBS7			In-Situ	<0.219	<0.024	<4.9	<15	<49	<68.9	<60
CBS8			In-Situ	<0.222	<0.025	<4.9	<14	<48	<66.9	<60
CBS9			In-Situ	<0.222	<0.025	<4.9	<13	<43	<60.9	<60
CBS10			In-Situ	<0.216	<0.024	<4.8	<14	<47	<65.8	<60
CBS11			In-Situ	<0.220	<0.024	<4.9	<15	<50	<69.9	<60
CBS12			In-Situ	<0.225	<0.025	<5.0	<14	<46	<65	<60
CBS13			In-Situ	<0.220	<0.024	<4.9	<13	<45	<62.9	<60
CBS14		2	In-Situ	<0.217	<0.024	<4.8	<13	<43	<60.8	<60
CBS15			In-Situ	<0.224	<0.025	<5.0	<14	<46	<65	<60
CSW1	12/15/2022	5'	In-Situ	<0.217	<0.024	<4.8	<15	<50	<69.8	<60
CSW2			In-Situ	<0.217	<0.024	<4.8	<15	<49	<68.8	<60
CSW3			In-Situ	<0.221	<0.025	<4.9	<15	<48	<67.9	<60
CSW4			In-Situ	<0.225	<0.024	<5.0	<14	<47	<66	<60
CSW5			In-Situ	<0.216	<0.024	<4.8	<15	<49	<68.8	<60
CSW6			In-Situ	<0.219	<0.024	<4.9	<14	<45	<63.9	<60
CSW7		2	In-Situ	<0.222	<0.025	<4.9	<13	<44	<61.9	<60
CSW8			In-Situ	<0.219	<0.024	<4.9	<15	<49	<68.9	<60
CSW9			In-Situ	<0.221	<0.025	<4.9	<14	<45	<63.9	<60
CSW10		5'	In-Situ	<0.221	<0.025	<4.9	<15	<49	<68.9	<60
CSW11			In-Situ	<0.216	<0.024	<4.8	<15	<49	<68.8	<60
CSW12			In-Situ	<0.219	<0.024	<4.9	<14	<47	<65.9	<60
CSW13			In-Situ	<0.220	<0.024	<4.9	<14	<47	<65.9	<60
CSW14			In-Situ	<0.216	<0.024	<4.8	<13	<43	<60.8	<60
CSW15			In-Situ	<0.219	<0.024	<4.9	<13	<44	<61.9	<60
CSW16			In-Situ	<0.217	<0.024	<4.8	<14	<47	<65.8	<60

"-" = Not Analyzed
BG: Background sample

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
AUG -1 2010
NMOCD ARTESIA

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

30-015-10041

NKMW1035542428

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Vernon E. Faulconer, Inc. 148394	Contact Butch Hickey
Address 1001 ESE LOOP 323 TYLER, TEXAS 75701	Telephone No. 903-581-4382
Facility Name ANTELOPE SINK #1	Facility Type WELL & TANK BATTERY

Surface Owner JOE HELMS	Mineral Owner STATE OF NEW MEXICO	Lease No. NM015-0027 NM015-0028

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	18	19S	24E	1890	NORTH	2070	EAST	EDDY

Latitude 32.6632 **Longitude** -104.6260

NATURE OF RELEASE

Type of Release CONDENSATE	Volume of Release 120 BBLS	Volume Recovered 0
Source of Release TANK FAILURE (LIGHTNING)	Date and Hour of Occurrence 7/28/10 4 PM	Date and Hour of Discovery 7/28/10 4 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? DARREL GRAY with New Mexico Oil Conservation Division, called VEF Inc.	
By Whom? ATOKA FIRE DEPARTMENT	Date and Hour 5:15 PM MOUNTAIN TIME 7/28/10	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Lightning struck tank resulting in explosion & fire. Bottom of tank split releasing contents. Most contents burned. Cleaned up & removed damaged tank. Repipe well to produce into one tank remaining on location.

Describe Area Affected and Cleanup Action Taken.*

Area in front & behind tank battery (+-50' either side)

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:

Printed Name: ROY SLOAN, JR.

Title: ENGINEER

E-mail Address: RSLOAN@VEFINC.COM

Date: 7/29/10 Phone: 903-581-4382

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By Mike Bratcher

Approval Date: 8/21/11 Expiration Date:

Conditions of Approval:
Remediation per OCD Rules & Guidelines. **SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:** 4/21/11

Attached ☐

2RP-509

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party FE-NM, LLC	OGRID 331102
Contact Name Karen Charles	Contact Telephone 903-581-4382
Contact email kcharles@faulenergy.com	Incident # *(assigned by OCD)* nKMW1035542428
Contact mailing address PO Box 7995, Tyler, TX 75711	

Location of Release Source

Latitude 32.66316 Longitude -104.62593
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Antelope Sink Unit #001	Site Type Gas Well
Date Release Discovered 7/28/2010	API# *(if applicable)* 30-015-10041

Unit Letter	Section	Township	Range	County
G	18	19S	24E	Eddy

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls) 120	Volume Recovered (bbls) 0
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Lightning struck tank resulting in explosion & fire.

Bottom of the tank split, releasing contents. Most of the contents burned. The area was cleaned up & damaged tank removed. Re-piped well to produce into other tank remaining on location.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? per NMOCD regulations

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Atoka Fire Department to Vernon E. Faulconer, Inc. Op# 145394 (Operator at the time) who in turn contacted Darrel Gray with New Mexico Oil Conservation Division via phone call.

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Condensate burned up. Initial C-141 was filed by Roy Sloan, Jr. on 7/29/2010.
This is informational in order to complete the process online now.

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Karen Charles Title: Production Analyst

Signature: Karen Charles Date: 7/26/2022

email: kcharles@faulenergy.com Telephone: 903-581-4382

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	285 bgs (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Karen Charles Title: Production Analyst

Signature: Karen Charles Date: 7/26/2022

email: kcharles@faulenergy.com Telephone: 903-581-4382 ext. 233

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- [X] Detailed description of proposed remediation technique
- [X] Scaled sitemap with GPS coordinates showing delineation points
- [X] Estimated volume of material to be remediated
- [X] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [X] Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- [ ] Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- [ ] Extents of contamination must be fully delineated.
- [ ] Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Karen Charles Title: Production Analyst

Signature: Karen Charles Date: 7/26/2022

email: kcharles@faulenergy.com Telephone: 903-581-4382, ext. 233

OCD Only

Received by: _____ Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nKMW1035542428
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Karen Charles Title: Sr. Production & Regulatory Analsyt

Signature: Karen Charles Date: 01/13/2023

email: kcharles@faulenergy.com Telephone: 903-581-4382

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

State of New Mexico
Oil Conservation Division

Incident ID	nKMW1035542428
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Karen Charles Title: Sr. Production & Regulatory Analsyt

Signature: Karen Charles Date: 01/13/2023

email: kcharles@faulenergy.com Telephone: 903-581-4382

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

State of New Mexico
Oil Conservation Division

Incident ID	nKMW1035542428
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Karen Charles Title: Sr. Production & Regulatory Analsyt

Signature: Karen Charles Date: 01/13/2023

email: kcharles@faulenergy.com Telephone: 903-581-4382

OCD Only

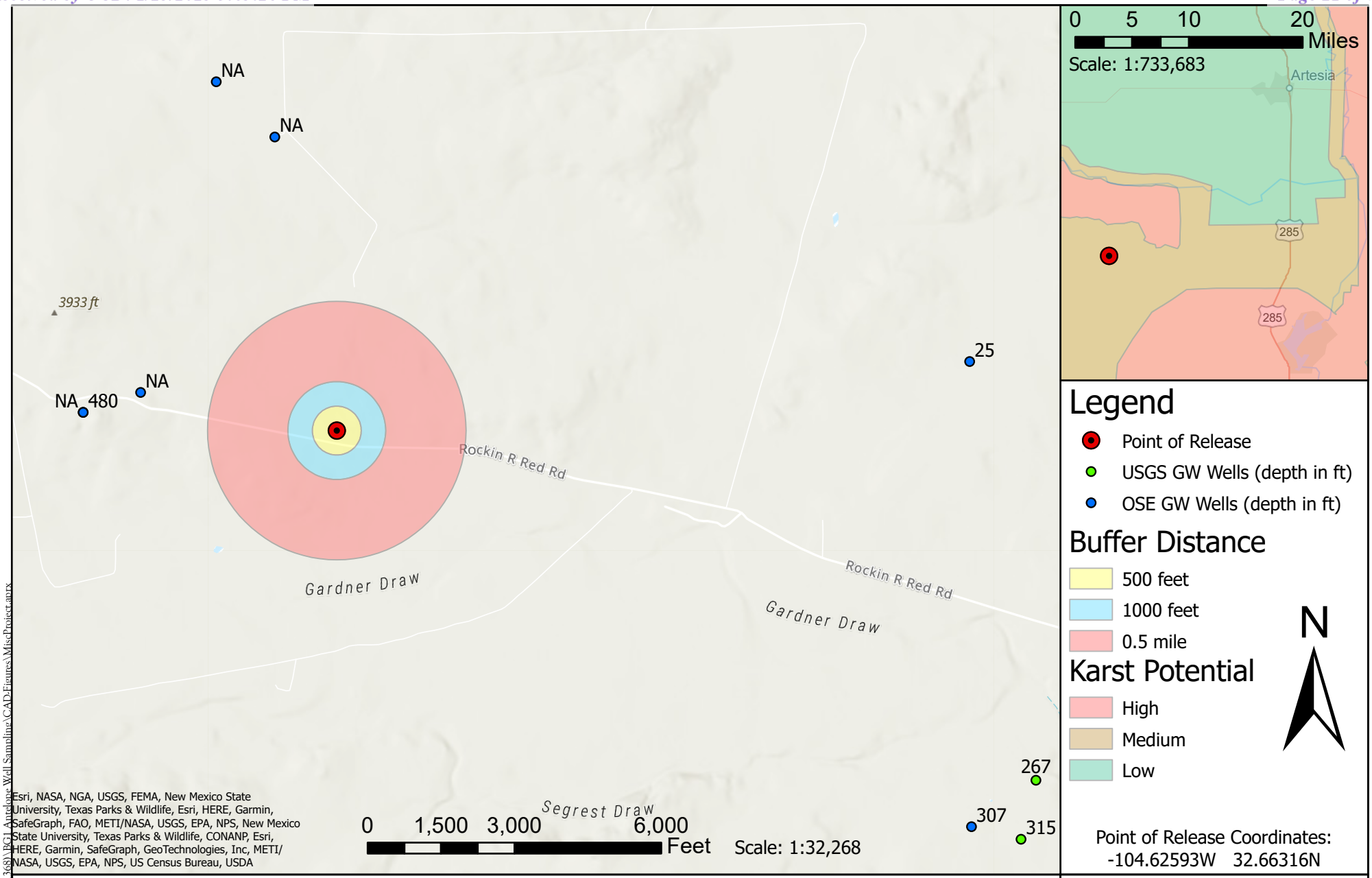
Received by: Robert Hamlet Date: 5/22/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Robert Hamlet Date: 5/22/2023

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

FIGURES



Vicinity and Well Head Protection Map
Antelope Sink #001 - FE-NM, LLC
S: 18 T: 19S R: 24E, Eddy County, New Mexico

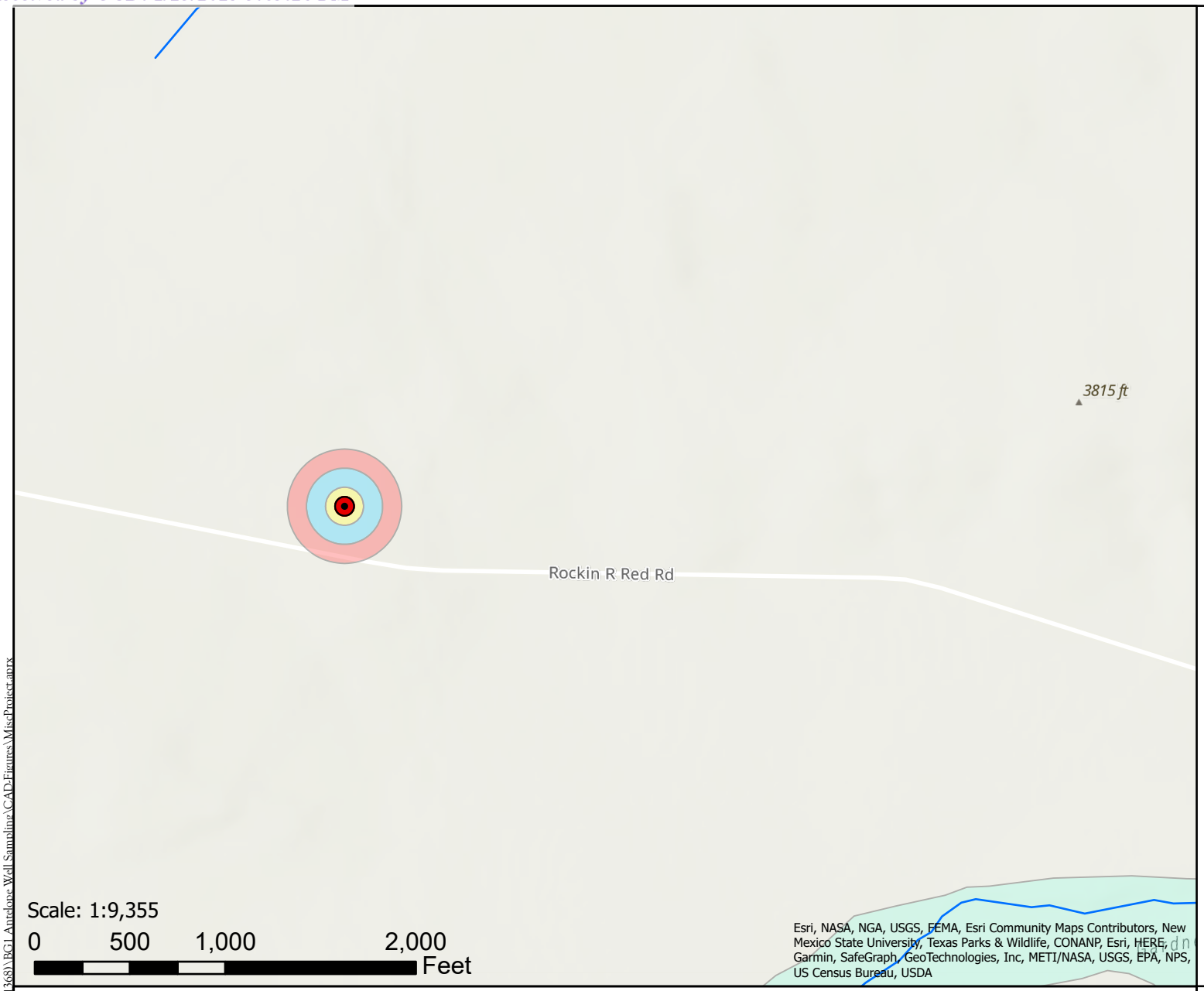
Figure 1

P:\5-Faulconer Energy Samoline (5F31368)\BG1 Antelope Well Samoline\CAD\Figures\MiscProject.aprx
Date Saved: 12/29/2022

Revisions
By: _____ Date: _____ Descr: _____
By: _____ Date: _____ Descr: _____

Drawn Sarahmay Schlea
Date 1/12/2023
Checked
Approved

SMA
Souder, Miller & Associates
Engineering • Environmental
Geomatics
201 South Halagueno Street
Carlsbad, New Mexico 88221
(575) 689-7040
Serving the Southwest & Rocky Mountains



Legend

- Point of Release
- Streams/Canals/Flowlines
- FEMA Flood Zones

Buffer Distance

- 100 feet
- 200 feet
- 300 feet

N

Point of Release Coordinates:
-104.62593W 32.66316N

Surface Water Radius Map
Antelope Sink #001 - FE-NM, LLC
S: 18 T: 19S R: 24E, Eddy County, New Mexico

Figure 2

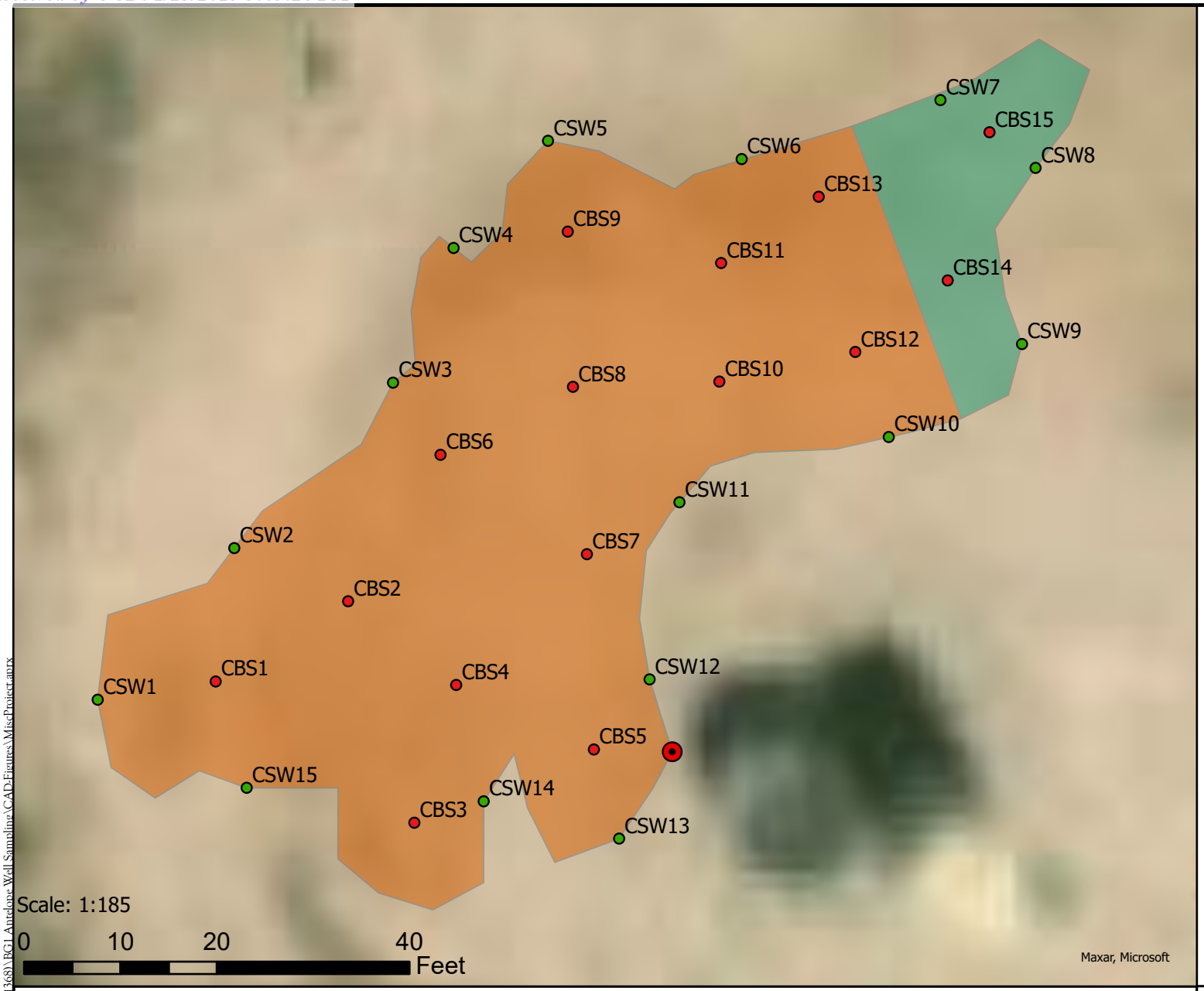
P:\5-Faulconer Energy Samoline (5F31368)\RG1 Antelope Well Samoline\CAD\Figures\MiscProject.mxd
Date Saved: 12/29/2022

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Sarahmay Schlea
Date 1/12/2023
Checked
Approved

SMA
Souder, Miller & Associates
Engineering • Environmental
Geomatics

201 South Halagueno Street
Carlsbad, New Mexico 88221
(575) 689-7040
Serving the Southwest & Rocky Mountains



Legend

- Point of Release

Sample Locations

- CBS Locations
- CSW Locations

Boundary Type

- 2' Excavation
- 5' Excavation

N

Point of Release Coordinates:
-104.62593W 32.66316N

Confirmation Sample Location Map
Antelope Sink #001 - FE-NM, LLC
S: 18 T: 19S R: 24E, Eddy County, New Mexico

Figure 3

P:\5-Faulconer Energy Samoline (5F31368)\RG1 Antelope Well Samoline\CAD Figures\MiscProject.aprx
Date Saved: 1/12/2023

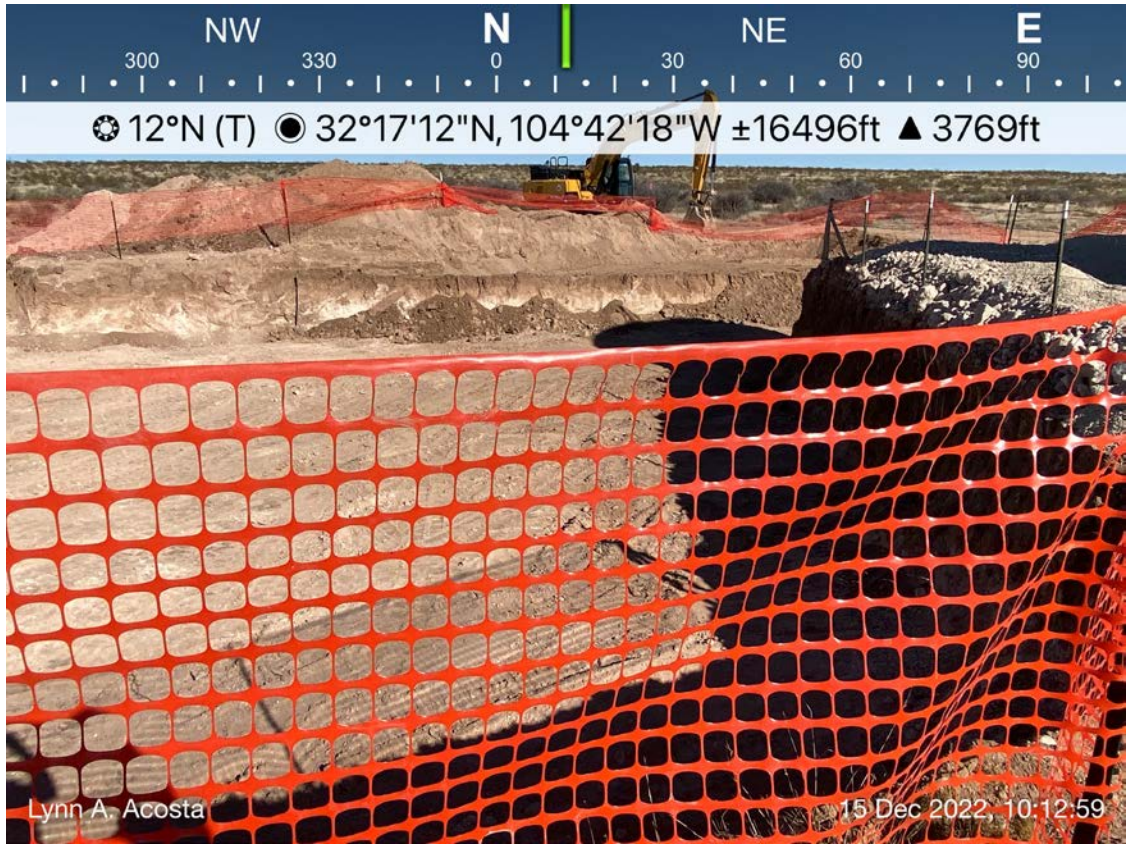
Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Sarahmay Schlea
Date 1/12/2023
Checked
Approved

SMA
Souder, Miller & Associates
Engineering • Environmental
Geomatics

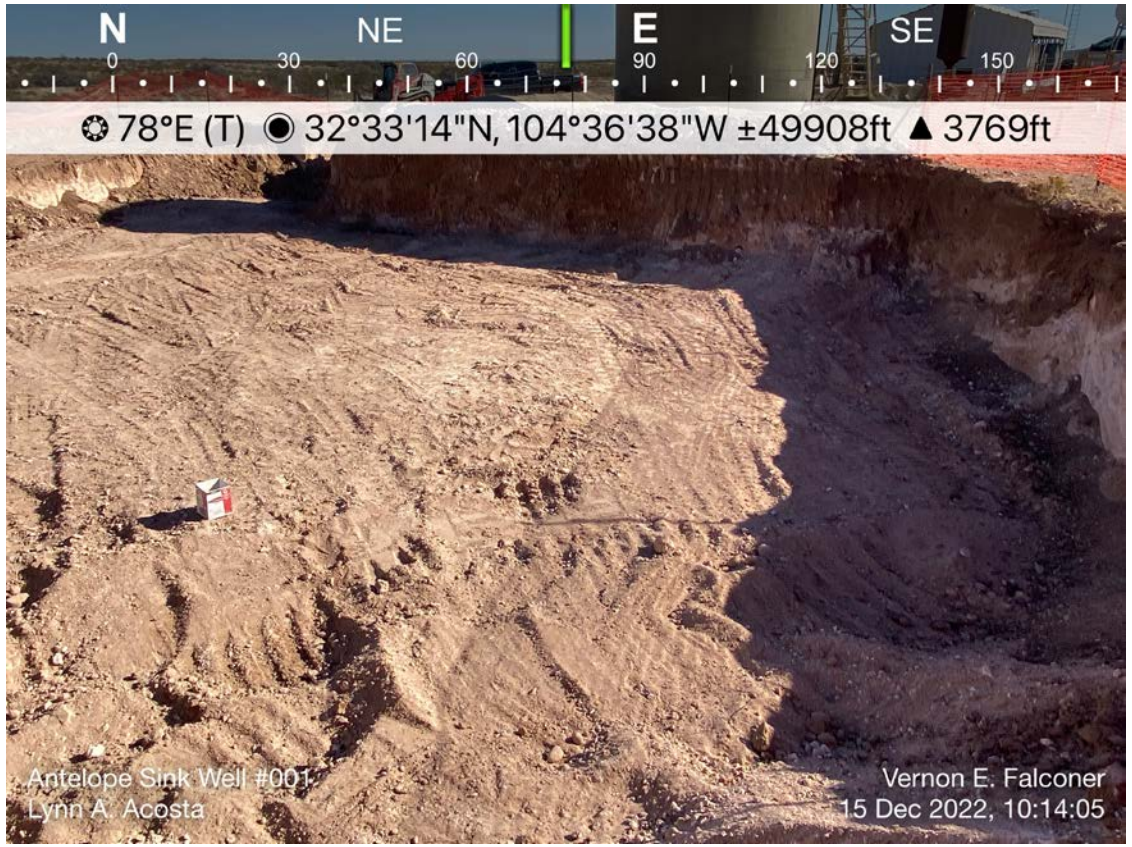
201 South Halagueno Street
Carlsbad, New Mexico 88221
(575) 689-7040
Serving the Southwest & Rocky Mountains

APPENDIX D
PHOTOLOG



Antelope Sink Well #001
(nAPP2205926232)
Photo Log

Antelope Sink Well #001
(nAPP2205926232)
Photo Log

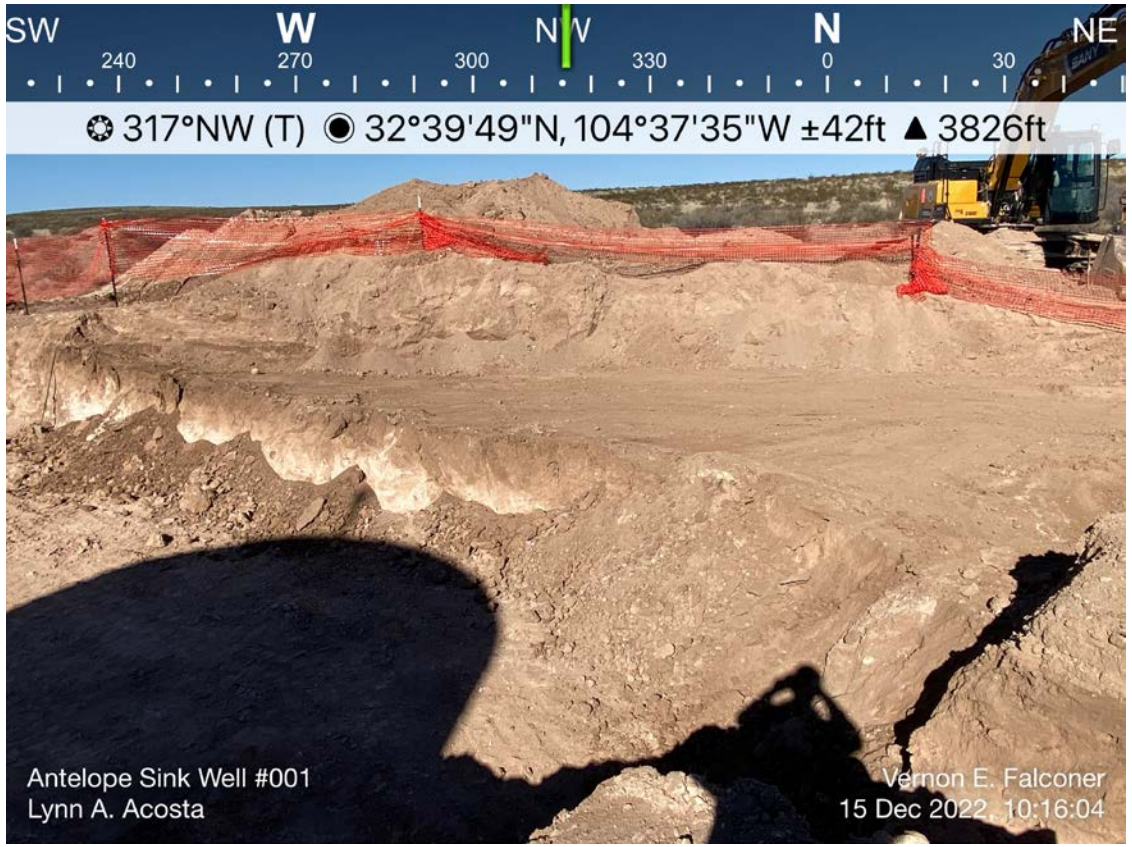


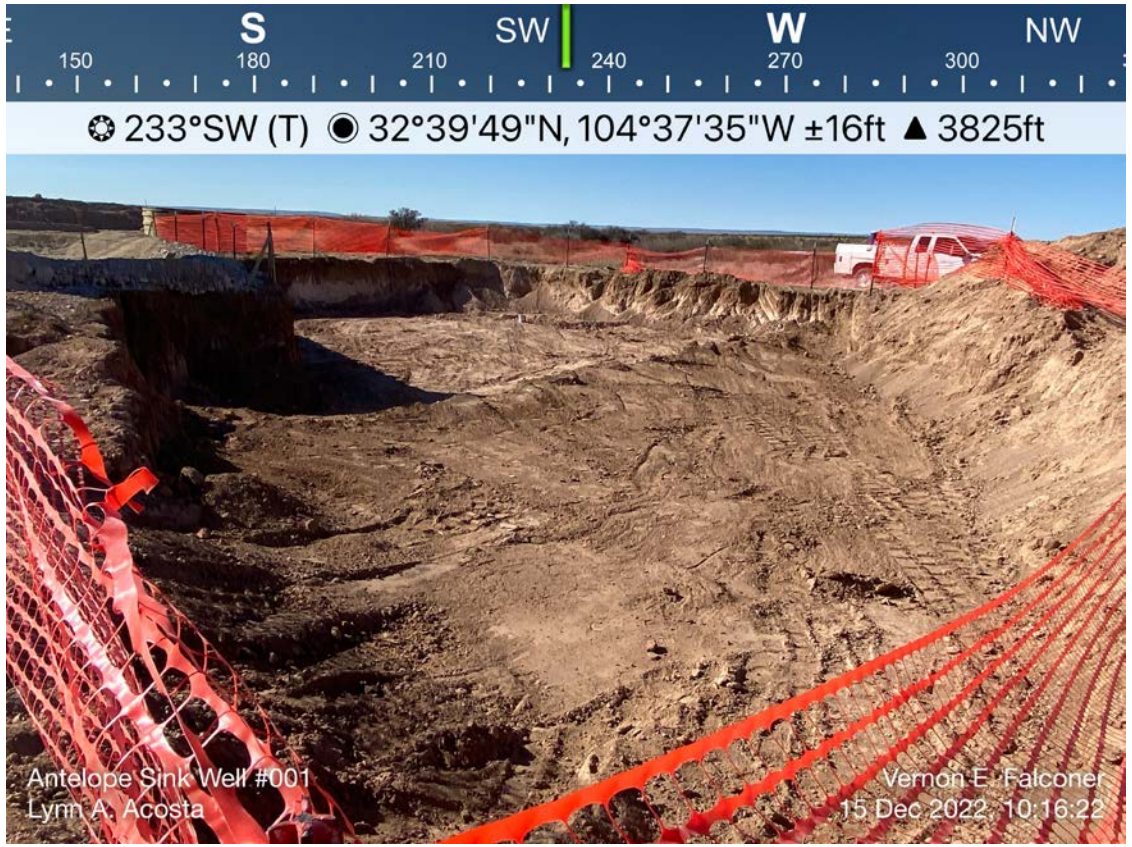
Antelope Sink Well #001
(nAPP2205926232)
Photo Log

Antelope Sink Well #001
(nAPP2205926232)
Photo Log

Antelope Sink Well #001
(nAPP2205926232)
Photo Log

Antelope Sink Well #001
(nAPP2205926232)
Photo Log





Antelope Sink Well #001
(nAPP2205926232)
Photo Log

APPENDIX F

LABORATORY ANALYTICAL REPORT

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 29, 2022

Lynn A. Acosta
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-8801
FAX

RE: Antelope Sink 001 OrderNo.: 2212A84

Dear Lynn A. Acosta:

Hall Environmental Analysis Laboratory received 31 sample(s) on 12/17/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CBS-1
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-001 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	12/22/2022 4:41:52 PM	72277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/21/2022 4:13:12 PM	72215
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/21/2022 4:13:12 PM	72215
Surr: DNOP	108	21-129		%Rec	1	12/21/2022 4:13:12 PM	72215
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 9:39:00 PM	72183
Surr: BFB	99.3	37.7-212		%Rec	1	12/21/2022 9:39:00 PM	72183
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 9:39:00 PM	72183
Toluene	ND	0.048		mg/Kg	1	12/21/2022 9:39:00 PM	72183
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 9:39:00 PM	72183
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 9:39:00 PM	72183
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	12/21/2022 9:39:00 PM	72183

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CBS-2
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-002 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	12/22/2022 4:54:17 PM	72277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/21/2022 4:23:51 PM	72215
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/21/2022 4:23:51 PM	72215
Surr: DNOP	127	21-129		%Rec	1	12/21/2022 4:23:51 PM	72215
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 9:59:00 PM	72183
Surr: BFB	100	37.7-212		%Rec	1	12/21/2022 9:59:00 PM	72183
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 9:59:00 PM	72183
Toluene	ND	0.049		mg/Kg	1	12/21/2022 9:59:00 PM	72183
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 9:59:00 PM	72183
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 9:59:00 PM	72183
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	12/21/2022 9:59:00 PM	72183

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CBS-3
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-003 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	12/22/2022 5:06:41 PM	72277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	12/21/2022 4:34:32 PM	72215
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	12/21/2022 4:34:32 PM	72215
Surr: DNOP	113	21-129		%Rec	1	12/21/2022 4:34:32 PM	72215
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 10:18:00 PM	72183
Surr: BFB	95.8	37.7-212		%Rec	1	12/21/2022 10:18:00 PM	72183
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 10:18:00 PM	72183
Toluene	ND	0.049		mg/Kg	1	12/21/2022 10:18:00 PM	72183
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 10:18:00 PM	72183
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 10:18:00 PM	72183
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	12/21/2022 10:18:00 PM	72183

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CBS-4
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-004 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	12/22/2022 5:19:05 PM	72277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	12/21/2022 4:45:20 PM	72215
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	12/21/2022 4:45:20 PM	72215
Surr: DNOP	111	21-129		%Rec	1	12/21/2022 4:45:20 PM	72215
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 10:38:00 PM	72183
Surr: BFB	105	37.7-212		%Rec	1	12/21/2022 10:38:00 PM	72183
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 10:38:00 PM	72183
Toluene	ND	0.048		mg/Kg	1	12/21/2022 10:38:00 PM	72183
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 10:38:00 PM	72183
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 10:38:00 PM	72183
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	12/21/2022 10:38:00 PM	72183

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CBS-5
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-005 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	12/22/2022 5:31:30 PM	72277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/21/2022 6:58:02 PM	72215
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/21/2022 6:58:02 PM	72215
Surr: DNOP	144	21-129	S	%Rec	1	12/21/2022 6:58:02 PM	72215
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 10:58:00 PM	72183
Surr: BFB	102	37.7-212		%Rec	1	12/21/2022 10:58:00 PM	72183
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 10:58:00 PM	72183
Toluene	ND	0.049		mg/Kg	1	12/21/2022 10:58:00 PM	72183
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 10:58:00 PM	72183
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 10:58:00 PM	72183
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	12/21/2022 10:58:00 PM	72183

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CBS-6
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-006 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 4:54:17 AM	72290
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	12/21/2022 11:54:05 PM	72215
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/21/2022 11:54:05 PM	72215
Surr: DNOP	121	21-129		%Rec	1	12/21/2022 11:54:05 PM	72215
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 11:17:00 PM	72183
Surr: BFB	98.0	37.7-212		%Rec	1	12/21/2022 11:17:00 PM	72183
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 11:17:00 PM	72183
Toluene	ND	0.049		mg/Kg	1	12/21/2022 11:17:00 PM	72183
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 11:17:00 PM	72183
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 11:17:00 PM	72183
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	12/21/2022 11:17:00 PM	72183

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CBS-15
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-015 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 9:11:27 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/22/2022 2:01:13 AM	72228
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/22/2022 2:01:13 AM	72228
Surr: DNOP	94.8	21-129		%Rec	1	12/22/2022 2:01:13 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/21/2022 11:58:00 AM	72191
Surr: BFB	105	37.7-212		%Rec	1	12/21/2022 11:58:00 AM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	12/21/2022 11:58:00 AM	72191
Toluene	ND	0.050		mg/Kg	1	12/21/2022 11:58:00 AM	72191
Ethylbenzene	ND	0.050		mg/Kg	1	12/21/2022 11:58:00 AM	72191
Xylenes, Total	ND	0.099		mg/Kg	1	12/21/2022 11:58:00 AM	72191
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	12/21/2022 11:58:00 AM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-1
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-016 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 9:23:52 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/22/2022 2:32:28 AM	72228
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/22/2022 2:32:28 AM	72228
Surr: DNOP	148	21-129	S	%Rec	1	12/22/2022 2:32:28 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 1:07:00 PM	72191
Surr: BFB	106	37.7-212		%Rec	1	12/21/2022 1:07:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 1:07:00 PM	72191
Toluene	ND	0.048		mg/Kg	1	12/21/2022 1:07:00 PM	72191
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 1:07:00 PM	72191
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 1:07:00 PM	72191
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	12/21/2022 1:07:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-2
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-017 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 9:36:17 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/22/2022 2:42:51 AM	72228
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/22/2022 2:42:51 AM	72228
Surr: DNOP	127	21-129		%Rec	1	12/22/2022 2:42:51 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 2:07:00 PM	72191
Surr: BFB	105	37.7-212		%Rec	1	12/21/2022 2:07:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 2:07:00 PM	72191
Toluene	ND	0.048		mg/Kg	1	12/21/2022 2:07:00 PM	72191
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 2:07:00 PM	72191
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 2:07:00 PM	72191
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	12/21/2022 2:07:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-3
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-018 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 9:48:41 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/22/2022 2:53:14 AM	72228
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/22/2022 2:53:14 AM	72228
Surr: DNOP	105	21-129		%Rec	1	12/22/2022 2:53:14 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 2:26:00 PM	72191
Surr: BFB	93.6	37.7-212		%Rec	1	12/21/2022 2:26:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	12/21/2022 2:26:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 2:26:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 2:26:00 PM	72191
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 2:26:00 PM	72191
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	12/21/2022 2:26:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-4
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-019 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 10:01:06 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/22/2022 3:03:39 AM	72228
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/22/2022 3:03:39 AM	72228
Surr: DNOP	116	21-129		%Rec	1	12/22/2022 3:03:39 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/21/2022 2:46:00 PM	72191
Surr: BFB	93.0	37.7-212		%Rec	1	12/21/2022 2:46:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	12/21/2022 2:46:00 PM	72191
Toluene	ND	0.050		mg/Kg	1	12/21/2022 2:46:00 PM	72191
Ethylbenzene	ND	0.050		mg/Kg	1	12/21/2022 2:46:00 PM	72191
Xylenes, Total	ND	0.10		mg/Kg	1	12/21/2022 2:46:00 PM	72191
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/21/2022 2:46:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-5
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-020 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 10:13:30 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/22/2022 3:14:07 AM	72228
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/22/2022 3:14:07 AM	72228
Surr: DNOP	113	21-129		%Rec	1	12/22/2022 3:14:07 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 3:05:00 PM	72191
Surr: BFB	104	37.7-212		%Rec	1	12/21/2022 3:05:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 3:05:00 PM	72191
Toluene	ND	0.048		mg/Kg	1	12/21/2022 3:05:00 PM	72191
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 3:05:00 PM	72191
Xylenes, Total	ND	0.096		mg/Kg	1	12/21/2022 3:05:00 PM	72191
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	12/21/2022 3:05:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-6
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-021 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 10:25:55 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/22/2022 3:24:35 AM	72228
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/22/2022 3:24:35 AM	72228
Surr: DNOP	109	21-129		%Rec	1	12/22/2022 3:24:35 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 3:25:00 PM	72191
Surr: BFB	99.1	37.7-212		%Rec	1	12/21/2022 3:25:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 3:25:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 3:25:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 3:25:00 PM	72191
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 3:25:00 PM	72191
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	12/21/2022 3:25:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-7
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-022 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 11:03:09 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	12/22/2022 3:35:04 AM	72228
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/22/2022 3:35:04 AM	72228
Surr: DNOP	121	21-129		%Rec	1	12/22/2022 3:35:04 AM	72228
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 3:45:00 PM	72191
Surr: BFB	102	37.7-212		%Rec	1	12/21/2022 3:45:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	12/21/2022 3:45:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 3:45:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 3:45:00 PM	72191
Xylenes, Total	ND	0.099		mg/Kg	1	12/21/2022 3:45:00 PM	72191
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	12/21/2022 3:45:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-8
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-023 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	59		mg/Kg	20	12/23/2022 11:15:34 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/22/2022 10:42:03 PM	72256
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/22/2022 10:42:03 PM	72256
Surr: DNOP	129	21-129	S	%Rec	1	12/22/2022 10:42:03 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 4:05:00 PM	72191
Surr: BFB	99.4	37.7-212		%Rec	1	12/21/2022 4:05:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 4:05:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 4:05:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 4:05:00 PM	72191
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 4:05:00 PM	72191
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	12/21/2022 4:05:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-9
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-024 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	61		mg/Kg	20	12/23/2022 11:27:59 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/22/2022 10:52:39 PM	72256
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/22/2022 10:52:39 PM	72256
Surr: DNOP	118	21-129		%Rec	1	12/22/2022 10:52:39 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 4:24:00 PM	72191
Surr: BFB	103	37.7-212		%Rec	1	12/21/2022 4:24:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	12/21/2022 4:24:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 4:24:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 4:24:00 PM	72191
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 4:24:00 PM	72191
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	12/21/2022 4:24:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-10
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-025 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 11:40:24 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/22/2022 11:06:00 PM	72256
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/22/2022 11:06:00 PM	72256
Surr: DNOP	135	21-129	S	%Rec	1	12/22/2022 11:06:00 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 5:04:00 PM	72191
Surr: BFB	99.3	37.7-212		%Rec	1	12/21/2022 5:04:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	12/21/2022 5:04:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 5:04:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 5:04:00 PM	72191
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 5:04:00 PM	72191
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	12/21/2022 5:04:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-11
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-026 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 11:52:48 AM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/22/2022 11:16:55 PM	72256
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/22/2022 11:16:55 PM	72256
Surr: DNOP	112	21-129		%Rec	1	12/22/2022 11:16:55 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 5:23:00 PM	72191
Surr: BFB	96.5	37.7-212		%Rec	1	12/21/2022 5:23:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 5:23:00 PM	72191
Toluene	ND	0.048		mg/Kg	1	12/21/2022 5:23:00 PM	72191
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 5:23:00 PM	72191
Xylenes, Total	ND	0.096		mg/Kg	1	12/21/2022 5:23:00 PM	72191
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	12/21/2022 5:23:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-12
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-027 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 12:05:13 PM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/22/2022 11:27:41 PM	72256
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/22/2022 11:27:41 PM	72256
Surr: DNOP	109	21-129		%Rec	1	12/22/2022 11:27:41 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 5:43:00 PM	72191
Surr: BFB	99.7	37.7-212		%Rec	1	12/21/2022 5:43:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 5:43:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 5:43:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 5:43:00 PM	72191
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 5:43:00 PM	72191
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	12/21/2022 5:43:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CSW-13
Project: Antelope Sink 001 **Collection Date:** 12/15/2022
Lab ID: 2212A84-028 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 12:17:37 PM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/22/2022 11:38:24 PM	72256
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/22/2022 11:38:24 PM	72256
Surr: DNOP	106	21-129		%Rec	1	12/22/2022 11:38:24 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 6:03:00 PM	72191
Surr: BFB	96.8	37.7-212		%Rec	1	12/21/2022 6:03:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 6:03:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 6:03:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 6:03:00 PM	72191
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2022 6:03:00 PM	72191
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	12/21/2022 6:03:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CSW-14
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-029 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 12:30:01 PM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	12/22/2022 11:49:07 PM	72256
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	12/22/2022 11:49:07 PM	72256
Surr: DNOP	109	21-129		%Rec	1	12/22/2022 11:49:07 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 6:22:00 PM	72191
Surr: BFB	98.4	37.7-212		%Rec	1	12/21/2022 6:22:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 6:22:00 PM	72191
Toluene	ND	0.048		mg/Kg	1	12/21/2022 6:22:00 PM	72191
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 6:22:00 PM	72191
Xylenes, Total	ND	0.096		mg/Kg	1	12/21/2022 6:22:00 PM	72191
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	12/21/2022 6:22:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CSW-15
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-030 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 12:42:26 PM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	12/22/2022 11:59:49 PM	72256
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/22/2022 11:59:49 PM	72256
Surr: DNOP	117	21-129		%Rec	1	12/22/2022 11:59:49 PM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2022 6:42:00 PM	72191
Surr: BFB	103	37.7-212		%Rec	1	12/21/2022 6:42:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 6:42:00 PM	72191
Toluene	ND	0.049		mg/Kg	1	12/21/2022 6:42:00 PM	72191
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2022 6:42:00 PM	72191
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 6:42:00 PM	72191
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	12/21/2022 6:42:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A84**
Date Reported: **12/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CSW-16
Project: Antelope Sink 001
Collection Date: 12/15/2022
Lab ID: 2212A84-031 **Matrix:** SOIL **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	12/23/2022 12:54:51 PM	72293
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 12:10:29 AM	72256
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2022 12:10:29 AM	72256
Surr: DNOP	97.7	21-129		%Rec	1	12/23/2022 12:10:29 AM	72256
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2022 7:02:00 PM	72191
Surr: BFB	103	37.7-212		%Rec	1	12/21/2022 7:02:00 PM	72191
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	12/21/2022 7:02:00 PM	72191
Toluene	ND	0.048		mg/Kg	1	12/21/2022 7:02:00 PM	72191
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2022 7:02:00 PM	72191
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2022 7:02:00 PM	72191
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	12/21/2022 7:02:00 PM	72191

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A84**
29-Dec-22

Client: Souder, Miller & Associates
Project: Antelope Sink 001

Sample ID: **MB-72277** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **72277** RunNo: **93518**
Prep Date: **12/22/2022** Analysis Date: **12/22/2022** SeqNo: **3373636** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72277** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **72277** RunNo: **93518**
Prep Date: **12/22/2022** Analysis Date: **12/22/2022** SeqNo: **3373637** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	90	110			

Sample ID: **MB-72290** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **72290** RunNo: **93534**
Prep Date: **12/22/2022** Analysis Date: **12/23/2022** SeqNo: **3374330** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72290** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **72290** RunNo: **93534**
Prep Date: **12/22/2022** Analysis Date: **12/23/2022** SeqNo: **3374331** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.6	90	110			

Sample ID: **MB-72293** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **72293** RunNo: **93543**
Prep Date: **12/22/2022** Analysis Date: **12/23/2022** SeqNo: **3374909** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72293** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **72293** RunNo: **93543**
Prep Date: **12/22/2022** Analysis Date: **12/23/2022** SeqNo: **3374910** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A84**
29-Dec-22

Client: Souder, Miller & Associates
Project: Antelope Sink 001

Sample ID: **LCS-72215** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **72215** RunNo: **93461**
Prep Date: **12/20/2022** Analysis Date: **12/21/2022** SeqNo: **3370983** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.00	0	95.2	64.4	127			
Surr: DNOP	5.8		5.000		117	21	129			

Sample ID: **MB-72215** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **72215** RunNo: **93461**
Prep Date: **12/20/2022** Analysis Date: **12/21/2022** SeqNo: **3370985** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	21	129			

Sample ID: **2212A84-015AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **CBS-15** Batch ID: **72228** RunNo: **93461**
Prep Date: **12/20/2022** Analysis Date: **12/22/2022** SeqNo: **3372809** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	48.88	0	97.0	36.1	154			
Surr: DNOP	5.4		4.888		111	21	129			

Sample ID: **2212A84-015AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **CBS-15** Batch ID: **72228** RunNo: **93461**
Prep Date: **12/20/2022** Analysis Date: **12/22/2022** SeqNo: **3372810** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	14	46.38	0	102	36.1	154	0.0628	33.9	
Surr: DNOP	5.3		4.638		114	21	129	0	0	

Sample ID: **LCS-72228** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **72228** RunNo: **93461**
Prep Date: **12/20/2022** Analysis Date: **12/22/2022** SeqNo: **3372867** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	50.00	0	92.5	64.4	127			
Surr: DNOP	6.2		5.000		125	21	129			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A84**

29-Dec-22

Client: Souder, Miller & Associates

Project: Antelope Sink 001

Sample ID: **MB-72228**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72228**	RunNo: **93461**
Prep Date: **12/20/2022**	Analysis Date: **12/22/2022**	SeqNo: **3372868** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	21	129			

Sample ID: **MB-72256**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72256**	RunNo: **93500**
Prep Date: **12/21/2022**	Analysis Date: **12/22/2022**	SeqNo: **3372932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		118	21	129			

Sample ID: **LCS-72256**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **72256**	RunNo: **93500**
Prep Date: **12/21/2022**	Analysis Date: **12/22/2022**	SeqNo: **3374250** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	15	50.00	0	99.6	64.4	127			
Surr: DNOP	6.8		5.000		136	21	129			S

Sample ID: **LCS-72271**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **72271**	RunNo: **93500**
Prep Date: **12/22/2022**	Analysis Date: **12/22/2022**	SeqNo: **3374252** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		117	21	129			

Sample ID: **MB-72271**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72271**	RunNo: **93500**
Prep Date: **12/22/2022**	Analysis Date: **12/22/2022**	SeqNo: **3374254** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		111	21	129			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A84**
29-Dec-22

Client: Souder, Miller & Associates
Project: Antelope Sink 001

Sample ID: **mb-72183**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **72183**	RunNo: **93433**
Prep Date: **12/19/2022**	Analysis Date: **12/20/2022**	SeqNo: **3369855** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.6	37.7	212			

Sample ID: **lcs-72183**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **72183**	RunNo: **93433**
Prep Date: **12/19/2022**	Analysis Date: **12/20/2022**	SeqNo: **3369856** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.8	72.3	137			
Surr: BFB	1800		1000		178	37.7	212			

Sample ID: **LCS-72191**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **72191**	RunNo: **93486**
Prep Date: **12/19/2022**	Analysis Date: **12/21/2022**	SeqNo: **3371848** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.8	72.3	137			
Surr: BFB	2200		1000		223	37.7	212			S

Sample ID: **mb-72191**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **72191**	RunNo: **93486**
Prep Date: **12/19/2022**	Analysis Date: **12/21/2022**	SeqNo: **3371849** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	37.7	212			

Sample ID: **2212A84-015ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **CBS-15**	Batch ID: **72191**	RunNo: **93486**
Prep Date: **12/19/2022**	Analysis Date: **12/21/2022**	SeqNo: **3371851** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.93	0	98.9	70	130			
Surr: BFB	2300		997.0		234	37.7	212			S

Sample ID: **2212A84-015amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **CBS-15**	Batch ID: **72191**	RunNo: **93486**
Prep Date: **12/19/2022**	Analysis Date: **12/21/2022**	SeqNo: **3371852** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A84**
29-Dec-22

Client: Souder, Miller & Associates
Project: Antelope Sink 001

Sample ID: **2212A84-015amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **CBS-15** Batch ID: **72191** RunNo: **93486**
Prep Date: **12/19/2022** Analysis Date: **12/21/2022** SeqNo: **3371852** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.93	0	105	70	130	5.93	20	
Surr: BFB	2300		997.0		235	37.7	212	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A84**
29-Dec-22

Client: Souder, Miller & Associates
Project: Antelope Sink 001

Sample ID: **mb-72183** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **72183** RunNo: **93433**
Prep Date: **12/19/2022** Analysis Date: **12/20/2022** SeqNo: **3369901** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130			

Sample ID: **LCS-72183** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **72183** RunNo: **93433**
Prep Date: **12/19/2022** Analysis Date: **12/20/2022** SeqNo: **3369902** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.6	80	120			
Toluene	0.93	0.050	1.000	0	92.6	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.8	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.1	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.9	70	130			

Sample ID: **LCS-72191** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **72191** RunNo: **93486**
Prep Date: **12/19/2022** Analysis Date: **12/21/2022** SeqNo: **3371928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	109	80	120			
Toluene	1.1	0.050	1.000	0	110	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	70	130			

Sample ID: **mb-72191** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **72191** RunNo: **93486**
Prep Date: **12/19/2022** Analysis Date: **12/21/2022** SeqNo: **3371929** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		113	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A84**
29-Dec-22

Client: Souder, Miller & Associates
Project: Antelope Sink 001

Sample ID: **2212A84-016ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **CSW-1** Batch ID: **72191** RunNo: **93486**
Prep Date: **12/19/2022** Analysis Date: **12/21/2022** SeqNo: **3371932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.024	0.9625	0	103	68.8	120			
Toluene	1.0	0.048	0.9625	0	104	73.6	124			
Ethylbenzene	1.0	0.048	0.9625	0	105	72.7	129			
Xylenes, Total	3.0	0.096	2.887	0	105	75.7	126			
Surr: 4-Bromofluorobenzene	1.1		0.9625		114	70	130			

Sample ID: **2212A84-016amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **CSW-1** Batch ID: **72191** RunNo: **93486**
Prep Date: **12/19/2022** Analysis Date: **12/21/2022** SeqNo: **3371933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9606	0	106	68.8	120	3.12	20	
Toluene	1.0	0.048	0.9606	0	108	73.6	124	3.12	20	
Ethylbenzene	1.0	0.048	0.9606	0	109	72.7	129	3.61	20	
Xylenes, Total	3.1	0.096	2.882	0	109	75.7	126	3.75	20	
Surr: 4-Bromofluorobenzene	1.1		0.9606		113	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Souder, Miller & Associates | Work Order Number: 2212A84 | RcptNo: 1

Received By: **Desiree Dominguez** 12/17/2022 10:00:00 AM DD

Completed By: **Sean Livingston** 12/19/2022 8:16:38 AM SL

Reviewed By: JN 12/19/22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: KPG 12.19.22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good				

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 5 day TAT

Project Name: Antelope Sink #001

Project #:

Project Manager: Lynn Acosta

Sampler: LA

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.2-0.1=0.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2212A84	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/15/22		Soil	CBS-1			001	X	X					X			
			CBS-2			002										
			CBS-3			003										
			CBS-4			004										
			CBS-5			005										
			CBS-6			006										
			CBS-7			007										
			CBS-8			008										
			CBS-9			009										
			CBS-10			010										
			CBS-11			011										
			CBS-12			012										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
12/15/22	1050				12/16/22	1050
12/15/22	1900			courier	12/17/22	10:00

Remarks: 1 of 3

Direct Bill: Falconer energy

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 5 day TAT

Project Name: Antelope Sink #001

Project #:

Project Manager: Lynn Acosta

Sampler: ZA

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.2-0.1=0.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/15/22		Soil	CBS-13			013	X	X					X			
			CBS-14			014										
			CBS-15			015										
			CSW-1			016										
			CSW-2			see relinquished 017										
			CSW-3			018										
			CSW-4			019										
			CSW-5			020										
			CSW-6			021										
			CSW-7			022										
			CSW-8			023										
			CSW-9			024										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/16/22	1050				12/16/22	1050
12/16/22	1900			courier	12/17/22	10:00

Remarks: 2 of 3

Direct Bill: Falcon energy.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: SMA Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 5 day TAT

Project Name: Antelope Sink #001

Project #:

Project Manager: Lynn Acosta

Sampler: LA

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.2 - 0.1 = 0.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	(BTEX) MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl), F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/15/2022		Soil	CSW-10			025	X	X					X			
			CSW-11			026										
			CSW-12			027										
			CSW-13			028										
			CSW-14			029										
			CSW-15			030										
			CSW-16			031										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
12/15/2022	1050				12/16/22	1050
12/16/22	1900			courier	12.17.22	10:00

Remarks: 3 of 3
Direct Bill: Falconer Energy

Souder, Miller & Associates♦201 S. Halagueno St.♦Carlsbad, NM 88220
(575) 689-8801

January 12, 2023

#5E31369-BG01

NMOCD District 2
506 W. Texas
Artesia, New Mexico 88210

SUBJECT: Closure Report for the Antelope Sink #001 Release (nAPP2205926232), Eddy County, New Mexico

To Whom It May Concern:

On behalf of FE-NM, LLC, Souder, Miller & Associates (SMA) has prepared this Closure Report that describes the remediation of a release of liquids related to oil and gas production activities at the Antelope Sink Unit #001 site. The site is in Unit G, Section 18, Township 19S, Range 24E, Eddy County, New Mexico, on State land. Figure 1 illustrates the vicinity and site location on a United States Geological Service (USGS) 7.5-minute quadrangle map.

Table 1 summarizes information regarding the release.

Table 1: Release Information and Closure Criteria			
Site Name	Antelope Sink Unit #001	Operator	FE-NM, LLC
API Number	30-015-10041	Location	32.66316, -104.62593
Tracking Number	NAPP2205926232		
Estimated Date of Release	2/17/2022	Date Reported to NMOCD	2/18/2022
Land Owner	New Mexico State Land	Reported To	NMOCD
Source of Release	Valve froze which caused the incident		
Released Volume	21 BBL	Released Material	Produced Water
Recovered Volume	0 BBL	Net Release	21 BBL
NMOCD Closure Criteria	<50 feet to groundwater		
SMA Response Dates	March 30, 2022; May 20, 2022; and December 15, 2022		

1.0 Background

On February 17, 2022, a release was discovered at the Antelope Sink Unit #001 site due to a frozen valve. Initial response activities were conducted by operator, and included source elimination, containment, and site stabilization activities. Figure 1 illustrates the vicinity and site location. Figures 2 and 3 illustrate the release location. The release notification form is included in Appendix A.

2.0 Site Information and Closure Criteria

The Antelope Sink Unit #001 is an active production facility located approximately 18 miles southwest of Artesia, New Mexico on State land at an elevation of approximately 3,823 feet above mean sea level (amsl).

Depth to Groundwater
A search of the New Mexico Office of the State Engineer (NMOSE) New Mexico Water Rights Reporting System and the USGS National Water Information System did not report any wells within ½-mile of the site. Based on records of wells within the larger vicinity, depth to groundwater in the area is estimated to be an average of 382 feet below grade surface (bgs). The minimum reported depth is 285 feet bgs and the maximum is 480 bgs. Water well documentation is included in Appendix B and registered wells in the vicinity are illustrated on Figure 1.

Wellhead Protection Area
There are no known water sources within ½-mile of the location, according to the NMOSE online water well database.

Distance to Nearest Significant Watercourse
The nearest significant watercourse is an unnamed tributary of the Fourmile Draw, located approximately 2,554 feet to the northwest.

Antelope Sink Unit #001 will be restored to meet the standards of Table I of 19.15.29.12 NMAC. Table 2 demonstrates the Closure Criteria applicable to this location. Figure 2 illustrates the site with 200 and 300-foot radii to indicate that it does not lie within a sensitive area. The site is not considered an “exploration, development, production or storage site” and therefore the top four feet must be remediated to the most stringent standards. Additionally, the release area did not occur on land considered “in-use”, as outlined by 19.15.29.13.D NMAC. Therefore, the release area shall be reclaimed within the upper four feet to meet the standards of 19.15.29.13.D(1).

Based on the information presented herein, the applicable New Mexico Oil Conservation Division (NMOCD) Closure Criteria for this site is for a groundwater depth of less than 50 feet bgs in addition to the requirements of reclamation for the upper four feet of impacted soil.

3.0 Remediation Activities

Site characterization including delineation is detailed in the SMA’s Remediation Plan dated June 6, 2022. Per the approved plan, SMA returned to the site to guide/oversee the excavation of contaminated soil beginning on December 05, 2022. SMA guided the excavation activities by collecting soil samples for field screening. Samples were screened for chloride using an electrical conductivity (EC) meter. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. NMOCD was notified on December 13, 2022, that closure samples were expected to be collected in two (2) business days. A copy of this notification is included in Appendix C.

On December 15, 2022, SMA conducted confirmation sampling activities at the site. Confirmation samples were comprised of five-point composites collected from the base (CBS1 – CBS15) and walls (CSW1 – CSW16) of the excavation. A photolog is included in Appendix D.

A total of 31 samples were collected for laboratory analysis for total chloride using Environmental Protection Agency (EPA) Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Laboratory samples were collected in accordance with the sampling protocol included in Appendix E. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico .

Figure 3 shows the extent of the final excavation and closure sample locations. Laboratory results are summarized in Table 3. The laboratory report is included in Appendix F.

4.0 Site Recommendations

As demonstrated in Table 3, all closure samples meet the Closure Criteria. The site has been remediated to meet the standards of Table I of 19.15.29.12 NMAC.

Contaminated soils were removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soil was transported and disposed of at R360 Environmental Solutions midway between Carlsbad and Hobbs, New Mexico, an NMOCD-permitted disposal facility.

SMA recommends no further action and requests closure of Incident Number nAPP2205926232.

5.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Lynn Acosta at 505-516-7469 or Heather Woods at 505-716-2787.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Lynn A. Acosta

Lynn A. Acosta
Staff Scientist

Reviewed by:

Heather M. Woods

Heather M. Woods, P.G.
Project Geoscientist

REFERENCES:

New Mexico Office of the State Engineer (NMOSE) online water well database
https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 6/5/2022

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map
Figure 2: Surface Water Radius Map
Figure 3: Confirmation Sample Location Map

Tables:

Table 2: NMOCD Closure Criteria Justification
Table 3: Summary of Confirmation Sample Results

Appendices:

Appendix A: Form C141
Appendix B: NMOSE Wells Report
Appendix C: Correspondence
Appendix D: Photolog
Appendix E: Sampling Protocol
Appendix F: Laboratory Analytical Report

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 178749

CONDITIONS

Operator: FE-NM, LLC 1001 E SE Loop 323, STE. 160 Tyler, TX 75711	OGRID: 331102
	Action Number: 178749
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NKMW1035542428 ANTELOPE SINK UNIT #001, thank you. This closure is approved.	5/22/2023