From: Wells, Shelly, EMNRD
To: Hayden Acosta

Cc: gdcofer coferandco.com; Lynn Acosta; Austin Weyant; Bratcher, Michael, EMNRD

Subject: RE: [EXTERNAL] Confirmation Sampling Plan for the State Land 76 #001 - nOY1716629707

Date: Friday, May 16, 2025 8:42:00 AM

Attachments: <u>image001.png</u>

Good morning Hayden,

The proposed Confirmation Sampling Plan is not approved. Due to the conflicting depths and shapes of the excavations in the Wellpad location, the Former Heater Treater location and Firewall locations these areas are required to be re-excavated to prior depths. Confirmation samples are required to be collected every 200 ft2 from the base and every 200 ft2 from the sidewalls of the excavations. The excavated soil will need to be sampled with one five-point composite sample collected for every 15 cubic yards if wanting to re-use as backfill. In addition, the tank battery requires further delineation. To obtain delineation in the tank battery area, samples will need to be discrete and collected at surface, 1', 2', 3', and 4' depths and submitted to a laboratory to be analyzed for all Table I constituents. TH-5, TH-6 and TH-7 collected outside the tank battery exceeded reclamation standards. Horizontal delineation should be achieved for these sample points and must be to reclamation standards. Should delineation results come back above the Closure Criteria, remediation will need to occur pursuant to 19.15.29.12 NMAC or a deferral requested after removing contaminants to the maximum extent practicable. Remediation on an active site can be deferred in areas immediately under or around production equipment such as production tanks, wellheads, and pipelines where remediation could cause a major facility deconstruction so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. The deferral request must specify which sample points are being requested for deferral including an explanation why the contaminants can't be removed. Photographic evidence must be obtained throughout the remediation process of each of the open excavations and included with the report pursuant to 19.15.29.12(E)1(b) NMAC.

Sincerely,

Shelly

Shelly Wells * Environmental Specialist-Advanced Environmental Bureau EMNRD-Oil Conservation Division 1220 S. St. Francis Drive|Santa Fe, NM 87505 (505)469-7520 Shelly.Wells@emnrd.nm.gov http://www.emnrd.state.nm.us/OCD/

From: Hayden Acosta hayden@strataresourcesllc.com

Sent: Tuesday, May 13, 2025 10:30 PM

To: Wells, Shelly, EMNRD < Shelly. Wells@emnrd.nm.gov>

Cc: gdcofer coferandco.com <gdcofer@coferandco.com>; Lynn Acosta <Lynn@strataresourcesllc.com>; Austin Weyant <austin@atkinseng.com>

Subject: [EXTERNAL] Confirmation Sampling Plan for the State Land 76 #001 - nOY1716629707

You don't often get email from hayden@strataresourcesllc.com. Learn why this is important

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Evening Shelly,

On behalf of Cofer & Co, Strata Resources is submitting this Confirmation Sampling Plan for the release at State Land 76 #001 Well and Tank Battery (Incident nOY1716629707). Based on the history of this incident, Strata felt it would be best to submit a sampling plan for review prior to conducting confirmation sampling. Our aim is to ensure that the proposed approach aligns with your expectations and requirements.

Please let us know if you have any feedback or if there is anything you would like us to revise or clarify. We appreciate your time and guidance in this matter.

Kind Regards,



Hayden Acosta

Project Scientist

hayden@strataresourcesllc.com 505-249-9506 PO Box 2474 Carlsbad, NM 88221



May 13, 2025

Shelly Wells Environmental Specialist-A 505-469-7520 Shelly.Wells@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505

SUBJECT: Confirmation Sampling Plan for the State Land 76 #001 Well Tank Battery (State Land 76) Release (nOY1716629707), Lea County, New Mexico

To Shelly Wells,

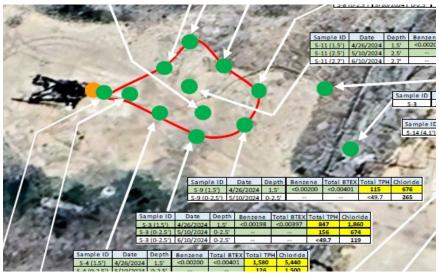
On behalf of Cofer & Co, LLC Strata Resources (Strata) has prepared this Confirmation Sampling Plan that describes the proposed confirmation closure sampling following the remediation of the release of liquids related to the activities at the State Land 76 #001 Well and Tank Battery (State Land 76). The site is on state land in Unit J, Section 2, Township 16S, Range 32E, Lea County, New Mexico.

1.0 Background

On May 23, 2017, according to the submitted C141, approximately 5 barrels (bbls) of produced water were released to the ground during a workover of the State Land 76 #001 well. A vacuum truck was on location during the entire workover process and recovered most of the fluids released on the ground. The released fluid flowed on the ground approximately 70 feet to the east of the well and covered a surface area of roughly 1,600 square feet (sq ft). The release was immediately reported to the New Mexico Oil Conservation Division (OCD) by telephone.

On June 15, 2017, a Release Notification and Corrective Action form (C-141) was submitted to the OCD. The C-141 was approved on June 15, 2017, and the release was assigned Spill No. 1RP-4722 and Incident # nOY1716629707. The release point and the surface extent of the release were depicted in the July 30, 2024 Closure Report.





Crain Environmental Figure February 4, 2025

A Remediation Summary and Closure Report was submitted to the OCD on July 30, 2024, and was rejected by the NMOCD on August 7, 2024, for the following reasons:

- Well data submitted is more than 25 years old. If nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, data must be no more than 25 years old, and well construction information must be provided. If evidence of depth to groundwater within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for groundwater at a depth of 50 feet or less. If no wells are within ½ mile of the site and/or the data from that well is more than 25 years old, a borehole can be drilled to 51' or 101'. If water is not detected in the open borehole after 72 hours, the OCD will accept this as a viable determination of depth to groundwater. A copy of the driller's log is required. Because Table 1 <50 feet to groundwater standards need to be used, S-1, S-14, S-19, and S-20 will need further remediation.
- Per Incident Events on 6/15/2017, Olivia Yu wrote, "Performing workover on site. Well flowback spilled over. Historic release at battery location. Combined well and battery releases into 1 RP." Samples will need collected around and within the tank battery to ensure no contamination remains there. Samples will also need collected north, west, and south of the wellhead. Due to this release being greater than 5 years old, samples need collected in 1 ft increments down to 4' depth.
- Since S-2 and S-3 were excavated, they need 5-point composite sidewall samples collected around the edges of the excavation to delineate the edges of the release and ensure all contamination was removed.
- Sample FW-1 is mentioned but no location is shown for its collection. Show on Figure.
- Pursuant to 19.15.29.12(E) NMAC "photographs of remediated site prior to backfill" need to be included and should clearly show the excavations. From the report I do not know the size of the excavations; up close photographs are needed to show what was done. They should be date/time stamped.



- Figure is not easy to read so it took time to figure out which samples were base samples and which were sidewalls. If you collected S-19 at 7' why weren't any sidewalls collected from 0-7"Explain.
- S-13 and S-14 appear to be sidewall samples but have a discrete sample depth listed...are they sidewall samples? If so, explain how 5-point composite sidewall samples are collected.
- Must test all samples for all Table I constituents unless a variance is requested and approved pursuant to 19.15.29.14 NMAC.
- Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.19.12.D.(1).(a) NMAC.
- Before collecting confirmation samples for next report, you must submit a C-141N on OCD Permitting at least two business days prior to sample collection or these samples will not be accepted for closure. Resubmit report to the OCD by 11/5/24.

On February 4, 2025 an updated Remediation Summary and Closure Report was submitted to the OCD. The remediation closure denied by NMOCD for the following:

- 1) DTGW is still not confirmed as unclear photos have been attached of the gauging event. The depth of the tape measure is not clearly seen. Clear photos must be provided of the gauging event in order to confirm depth to groundwater. If you do not provide clear photographic evidence, then the depth to groundwater is not confirmed and release must be remediated to most stringent standards.
- 2) Chain of Custody on pg. 292 says TH-5, 6, 7 were composite samples. Delineation samples are grab and confirmation samples are to be composite except for "wet or discolored areas" per 19.15.29.12(D)1 NMAC. Explain.
- 3) Describe the size of the excavation at TH-1. If OCD does not know how large an excavation is, we can not determine the correct number of samples to be collected. The only photo that refers to TH-1 looks like a surface scrape, not a 2' excavation. Explain.
- 4) You collected TH-5, 6, and 7 at 1' on 1/16/25 and there were TPH and chloride exceedances. Then you say you collected TH-5, 6, and 7 at 1' on 1/24/25 and they were below reclamation standards. How did that happen? How did chlorides go from 6,810 mg/kg and TPH 1,090 mg/kg in TH-5 at 1' to 71.4 mg/kg chlorides and <49.8 mg/kg TPH in 8 days?
- 5) Three test holes were dug to the south, east and north of the tank battery to provide vertical and horizontal delineation of TPH and chloride impacts. All three sample points were above reclamation limits, therefore horizontal delineation was not achieved. More horizontal delineation samples should be collected around the tank battery perimeter until it is horizontally delineated prior to excavation.



- 6) Hydrocarbon contamination seen clearly in TH-3 and TH-4. As the remediation of the former tank battery does not involve a major facility deconstruction, this site requires excavation with clear lines and with separate base samples and separate sidewall samples in order to ensure the entire release area is remediated properly. Samples must be five-point composite samples collected no more than every 200 square feet per 19.15.29.12(D)1(c) NMAC.
- 7) It appears FW-1 location is between the heater treater excavation and the area where S-19 and S-20 were collected. With TPH at 16,150 mg/kg this area requires remediation.
- 8) On pg. 11 you say this: "The final excavation in the heater treater area covered an approximate 1,300 square foot surface area." To find the number of base samples that should be collected you take 1,300/200=6.5 which should be rounded up to 7, 5-point composite samples should have been collected from the base of the heater treater excavation. As no clear photos of the excavation were ever included with this report ensure new ones are taken when you reopen the excavation and collect the required number of samples. Sidewall samples are to be collected every 200 square feet around the perimeter of the open excavation in addition to the 7 base samples.
- 9) On pg. 11 you say this: "The final excavation on the well pad covered an approximate 2,200 square foot surface area." The correct number of base samples that should be collected is 11. As no clear photos of the excavation were ever included with this report ensure new ones are taken when you reopen the excavation and collect the required number of samples. Sidewall samples are to be collected every 200 square feet around the perimeter of the open excavation.
- 10) Submit remediation closure report to the OCD by 5/13/25.

2.0 Additional Information and Third-Party Review

Because of the discrepancy between the actual excavation and the previously submitted figure imagery, on May 23, 2017, and February 4, 2025, Strata had a licensed New Mexico Surveyor mobilize to the location. On April 30th, 2025, Atkins Engineering Associates, INC.(Atkins) set up a base station to tie the surveyor rover unit and DJI drone to an AEA-established local network for RTK-GPS observations to get survey-quality positional data. The control point(s) and base were set up to the site's southwest. All attached figures include the geo-referenced drone imagery collected by Atkins April 30th. As shown in Figure 1, starting from the State Land 76 #001 wellhead and moving east, the excavations are

- 1. Center 32.95089 103.73479 has an area of 2430.94 ft² (nOY1716629707)
- 2. Center 32.95597 -103.73423 has an area of 2517.16 ft² (nOY1716629707)
- 3. Center 32.95604 -103.73407 has an area of 1954.04 ft² (nOY1716629707)
- 4. Center 32.95595 -103.73389 has an area of 28.42 ft² (possibly TH1)
- 5. Center 32.95586 -103.73349 has an area of 44.90 ft² (possibly TH5)
- 6. Center 32.95604 -103.73345 has an area of 208.12 ft² (possibly TH7)
- 7. Center 32.95594 -103.73333 has an area of 1248.61 ft² (possibly TH6)

The area within the fenced battery was found to be 7198.51 ft². All areas are based on the apparent edge of the excavation as found on April 30th, 2025 and verified by the excavator.



Additional DTGW data was submitted via email to Mike Bratcher, Incident Supervisor, by Mr. Cofer on April 16th, 2025(shown in Appendix). The reply stated,

"Mr. Cofer.

My understanding is this water well exists on the State Land 76 #1 well site. Since it is within ½ mile of the release, this will be sufficient for your depth to ground water determination. Is the water well being used for anything?"

Mr. Cofer's response was,

Sir,

Monitoring well is not on Well pad and it's use is for checking water levels and sampling.

It is to the west of the State Land 76 #1 well head approximately 275 feet, 210 feet from west side of State Land 76 Well pad.

Coordinates for State Land 76 #1 well head (32.9560852, -103.7349909)

Coordinates for Monitoring well L-03631 (32.9561609, -103.7356641)

In the Office of the State Engineer It is well # L-03631 use for checking water levels and sampling .If anything else needed please let me know

3.0 Overview of Activities

Below is an overview of activities performed by the operator and its contractor since the incident occurred, compiled from the NMOCD OCD Permitting - Incidents:

Туре	Action	Received	Denied	Approved
Remediation Closure Report	[368664]	07/30/2024	08/07/2024	
Remediation Closure Report Extension		08/15/2018		08/15/2018
Sampling Notice	[425355]	01/27/2025		01/27/2025
Sampling Notice	[423277]	01/22/2025		01/22/2025
Sampling Notice	[420210]	01/14/2025		01/14/2025
Sampling Notice	[385794]	09/23/2024		09/23/2024



Туре	Action	Received	Denied	Approved
Sampling Notice	[385577]	09/23/2024		09/23/2024
Sampling Notice	[376987]	08/23/2024		08/23/2024
Sampling Notice	[368666]	07/30/2024		07/30/2024
Deferral Request	[428712]	02/05/2025	03/14/2025	
Remediation Plan	[368664]	07/30/2024	08/07/2024	
Site Characterization	[368664]	07/30/2024	08/07/2024	
Initial C-141 Report		06/15/2017		06/15/2017
Notification		05/24/2017		05/24/2017

Strata has additionally found a submission of Revised Remediation Summary and Closure Report with Deferral Request on February 4, 2025.

4.0 Sampling Plan

Strata Resources is submitting a confirmation sampling plan due to the historical context of incident no. nOY1716629707. Strata is proposing a complete and new closure sampling event. To address the NMOCD concerns via the most recent denial, all aforementioned sample areas will be sampled.

- 1. Center 32.95089 -103.73479 has an area of 2430.94 ft² (nOY1716629707) 2430.94/200=12.15, Thirteen (13) bottom hole (BH) BH1-BH13 five-point composite samples will be collected as seen in Figure 2. With an excavation perimeter of 262 feet and a maximum depth of 5.5ft, the number of sidewall (SW) samples needed is (262X5.5)/200 =7.21 samples, or eight (8) SW1-SW8.
- 2. Center 32.95597 -103.73423 has an area of 2517.16 ft² (nOY1716629707) 2517/200=12.58, Thirteen (13) bottom hole (BH) BH14-BH27 five-point composite samples will be collected as seen in Figure 3. With an excavation perimeter of 405.33 feet and a maximum depth of 4 feet, the number of sidewall (SW) samples needed is $(405.33 \times 4)/200 = 8.06$ samples, or eight (8) SW9-SW17.
- 3. Center 32.95604 -103.73407 has an area of 1954.04 ft² (nOY1716629707) 1954.04/200=8.77 or Nine (9) bottom hole (BH) BH28-BH37 five-point composite



samples will be collected as seen in Figure 3. With an excavation perimeter of 179.03 feet and a maximum depth of 4 feet, the number of sidewall (SW) samples needed is $(179.03 \times 4)/200 = 3.58$ samples, or six (6) SW18-SW24.

- 4. Center 32.95595 -103.73389 has an area of 28.42 ft² (possibly TH1)
- 5. Center 32.95586 -103.73349 has an area of 44.90 ft² (possibly TH5)
- 6. Center 32.95604 -103.73345 has an area of 208.12 ft² (possibly TH7)
- 7. Center 32.95594 -103.73333 has an area of 1248.61 ft² (possibly TH6) 1248.61/200= 6.24 or Seven bottom hole (BH) BH38-BH45 five-point composite samples will be collected as seen in Figure 4. With an excavation perimeter of 173.83 feet and a maximum depth of 1 foot, the number of sidewell (SW) samples needed is (179.03 × 1)/200 =0.86 samples, or four (4) SW25-SW29.

Sidewalls samples SW1-SW24 will be collected in corresponding depths near the surrounding excavation areas.

All confirmation BH samples will comprise 5-point composite samples, each representing 200 ft² surface area. Shown in Illustration 1 below BH boreholes will be 5-point composite samples. Similarly, the yellow box represents the 200 ft² area around SP4 and the 5 boreholes locations as shown in Illustration 1. Sidewall samples will be collected based on Illustration 1 composites of each interval at depth along the sidewall.

Illustration 1

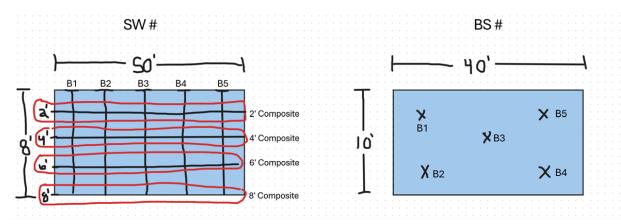
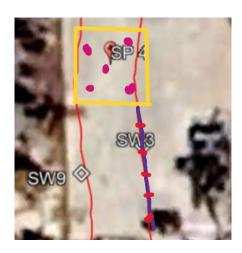


Illustration 1 is method only not square feet

Example 1





Samples will be collected using a gas powered rock drill- solid stem and all samples taken by Strata mentioned above will be collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel, and gasoline range organics (MRO, DRO, & GRO) by EPA Method 8015D.

If contamination is encountered above closure criteria, the following steps will be taken:

- 1. Delineate contamination vertically and laterally. Collect samples and send them for laboratory analysis.
- 2. Submit a remediation plan to NMOCD based on results from laboratory analysis within 15-30 business days.

If contamination is not encountered above closure criteria, the following steps will be taken

1. Submit a remediation closure report to NMOCD within 15-30 business days utilizing the samples taken from this plan as confirmation closure samples.

5.0 Deferral Area Sample Request

As stated in the February 4, 2025 an updated Remediation Summary and Closure Report, "Three test holes were dug to the south (TH-5), east (TH-6), and north (TH-7) of the tank battery to provide vertical and horizontal delineation of TPH and chloride impacts. Soil samples were collected from depths of 1' and 4.1' bgs at each test hole on January 16, 2025. On January 24, 2025, soil samples were collected from each test hole at a depth of 1' bgs from the side of the hole farthest from the battery."

Strata proposes an updated battery delineation to address the NMOCD's concerns about the sample areas TH1-TH7.





Crain Environmental Figure February 4, 2025

Strata will delineate the areas of concern in and around the fenced battery, see proposed sample locations in Figure 4 labeled Delineation (D) D1-9.

Strata respectfully selected sample areas as close to the equipment as possible to prevent production disruption and avoid safety hazards caused by line strike or fire. As shown in Figure 4, the impacted soil has been removed from the site except for the soil within three feet of the storage tanks. Work will be scheduled after NMOCD and client approval of the sampling plan.

6.0 Scope and Limitations

The scope of our services included: assessment sampling, verifying release stabilizations; regulatory liaison; remediation; and preparation of this sampling plan. 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 Hayden Acosta at (505) 249-9506 or hayden@strataresourcesllc.com

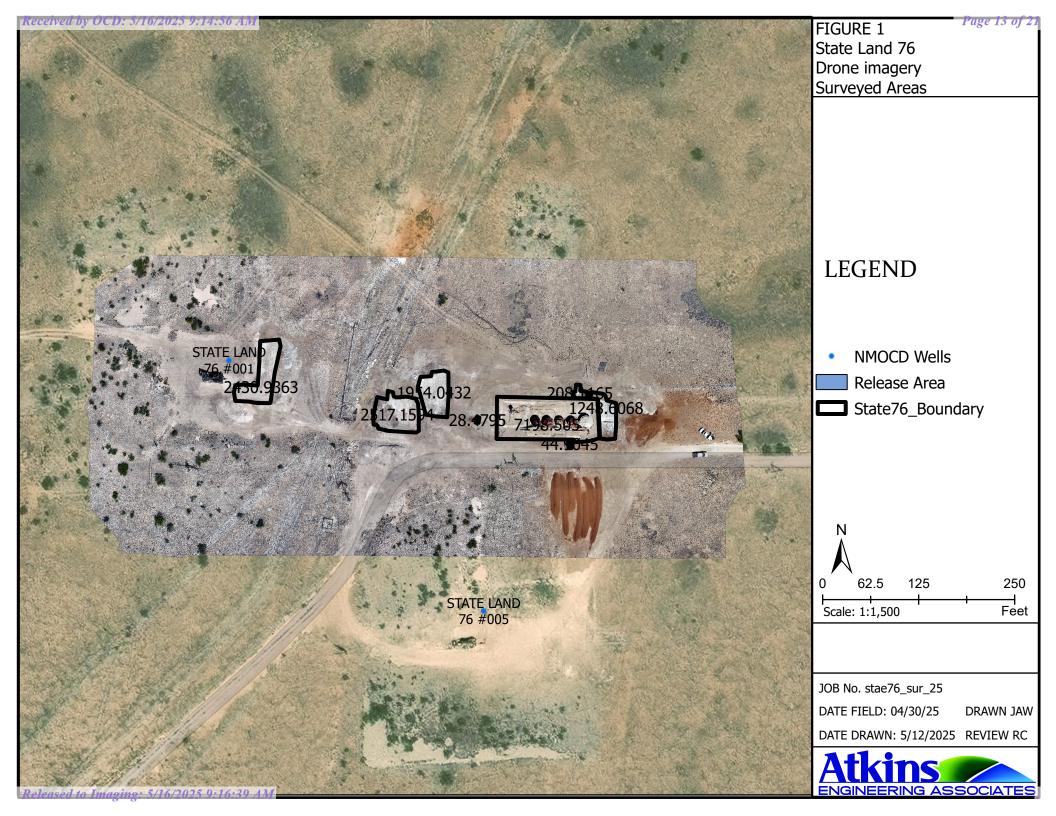
Submitted by:

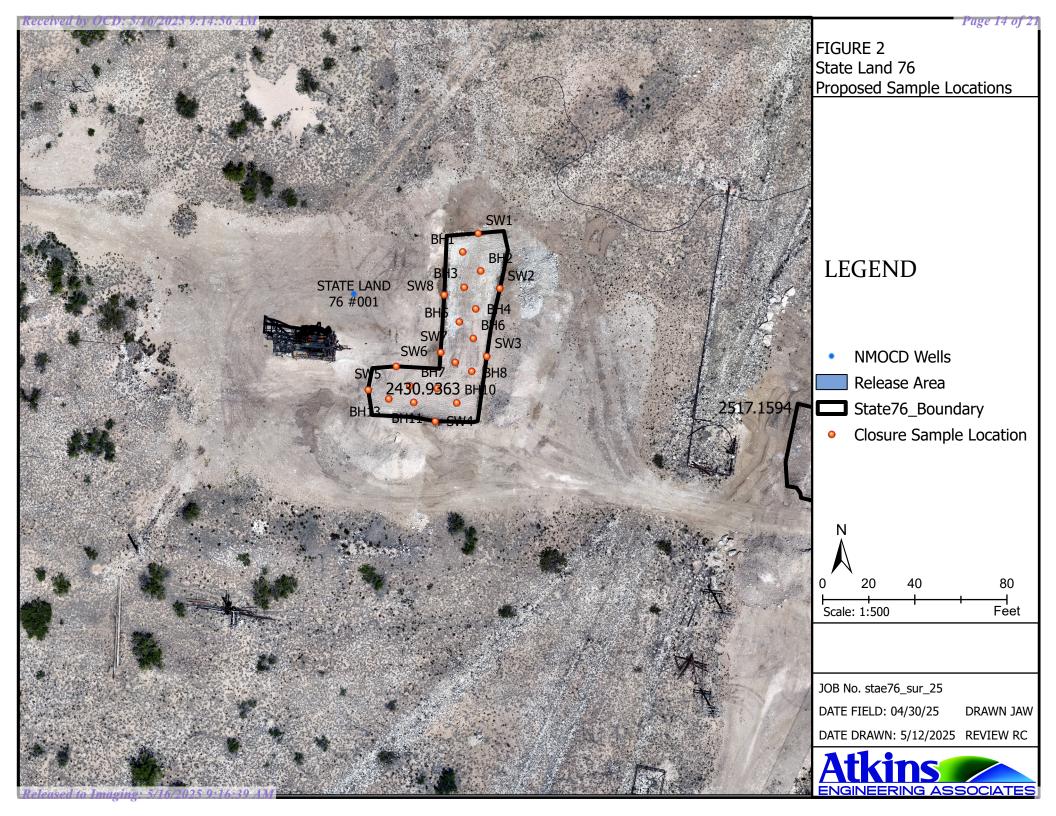
Strata Resources, LLC

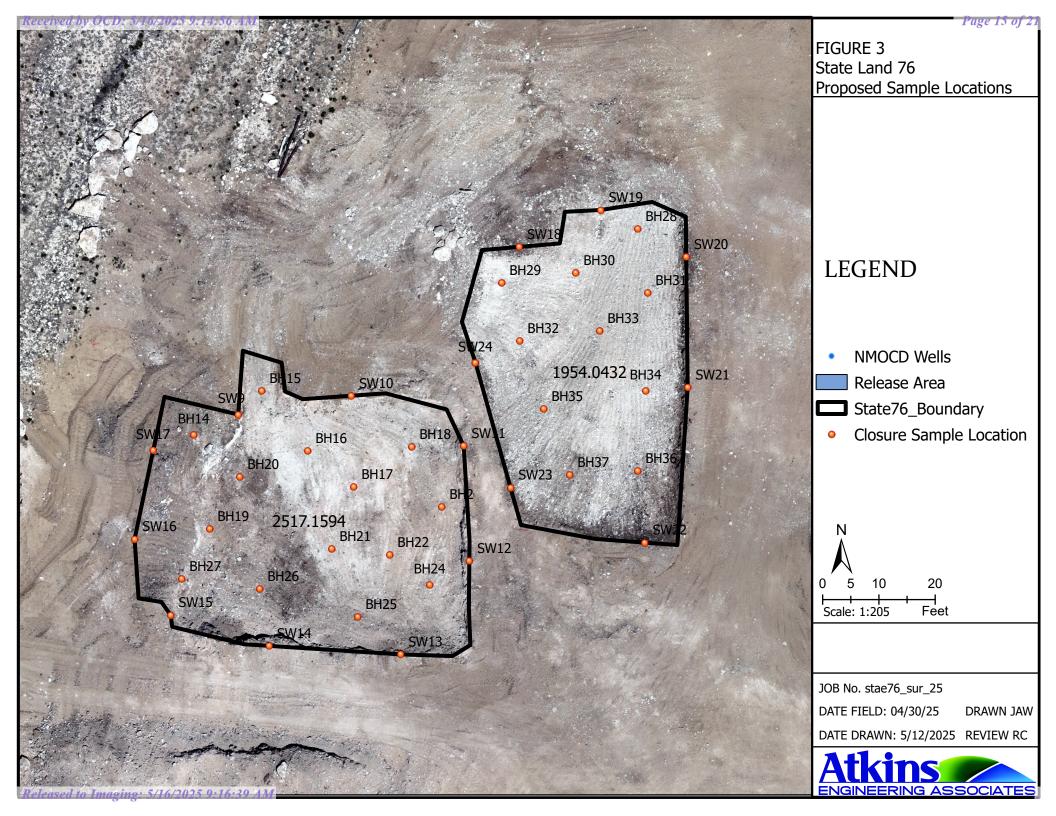
Hayden Acosta, Project Scientist

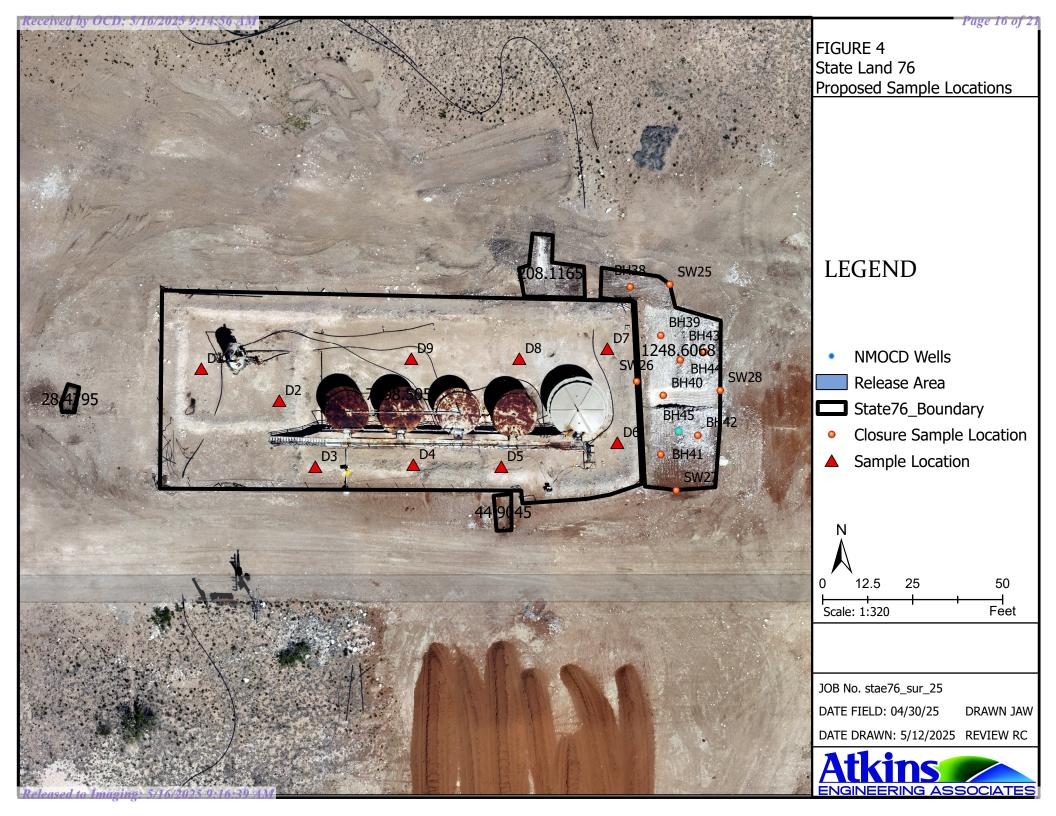


FIGURES



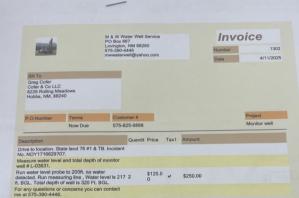








APPENDIX A: NMOSE WELLS REPORT



HA 10, 2029 Work Done

Amount Paid	\$0.00		
Amount Due	\$267.50		

Shipping Cost	\$0.00	
Sub Total	\$250.00	
Sales Tax 7.00% on \$250.00	\$17.50	

\$267.50

	0 - 30 days	31 - 60 days	61 - 90 days	> 90 days	Total		
П	\$267.50	\$0.00	\$0.00	\$0.00	\$267.50		





Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 464092

CONDITIONS

Operator:	OGRID:		
COFER & CO LLC	331911		
8226 Rolling Meadows	Action Number:		
Hobbs, NM 88240	464092		
	Action Type:		
	[IM-SD] Incident File Support Doc (ENV) (IM-BNF)		
CONDITIONS			

CONDITIONS

(Created By	Condition	Condition Date	
	scwells	None	5/16/2025	