



October 1, 2024

District Supervisor  
Oil Conservation Division, District 1  
1625 North French Drive  
Hobbs, New Mexico 88240

**Re: Remediation and Reclamation Closure Report  
ConocoPhillips Company (Heritage COG Operating, LLC)  
Way South State Com #001H Tin Horn Release  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico  
Incident ID# nAB1821441824  
Landowner: NMSLO**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (ConocoPhillips) to assess a release that occurred from a tin horn associated with the Way South State Com #001H well (API No. 30-015-37324). The release footprint is located within the Public Land Survey System (PLSS) Unit Letter A, Section 30, Township 26 South, Range 28 East, in Eddy County, New Mexico (Site). The Site coordinates are approximately 32.018655°, -104.120179°, as shown on Figures 1 and 2.

## BACKGROUND

According to the State of New Mexico C-141 Initial Report, the release was discovered on July 28, 2018. Approximately 72 barrels (bbls) of produced water and 0.1 bbl of oil were released due to a hole on the check valve. A vacuum truck was dispatched to remove all freestanding fluids. Approximately 60 bbls of produced water and no oil was recovered. The release impacted areas in pasture east of the tin horn. The New Mexico Oil Conservation District (NMOCD) approved the initial C-141 on August 2, 2018 and assigned the release the Incident ID nAB1821441824.

## LAND OWNERSHIP

According to the NMOCD Oil and Gas Map, the site is located on New Mexico State trust land. A review of the New Mexico State Land Office (NMSLO) Land Status Map was completed, and the site is within active oil and gas lease V074510003. The active lease is under Concho Oil & Gas LLC/COG Operations LLC. Based on guidance provided by the NMSLO, as the release footprint is located on an active oil and gas lease and the footprint is wholly located within the boundaries of the active oil and gas lease, no Remediation Right of Entry (ROE) is required at the Site.

## CULTURAL PROPERTIES PROTECTION

Tetra Tech, on behalf of ConocoPhillips, contracted SWCA Environmental Consultants (SWCA) to conduct an intensive pedestrian survey in support of a permit application to install monitoring wells at the adjacent Way South Com #001H Tank Battery release (Incident ID nRM2008650013). The proposed area of potential effects (APE) for the proposed monitoring well is a 10-acre block on NMSLO-managed land in Eddy County, New Mexico. On April 17, 2023, SWCA surveyed a 100-foot buffer on all sides of the proposed monitoring well project area for a total survey area of 18.15 acres. No archaeological sites, historic

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properties, or isolated occurrences were observed during the investigation. No additional investigation or treatment was recommended regarding the current undertaking. A copy of the NMCRIS Activity No. 152756 is included in previous reporting available in the NMOCD Permitting files for the release incident.

## SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, or subsurface mines are located within the distances specified in 19.15.0029 New Mexico Administrative Code (NMAC). A Federal Emergency Management Agency (FEMA) Flood Hazard Area Zone A partially encompasses the Site. The Site is also located within 100 feet of a watercourse mapped by the New Mexico Office of the State Engineers (NMOSE). The Site is in an area of high karst potential.

The Site is within a New Mexico oil and gas production area. There are no water wells listed in the NMOSE reporting system located within a ½ mile (800-meter) radius of the Site. The nearest well with recent groundwater data is located approximately 0.83 miles (1,338 meters) from the Site with a depth to water of 33 feet below ground surface (bgs). The site characterization data is included in Appendix B.

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine that the recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil default to the most stringent Table 1 values:

CONSTITUENT	RRAL
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

## TALON SITE ASSESSMENT

Talon/LPE (Talon) conducted initial site assessment sampling on behalf of Concho in November 2018. Talon personnel installed two (2) boreholes (B1 and B2) within the release extent to 8 feet bgs and 12 feet bgs, respectively. Select samples were sent to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA method 8021B, and chloride by EPA method SM4500Cl-B. The borehole locations are shown on Figure 3.

The analytical results are summarized in Table 1. Analytical results associated with all samples collected from boring B2 indicated chloride concentrations above the Site RRAL of 600 mg/kg. The highest chloride concentration analyzed was 12,400 mg/kg at 4 feet bgs, and concentrations declined with depth to 1,120 mg/kg at 12 feet bgs. Analytical results for chloride associated with boring B1 were below the Site RRAL of 600 mg/kg in both soil intervals. Analytical results for TPH, BTEX, and benzene were below the Site RRALs in all analyzed samples from both borings.

## TETRA TECH SITE ASSESSMENT

Based on the laboratory data from the Talon Site Assessment, Tetra Tech personnel were onsite on December 20, 2018, to install one borehole (BH #1) in the area of previous Talon borehole B2 to a total depth of 15 feet bgs in order to vertically delineate the impact. In addition, a background borehole was installed to depth of 15 feet bgs to evaluate the native soils. Selected soil samples were collected and submitted to Xenco Laboratories in Midland, Texas to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300. Sample locations from the December 2018 site assessment activities are shown on Figure 3.

The results of the laboratory analysis associated with the samples collected in December 2018 are summarized in Table 2. Analytical results associated with soil samples from BH #1 indicated TPH, benzene, and total BTEX below the reporting limits. Analytical results associated with both boring BH-1 and the background boring indicated chloride concentrations above the Site RRAL (600 mg/kg) in sampling intervals from the surface to 15 feet bgs. Chloride concentrations in boring BH #1 were 9,760 mg/kg at the surface, increased to 13,400 mg/kg at 4-5 feet bgs, and then declined with depth to 646 mg/kg at 14-15 feet bgs. Chloride concentrations at the background boring increased from 851 mg/kg at the surface to 3,000 mg/kg at 2-3 feet bgs, and then declined to 822 mg/kg at 14-15 feet bgs.

## 2019 WORK PLAN AND NMOCD REJECTION

Tetra Tech prepared a Work Plan on behalf of Concho dated February 13, 2019 that included a summary of the results of site assessment activities and a proposal to remediate the impacted soils. Due to access issues and safety concerns, the proposed excavation involved removing the impacted soils to the maximum extent practicable. In the area of borehole B1, impacted soils would be excavated to between 3.5 and 4 feet bgs. In the area of boreholes B2 and BH #1, impacted soils would be excavated to between 9 and 10 feet bgs. The excavated areas would be backfilled with clean materials to surface grade. Excavated soils would be transported offsite for proper disposal to an NMOCD-approved or permitted facility. Approximately 115 cubic yards would be excavated during the proposed remediation. Confirmation samples were proposed for collection every 200 square feet in order to ensure proper removal of the impacted areas.

The Work Plan noted that the proposed excavation depths may not be reached due to safety concerns for onsite personnel as well as impacted soils around oil and gas equipment, structures, or subsurface lines may not be viable or practicable to be removed. As such, Concho would excavate the impacted soils to the maximum extent practicable. The Work Plan was submitted to the NMOCD for approval. A copy of the Work Plan is available on the NMOCD Permitting site under the incident ID.

The NMOCD rejected the Work Plan in an email dated November 28, 2022 for the following reasons:

- *“The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.*
- *Horizontal delineation submitted was incomplete and did not meet the requirements of 19.15.29.11 NMAC. The values for determination of horizontal impact are derived by Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for “on-pad” releases to ensure the release did not extend to the “off-pad”/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved “background” values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation.*
- *2RP-4888 closed. Please refer to incident #nAB1821441824 in all future communications.*
- *Background sample(s) should be a grab, not composite, sample(s) should be gathered in areas undisturbed by oil and gas activities, nominally uphill from the release area, and no closer than 50 feet but no farther than 100 feet from the lateral and horizontal extents of a release’s impact. The background sampling should be representative of the entire horizontal and vertical extent of the release. The background sample cannot be approved based on delineation is incomplete.*
- *Please submit a complete report through the OCD Permitting website by 3/3/2023.”*

The NMOCD approved a request for a 90-day extension was approved via email on February 28, 2023. and a second 90-day extension was approved via email on June 2, 2023. An additional 90-day extension request was approved in an email dated October 31, 2023 for a new due date of December 3, 2023. Copies of the regulatory correspondence are included as Appendix C.

## 2023 HORIZONTAL DELINEATION SAMPLING

Following receipt of the NMOCD rejection of the 2019 Work Plan, Tetra Tech conducted additional assessment sampling at the Site on behalf of ConocoPhillips in order to complete horizontal delineation of the release. On May 11, 2023, Tetra Tech personnel installed six (6) hand auger borings (AH-23-1 through AH-23-6) along the perimeter of the reported release extent to complete horizontal delineation. Horizontal sampling locations were placed 15 feet or more away from buried lines out of safety considerations. The 2023 boring locations and a revised release extent based on historical aerial imagery and observations made in the field are presented on Figure 3.

A total of six (6) samples were collected from the 0-1 foot bgs soil interval from each of the borings and submitted to Cardinal to be analyzed for chloride via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8261B. Analytical results from the 2023 horizontal delineation soil assessment activities are summarized in Table 3. All analytical results were below the applicable Site RRALs for all constituents. Horizontal delineation was achieved following the May 2023 additional assessment activities.

## 2023 REVISED REMEDIATION WORK PLAN

A Revised Remediation Work Plan was submitted by Tetra Tech on behalf of ConocoPhillips, dated December 1, 2023, to the NMOCD via the portal describing the additional horizontal assessment activities and sampling results. Additionally, based on an average chloride concentration from the samples collected from the background boring (Table 2), ConocoPhillips proposed a revised chloride RRAL for subsurface soil of 1,450 mg/kg, due to the naturally variable chloride concentrations in native soils.

The NMOCD rejected the Revised Work Plan in an email from Ms. Brittany Hall dated December 28, 2023 with the following comments:

- *“Due to the site being partially encompassed by a FEMA Flood Hazard Area Zone A, within 100 feet of a watercourse mapped by the NMOSE, in an area of high karst potential, in an area of shallow groundwater, and the age of the analytical data for the background; the OCD is requesting a new background borehole be installed within the vicinity of the 2018 background borehole before approving background chloride concentrations. Please send at least a 2-business day notification to the OCD Enviro email and Robert Hamlet (robert.hamlet@emnrd.nm.gov), prior to installing the borehole and collecting background samples. OCD would like to witness the boring and sampling, if available.*
- *Submit a complete report through the OCD Permitting website by 5/6/2024.”*

The associated comments can be found on the OCD Permitting website.

## REGULATORY REVIEW AND REQUEST FOR ADDITIONAL INFORMATION

The Revised Work Plan was also sent to NMSLO for review via email dated December 27, 2023. In an email dated January 4, 2024, Ms. Tami Knight wrote the following:

- *“ECO has reviewed the workplan and NMOCD comments. We do agree with NMOCD and would like to witness a new background soil boring. However, we believe it would be more beneficial to determine background chlorides by selecting a new sample location, not near the 2018 boring. We have also opened the discussion with NMOCD regarding the soil boring location. ECO has concerns about selecting a new sample point due the erosional features coming off the ROW north of the spill location which appears to have had releases along it's path also.*
- *We are available to discuss this project with your team and NMOCD.”*

A conference call was held on January 5, 2024 with representatives from ConocoPhillips and Tetra Tech, Ms. Brittany Hall of the NMOCD, and Ms. Tami Knight of the NMSLO, to discuss the ideal placement for the requested additional background soil boring. After review of the site conditions in the vicinity of the tin

horn and the right-of-way, a location approximately 100 feet due north of the release extent (presented in the image below) was selected for the background boring. That location was agreed upon by Tami Knight of NMSLO ECO and Brittany Hall of NMOCD. ConocoPhillips then proceeded to procure a right-of-entry permit from the NMSLO Commercial Resources Division. A copy of the associated regulatory correspondence is included in previous reporting available in the NMOCD Permitting incident files.

### ADDITIONAL BACKGROUND SOIL SAMPLING

Tetra Tech remobilized to the Site on April 17, 2024 to oversee the installation of the requested background boring (BG-24-1) at the previously agreed-upon location. The boring was installed using an air rotary drill rig to a total depth of 20 feet bgs. The boring location is presented on Figure 3. Samples were collected on one-foot centers and submitted to Cardinal to be analyzed for chloride via standard method 4500.

Analytical results from the 2024 background soil assessment activities are summarized in Table 4. Chloride concentrations at this new background boring location were 1340 mg/kg in the 0-1 foot bgs soil interval, increased to 5,040 mg/kg at 1-2 feet bgs, declined to 544 mg/kg at 4-5 feet bgs, and then were relatively consistent in from 5 to 19 feet bgs, ranging from 1230 mg/kg to 1810 mg/kg before declining to 688 mg/kg at the terminal sampling interval of 19-20 feet bgs.

Thus, consistent with the previous background soil boring, it was confirmed that chloride concentrations do indeed vary in native soils. Based on this determination, the soils in the 14-15 foot bgs sample interval at boring BH-1 (within the footprint), which had a chloride concentration of 646 mg/kg, were proposed to be left in place. These soils in the release footprint are characterized by a lower concentration than the same depth interval in the background boring outside the release footprint.

### 2024 REMEDIATION WORK PLAN AND NMOCD APPROVAL

Tetra Tech, on behalf of ConocoPhillips, prepared a Revised Remediation Work Plan ADDENDUM dated May 6, 2024 (2024 Remediation Work Plan) and submitted it to the NMOCD and the NMSLO for approval. The 2024 Remediation Work Plan incorporated the results of the additional background soil sampling.

The 2024 Remediation Work Plan was approved via email by Nelson Velez of the NMOCD on May 9, 2024, with the following conditions:

- *“Remediation plan is approved under the following conditions;*
  1. *Based on the sampling conducted, only Total Petroleum Hydrocarbons (TPH) and chloride are required for laboratory analysis from this point forward.*
  2. *Based on the most recent background boring in determining the closure standard for chloride, OCD approves administering 1,400 mg/Kg (averaged taken below 4 ft.) for soils greater than four (4) feet (ft.) below grade.*
  3. *Remediation of the top 4 ft. must meet the reclamation standards of 600 mg/Kg for chloride and 100 mg/Kg for TPH.*
  4. *Site reclamation and restoration plan as described in the report is approved.*
  5. *Per 19.15.29.13E NMAC, if a reclamation and/or revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and/or revegetation report will need to be submitted to the OCD via the Permitting website.*
  6. *COP has 90-days (August 7, 2024) to submit to OCD its appropriate or final remediation closure report.”*

The 2024 Remediation Work Plan was submitted to the NMSLO via email on June 11, 2024, and approved by Tami Knight on June 21, 2024.

An extension request was approved by the NMOCD via email dated August 14, 2024 for a revised deadline of October 7, 2024. Copies of the regulatory correspondence are included in Appendix C.

## REVISED REGULATORY FRAMEWORK

Based upon the additional background soil sampling analytical results, and established by the NMOCD and NMSLO approval of the 2024 Remediation Work Plan, the revised RRALs for the Site are as follows:

CONSTITUENT	RRAL
Chloride (Surface Soils 0-4 ft bgs)	600 mg/kg
Chloride (Subsurface Soils >4 ft bgs)	1,400 mg/kg
TPH	100 mg/kg

## REMEDIAL ACTIVITIES AND CONFIRMATION SAMPLING

From September 4-10, 2024, Tetra Tech personnel were onsite to supervise the remedial activities proposed in the approved R2024 Remediation Work Plan, including excavation, disposal, and confirmation sampling. Prior to confirmation sampling, on September 4, 2024, the NMOCD district office was first notified via the OCD Portal in accordance with Subsection D of 19.15.29.12 NMAC. A variance request to begin confirmation sampling outside of the initial notice period with less than 48 hours' notice was approved by the NMOCD on September 5, 2024. Regulatory correspondence, including the approved extension request and release notifications and variance request are documented in Appendix C.

Impacted soils were excavated as indicated in Figure 4. The areas within the release footprint were excavated to a maximum depth of 10 feet below surrounding grade. The excavation was benched with a 6-foot and a 4-foot section to remove all soils above the Site RRALs and reclamation limits and to prevent cave-ins and protect personnel.

Due to safety concerns associated with working around pressurized lines, impacted soils were excavated by hand or hydro-excavation within 4 feet of subsurface lines. Heavy machinery remained outside this buffer zone to avoid any associated risk or disturbance. The remediated surface area was comprised of approximately 625 square feet. Photographs from the excavated areas prior to backfill are provided in Appendix D.

Following excavation, confirmation floor and sidewall samples were collected from the entire remediated area and submitted for laboratory analysis to verify efficacy of remediation activities. Per the NMOCD approved confirmation sampling plan, confirmation samples were collected such that each discrete sample (sidewall and floor) was representative of no more than 200 square feet of excavated area. A total of three (3) confirmation floor sample locations, three (3) confirmation sidewall sample locations, and two (2) confirmation interior sidewall locations were collected for laboratory analysis during remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with FS-#. Internal sidewall samples were collected from the vertical faces of the excavation between the 4-foot and 6-foot areas and labeled with ISW-#. Final excavated areas, depths and confirmation sample locations are indicated in Figure 4.

Collected confirmation samples were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH (GRO+DRO+MRO) by EPA Method 8015M and chlorides by SM4500CI-B. The soils samples were not analyzed for BTEX, in accordance with the 2024 Remediation Work Plan conditions of approval. The analytical results were directly compared to the reclamation limits and established Site RRALs to demonstrate compliance.

The results of the September 2024 confirmation sampling events are summarized in Table 5. All final confirmation soil samples (floor and sidewall) were below the applicable cleanup levels for chloride and TPH. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E.

All excavated material was transported offsite for proper disposal. Approximately 165 cubic yards of material were transported to the R360 Red Bluff Facility in Orla, TX. Copies of the waste manifests are included as Appendix F.

## RECLAMATION ACTIVITIES

Based on 19.15.29.13 NMAC, all areas disturbed by the remediation have been reclaimed. Collected confirmation samples were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH (GRO+DRO+MRO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chlorides by SM4500Cl-B. The analytical results were directly compared to the reclamation requirements and established Site RRALs to demonstrate compliance. All final confirmation soil samples (floor and sidewall) were below the reclamation limits for chloride, TPH, and BTEX. Excavated areas, depths and confirmation sample locations are indicated in Figure 4. The results of the September 2024 confirmation sampling events are summarized in Table 5.

Once acceptable confirmation sample results were received, the excavation was backfilled with clean material to pre-release grade. In accordance with 19.15.29.12 NMAC, the reclaimed area contained a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0. The soil cover included a top layer consisting of one foot of suitable material to establish vegetation at the site. The backfilled areas in the pasture were seeded following backfilling, to aid in revegetation. Based on the soils of the site, the NMSLO Loamy (L) Sites Seed Mixture was used for seeding and was planted in the amount specified in the pounds pure live seed (PLS) per acre.

The backfill material was sourced from the R360 Red Bluff Facility. Thirty-six (36) representative soil samples were collected by R360 from the backfill material used for the reclamation of the project site on September 5, 2024 and sent to Eurofins in Carlsbad, New Mexico to be analyzed for chlorides by EPA Method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E.

Site inspections will be performed annually to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. Reclamation activities have been implemented in consultation with the NMSLO.

## CONCLUSION

ConocoPhillips respectfully requests closure of the incident based on the confirmation sampling results and remedial activities performed. The final C-141 forms are enclosed in Appendix A.

Remediation and Reclamation Closure Report  
October 1, 2024

ConocoPhillips

If you have any questions concerning the remediation activities for the Site, please call me at (512) 739-7874 or Christian at (512) 338-2861.

Sincerely,

**Tetra Tech, Inc.**



Samantha Abbott, P.G.  
Project Manager



Christian M. Llull, P.G.  
Program Manager

cc:

Mr. Ike Tavarez, RMR – ConocoPhillips  
Ms. Tami Knight, ECO

## LIST OF ATTACHMENTS

### Figures:

- Figure 1 – Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Approximate Release Extent and Site Assessment
- Figure 4 – Proposed Remediation Extent

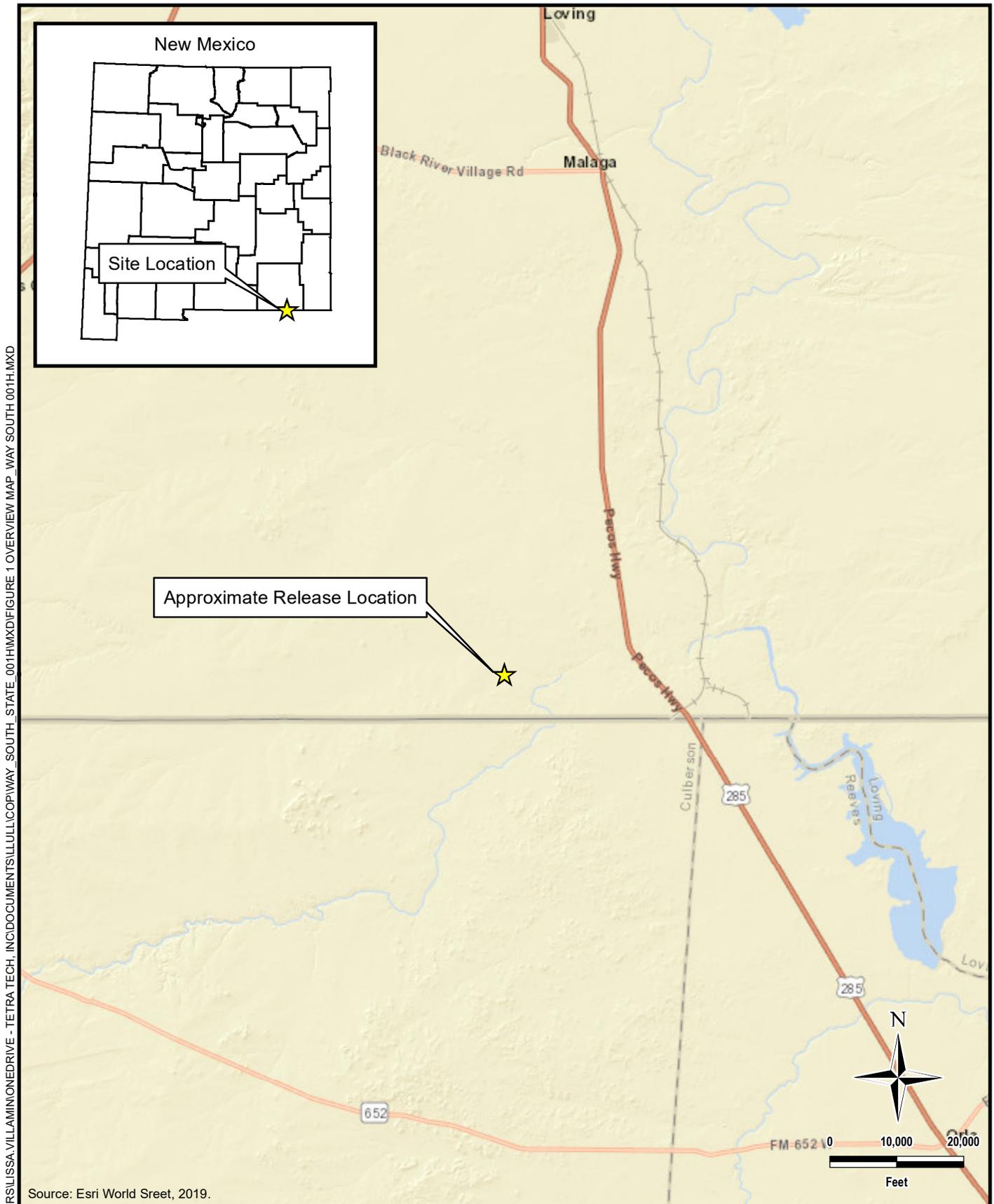
### Tables:

- Table 1 – Summary of Analytical Results – 2018 Soil Assessment (Talon)
- Table 2 – Summary of Analytical Results – 2018 Soil Assessment (Tetra Tech)
- Table 3 – Summary of Analytical Results – 2023 Soil Assessment (Tetra Tech)

### Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Regulatory Correspondence
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Analytical Data
- Appendix F – Waste Manifests

## FIGURES



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Source: Esri World Sreet, 2019.



**TETRA TECH**

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**CONOCOPHILLIPS**

NAB1821441824  
EDDY COUNTY, NEW MEXICO  
(32.018655°, -104.120179°)

**WAY SOUTH STATE COM #001H  
OVERVIEW MAP**

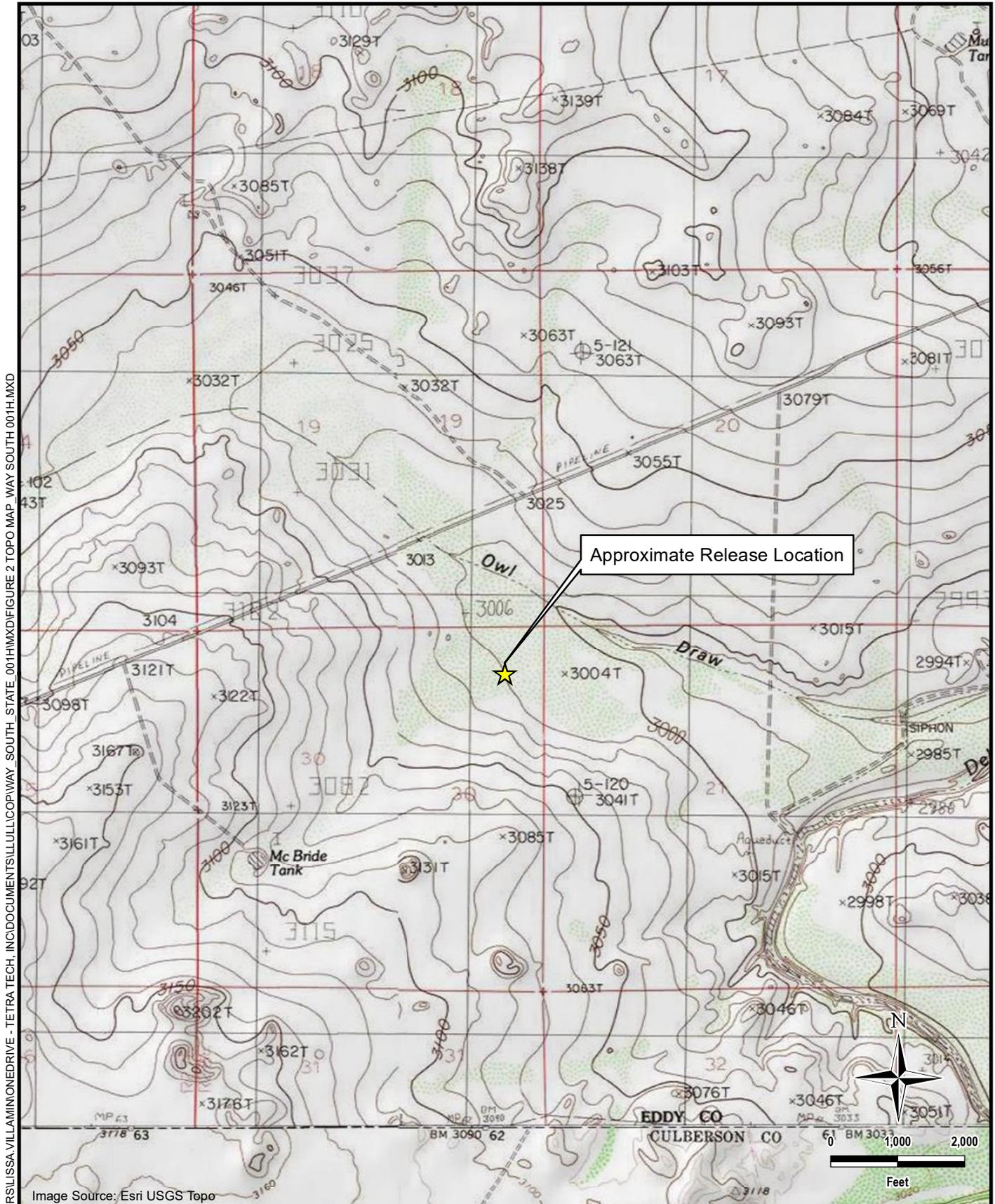
PROJECT NO.: 212C-MD-02994

DATE: MAY 16, 2023

DESIGNED BY: LMV

Figure No.

**1**



DOCUMENT PATH: C:\USERS\LISSA.VILLAMONEDRIVE - TETRA TECH, INC\DOCUMENTS\ILLULLICOPWAY SOUTH STATE 001H\MXD\FIGURE 2 TOPO MAP\_WAY SOUTH 001H.MXD



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CONOCOPHILLIPS

NAB1821441824  
EDDY COUNTY, NEW MEXICO  
(32.018655°, -104.120179°)

**WAY SOUTH STATE COM #001H  
TOPOGRAPHIC MAP**

PROJECT NO.: 212C-MD-02994

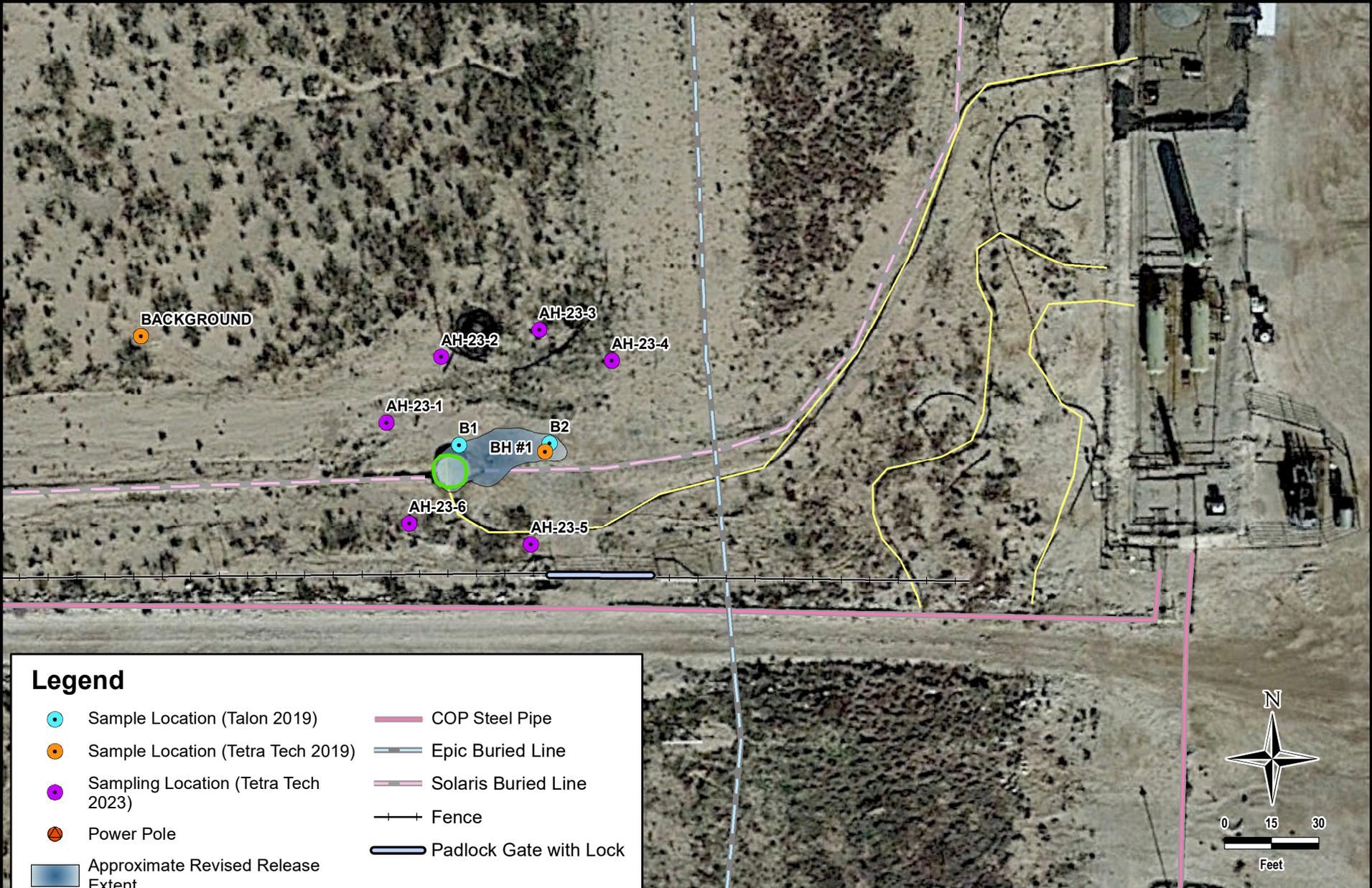
DATE: MAY 16, 2023

DESIGNED BY: LMV

Figure No.

**2**

DOCUMENT PATH: C:\USERS\LISSA.VILLAMONEDRIVE - TETRA TECH, INC\DOCUMENTS\11111\COPYWAY SOUTH STATE 001H\_212C-MD-02994\MXD\FIGURE 3 APPROX RELEASE & ASSESS WAY SOUTH 001H.MXD



### Legend

- Sample Location (Talon 2019)
- Sample Location (Tetra Tech 2019)
- Sampling Location (Tetra Tech 2023)
- ⦿ Power Pole
- Approximate Revised Release Extent
- Tin Horn
- COP Polyline
- COP Steel Pipe
- Epic Buried Line
- Solaris Buried Line
- Fence
- Padlock Gate with Lock

Image Source: Google Earth.

**TETRA TECH**

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**CONOCOPHILLIPS**

NAB1821441824  
 EDDY COUNTY, NEW MEXICO  
 (32.018655°, -104.120179°)

**WAY SOUTH STATE COM #001H**

**APPROXIMATE RELEASE EXTENT AND SITE ASSESSMENT**

PROJECT NO.:	212C-MD-02994
DATE:	DECEMBER 01, 2023
DESIGNED BY:	LMV
Figure No.	<b>3</b>

DOCUMENT PATH: Y:\CONOCOPHILLIPS\WAY SOUTH STATE 001H - 212C-MD-02994\MXD\FIGURE 4 REMEDIATION & CONFIRMATION WAY SOUTH 001H.MXD



**Legend**

- Confirmation Floor Sample Location
- Confirmation Interior Sidewall Sample Location
- Confirmation Sidewall Sample Location
- Tin Horn
- Excavation - 4 ft bgs
- Excavation - 6 ft bgs
- Excavation - 10' bgs
- Padlocked Gate
- COP Polyline
- COP Steel Pipe
- Epic Buried Line
- Solaris Buried Line
- Fence

BGS: Below Ground Surface  
Image Source: Google Earth.

<p><b>TETRA TECH</b></p> <p>www.tetratech.com</p> <p>901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p><b>CONOCOPHILLIPS</b></p> <p>NAB1821441824 EDDY COUNTY, NEW MEXICO (32.018655°, -104.120179°)</p>	<p>PROJECT NO.: 212C-MD-02994</p>
	<p><b>WAY SOUTH STATE COM #001H</b></p> <p><b>REMEDICATION EXTENTS AND CONFIRMATION SAMPLING LOCATIONS</b></p>	<p>DATE: SEPTEMBER 25, 2024</p> <p>DESIGNED BY: LMV</p>
		<p>Figure No.</p> <p><b>4</b></p>

# **TABLES**

TABLE 1  
 SUMMARY OF ANALYTICAL RESULTS  
 2018 SOIL ASSESSMENT (TALON) - nAB1821441824  
 CONOCOPHILLIPS  
 WAY SOUTH STATE COM #001H  
 EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>						
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	
B1	11/28/2018	4	208		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		25.9		18.4		44.3
		8	288		-		-		-		-		-		-		-		-		-
B2	11/28/2018	4	<b>12,400</b>		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
		8	<b>1,120</b>		-		-		-		-		-		-		-		-		-
		9	<b>3,680</b>		-		-		-		-		-		-		-		-		-
		10	<b>976</b>		-		-		-		-		-		-		-		-		-
		11	<b>1,280</b>		-		-		-		-		-		-		-		-		-
		12	<b>1,120</b>		-		-		-		-		-		-		-		-		-

NOTES:

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- Sample not analyzed for parameter
- 1 Method SM4500Cl-B
- 2 Method 8021B
- 3 Method 8015M

***Bold and italicized values indicate exceedance of proposed Remediation RRALs and/or Reclamation Requirements.***

QUALIFIERS:

TABLE 2  
 SUMMARY OF ANALYTICAL RESULTS  
 2018 SOIL ASSESSMENT (TETRA TECH) - nAB1821441824  
 CONOCOPHILLIPS  
 WAY SOUTH STATE COM#001H  
 EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>											
					Benzene		Toluene		Ethylbenzene		m,p-Xylenes		o-Xylene		Total Xylenes		Total BTEX		GRO		DRO		MRO		Total TPH	
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
BH # 1	12/20/2018	0-1	<b>9,760</b>		<0.00200		<0.00200		<0.00200		<0.00399		<0.00200		<0.00200		<15.0		<15.0		<15.0		-			
		2-3	<b>10,900</b>		<0.00199		<0.00199		<0.00199		<0.00398		<0.00199		<0.00199		25.7		<15.0		<15.0		25.7			
		4-5	<b>13,400</b>		-		-		-		-		-		-		-		-		-		-			
		6-7	<b>5,600</b>		-		-		-		-		-		-		-		-		-		-			
		9-10	<b>5,180</b>		-		-		-		-		-		-		-		-		-		-			
		14-15	<b>646</b>		-		-		-		-		-		-		-		-		-		-			
Background	12/20/2018	0-1	<b>851</b>		-		-		-		-		-		-		-		-		-		-			
		2-3	<b>3,000</b>		-		-		-		-		-		-		-		-		-		-			
		4-5	<b>2,200</b>		-		-		-		-		-		-		-		-		-		-			
		6-7	<b>954</b>		-		-		-		-		-		-		-		-		-		-			
		9-10	<b>876</b>		-		-		-		-		-		-		-		-		-		-			
		14-15	<b>822</b>		-		-		-		-		-		-		-		-		-		-			

NOTES:

- ft. Feet
  - bgs Below ground surface
  - mg/kg Milligrams per kilogram
  - TPH Total Petroleum Hydrocarbons
  - GRO Gasoline range organics
  - DRO Diesel range organics
  - MRO Motor Oil range organics
  - Sample not analyzed for parameter
  - 1 EPA Method 300.0
  - 2 EPA Method 8021B
  - 3 Method SW8015 Mod
- QUALIFIERS:
- Bold and italicized values indicate exceedance of proposed Remediation RRALs and/or Reclamation Requirements.*

TABLE 3  
 SUMMARY OF ANALYTICAL RESULTS  
 2023 SOIL ASSESSMENT (TETRA TECH) - nAB1821441824  
 CONOCOPHILLIPS  
 WAY SOUTH STATE COM #001H  
 EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Field Screening Results	Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>						
			Chloride			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
			ppm			mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
AH-23-1	5/11/2023	0-1	536	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-2	5/11/2023	0-1	250	160		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-3	5/11/2023	0-1	550	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-4	5/11/2023	0-1	276	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-5	5/11/2023	0-1	521	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-6	5/11/2023	0-1	197	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-

NOTES:

ft. Feet

*Bold and italicized values indicate exceedance of proposed Remediation RRALs and/or Reclamation Requirements.*

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500CI-B

2 Method 8021B

3 Method 8015M

TABLE 4  
 SUMMARY OF ANALYTICAL RESULTS  
 2024 SOIL BACKGROUND (TETRA TECH) - nAB1821441824  
 CONOCOPHILLIPS  
 WAY SOUTH STATE COM #001H  
 EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>	
		ft. bgs	mg/kg	Q
BG-24-1	4/17/2024	0-1	1340	
		1-2	5040	
		2-3	2160	
		3-4	752	
		4-5	544	
		5-6	1330	
		6-7	1810	
		7-8	1760	
		8-9	1570	
		9-10	1520	
		10-11	1390	
		11-12	1390	
		12-13	1470	
		13-14	1440	
		14-15	1650	
		15-16	1630	
		16-17	1520	
		17-18	1390	
		18-19	1230	
19-20	688			

**NOTES:**

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- 1 Method SM4500CI-B
- 2 Method 8021B
- 3 Method 8015M

TABLE 5  
 SUMMARY OF ANALYTICAL RESULTS  
 SOIL REMEDIATION - nAB1821441824  
 CONOCOPHILLIPS  
 WAY SOUTH STATE COM #001 TIN HORN RELEASE  
 EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>	TPH <sup>2</sup>			
				GRO	DRO	EXT DRO	Total TPH
				C <sub>6</sub> - C <sub>10</sub>	> C <sub>10</sub> - C <sub>28</sub>	> C <sub>28</sub> - C <sub>36</sub>	(GRO+DRO+EXT DRO)
		ft bgs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
<b>Reclamation Closure Criteria for Soils 0-4 ft bgs:</b>			<u>600 mg/kg</u>	--	--	--	<u>100 mg/kg</u>
<b>Site RRALs for Soils &gt;4 ft bgs (GW &gt;50 ft):</b>			<u>1,400 mg/kg</u>	--	--	--	<u>100 mg/kg</u>
FS-1	9/6/2024	4	1,180	<10.0	<10.0	<10.0	-
FS-2	9/6/2024	6	1,170	<10.0	<10.0	<10.0	-
FS-3	9/6/2024	10	1,180	<10.0	<10.0	<10.0	-
NSW-1	9/5/2024	-	32.0	<10.0	<10.0	<10.0	-
SSW-1	9/5/2024	-	48.0	<10.0	<10.0	<10.0	-
ESW-1	9/5/2024	-	32.0	<10.0	<10.0	<10.0	-
ISW-1	9/6/2024	-	1,060	<10.0	<10.0	<10.0	-
ISW-2	9/6/2024	-	864	<10.0	<10.0	<10.0	-

NOTES:

- ft Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- 1 Method SM4500CI-B
- 2 Method 8015M

# **APPENDIX A C-141 Forms**

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

Form C-141  
Revised April 3, 2017

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

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

*NAB1821441824*

**OPERATOR**  Initial Report  Final Report

Name of Company: COG Operating, LLC (OGRID #229137)	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-683-7443
Facility Name: Way South State Com #001H	Facility Type: Flowline
Surface Owner: State	Mineral Owner: State
API No. 30-015-37234	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	30	26S	28E	660	North	330	East	Eddy

Latitude 32.0186005 Longitude -104.1191635 NAD83

**NATURE OF RELEASE**

Type of Release Oil & Produced Water	Volume of Release 0.1 bbl. – Oil 72 bbl. – Produced Water	Volume Recovered 0 bbl. – Oil 60 bbl. – Produced Water
Source of Release Hole in valve	Date and Hour of Occurrence July 28, 2018 1:00pm	Date and Hour of Discovery July 28, 2018 1:00pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher – NMOCD Ryan Mann – SLO	
By Whom? Sheldon Hitchcock	Date and Hour July 29, 2018 12:33pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The release was caused by a hole in the check valve. The check valve is being replaced.

Describe Area Affected and Cleanup Action Taken.\*

The release was on location. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant 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 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: <i>DeAnn Grant</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: DeAnn Grant		Approved by Environmental Specialist: <i>Maria Pruett</i>	
Title: HSE Administrative Assistant	Approval Date: <i>8/2/18</i>	Expiration Date: <i>N/A</i>	
E-mail Address: agrant@concho.com	Conditions of Approval: <i>See attached</i>		Attached: <i>27P-4888</i>
Date: July 30, 2018	Phone: (432) 253-4513		

\* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 07/31/18 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP4888 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

*The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]*

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in Artesia on or before 08/28/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**

OCD Environmental Bureau Chief

1220 South St. Francis Drive

Santa Fe, New Mexico 87505

505-476-3465

[jim.griswold@state.nm.us](mailto:jim.griswold@state.nm.us)

**Bustamante, Amalia, EMNRD**

---

**From:** Pruett, Maria, EMNRD  
**Sent:** Wednesday, August 1, 2018 6:51 AM  
**To:** Bustamante, Amalia, EMNRD  
**Subject:** FW: (C-141 Initial) Way South State Com #001H (30-015-37234) 07-28-2018  
**Attachments:** revised C-141 directive of 11-4-16.pdf; OCD Received Signed (C-141 Initial) Way South State Com #001H (30-015-37234) 07-28-2018.pdf

Good Morning Amalia,

Please find attached the signed/dated C-141 and directive.

Best Regards,

*Maria Pruett*

Environmental Specialist  
N.M. Oil Conservation Division  
District 2  
811 S. 1<sup>st</sup> Street  
Artesia, NM 88210  
Desk: 575 748-1283 X 101  
Cell: 575 840-5963  
Fax: 575748-9720

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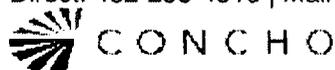
**From:** DeAnn Grant <agrant@concho.com>  
**Sent:** Tuesday, July 31, 2018 7:28 AM  
**To:** Pruett, Maria, EMNRD <Maria.Pruett@state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>  
**Cc:** Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Ike Tavarez <itavarez@concho.com>; Robert McNeill <RMcNeill@concho.com>; Sheldon Hitchcock <SLHitchcock@concho.com>; Dakota Neel <DNeel2@concho.com>; Rebecca Haskell <RHaskell@concho.com>; DeAnn Grant <agrant@concho.com>  
**Subject:** (C-141 Initial) Way South State Com #001H (30-015-37234) 07-28-2018

Ms. Pruett/Mr. Mann,

Please find the attached Initial C-141 for your consideration. If you have any questions or concerns please contact me.

Thank you,

*DeAnn Grant*  
HSE Administrative Assistant  
agrant@concho.com  
COG Operating LLC  
600 W Illinois Avenue | Midland, TX 79701  
Direct: 432-253-4513 | Main: 432.683.7443



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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?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> 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.

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: \_\_\_\_\_ Title: \_\_\_\_\_

Signature:  \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- 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: \_\_\_\_\_ Title: \_\_\_\_\_

Signature:  \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

- Approved     
 Approved with Attached Conditions of Approval     
 Denied     
 Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
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: \_\_\_\_\_ Title: \_\_\_\_\_

Signature:  \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**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.

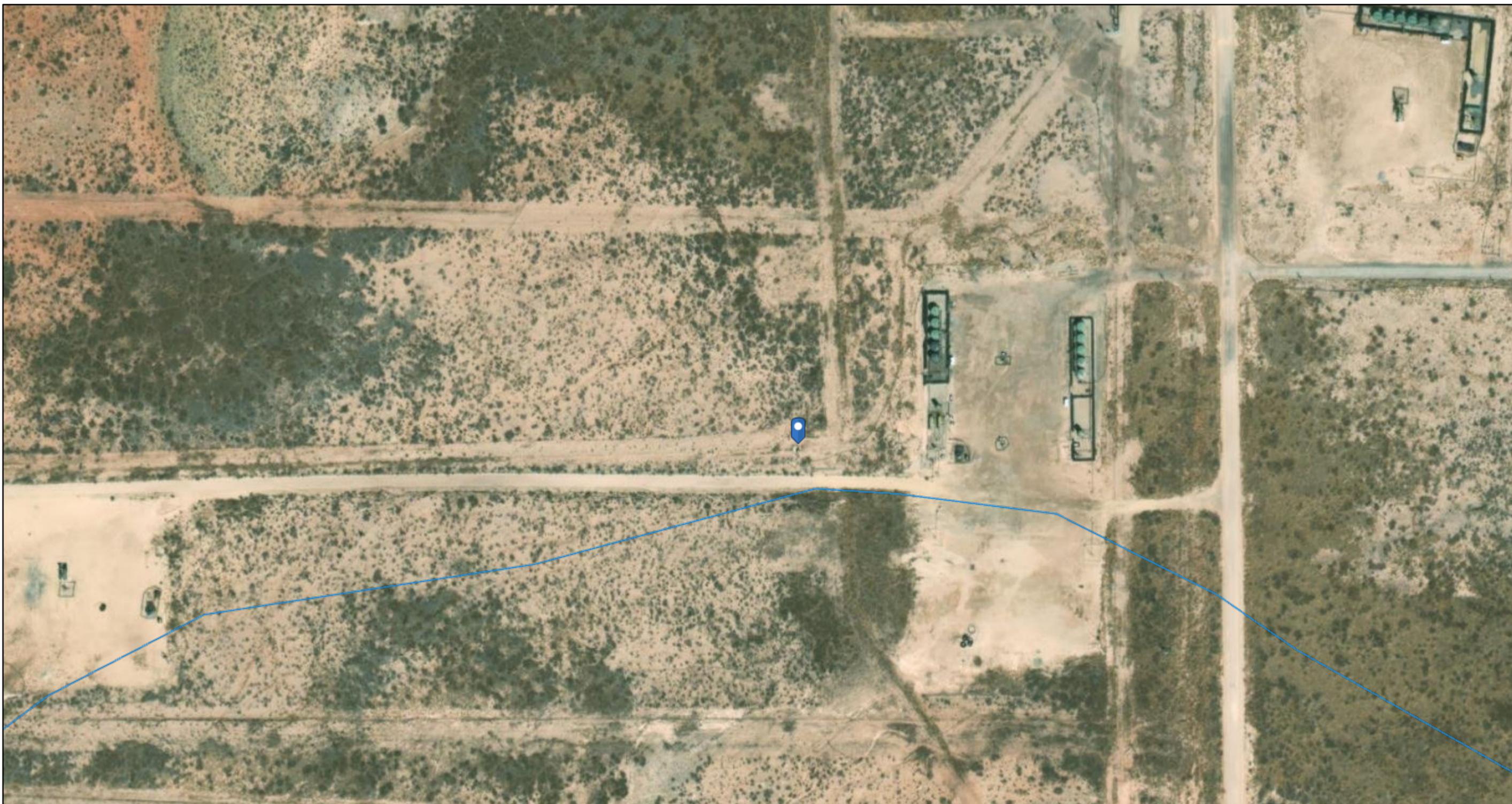
Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

## **APPENDIX B**

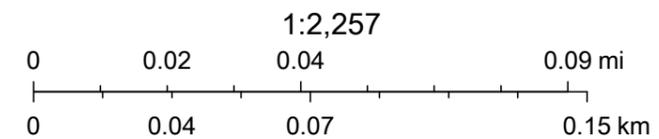
### **Site Characterization Data**

# OCD Waterbodies Map



2/8/2023, 2:36:50 PM

— OSE Streams



Maxar, Microsoft, Esri, HERE, Garmin, iPC, NM OSE

# Way South State Com #001H Tin Horn

Incident ID# nAB1821441824

## Legend

★ Way South StateCom #001H Tin Horn



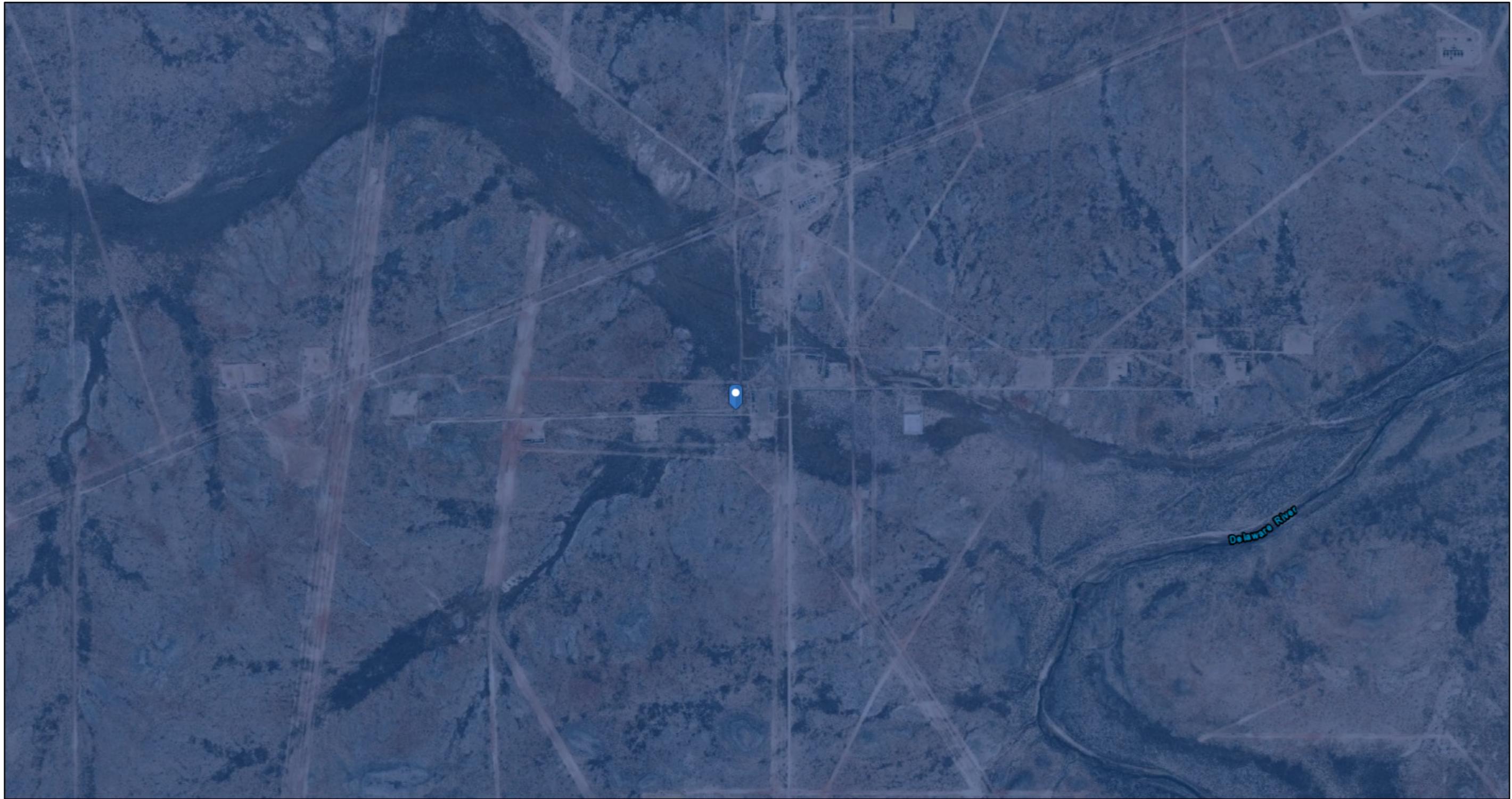
Way South State Com #001H Tin Horn

Zone A

REFERENCE LAYERS	
[Red Line]	RPL Data Points
[Red Outline]	Tin Horn Boundary
[Blue Outline]	LOM Boundary
SPECIAL FLOOD HAZARD AREAS	
[Light Blue Area]	1% Annual Chance Flood Hazard
[Light Blue Area]	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	
[Orange Area]	2% Annual Chance Flood Hazard
[Light Orange Area]	Regulatory Floodway
[Light Orange Area]	Area with Reduced Flood Risk
[Light Orange Area]	Area with Reduced Flood Risk
[Light Orange Area]	Area with Reduced Flood Risk
[Light Orange Area]	Area with Reduced Flood Risk
[Light Orange Area]	Area with Reduced Flood Risk
[Light Orange Area]	Area with Reduced Flood Risk
[Light Orange Area]	Area with Reduced Flood Risk
CROSS SECTIONS & BEES	
[Red Circle]	Cross Section with 1% Annual Chance Flood Hazard
[Blue Circle]	Cross Section with 2% Annual Chance Flood Hazard
[Red Line]	Cross Section
[Blue Line]	Cross Section
[Red Line]	Profile Boundary
[Blue Line]	Base Flood Elevation
SUPPORTING INFORMATION	
[Red Line]	Limit of Study
[Blue Line]	Antenna Boundary



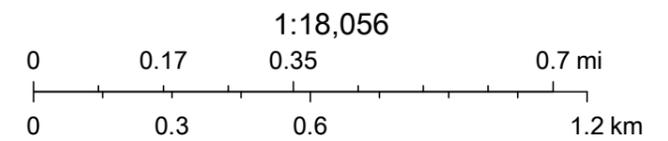
# OCD Karst Potential Map



2/8/2023, 2:35:40 PM

Karst Occurrence Potential

High



BLM, OCD, New Mexico Tech, Esri, HERE, Garmin, iPC, Maxar



# 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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">C 04466 POD1</a>	CUB	ED		3	3	2	29	26S	28E	584327	3542357	1338	96	33	63

Average Depth to Water: **33 feet**  
 Minimum Depth: **33 feet**  
 Maximum Depth: **33 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

**Easting (X):** 583080

**Northing (Y):** 3542842.31

**Radius:** 1600

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# **APPENDIX C**

## **Regulatory Correspondence**

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Lull, Christian](#)  
**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 341128  
**Date:** Thursday, May 9, 2024 3:52:29 PM

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

To whom it may concern (c/o Christian Lull for COG OPERATING LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAB1821441824, with the following conditions:

- **Remediation plan is approved under the following conditions; 1. Based on the sampling conducted, only Total Petroleum Hydrocarbons (TPH) and chloride are required for laboratory analysis from this point forward. 2. Based on the most recent background boring in determining the closure standard for chloride, OCD approves administering 1,400 mg/Kg (averaged taken below 4 ft.) for soils greater than four (4) feet (ft.) below grade. 3. Remediation of the top 4 ft. must meet the reclamation standards of 600 mg/Kg for chloride and 100 mg/Kg for TPH. 4. Site reclamation and restoration plan as described in the report is approved.**
- **5. Per 19.15.29.13E NMAC, if a reclamation and/or revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and/or revegetation report will need to be submitted to the OCD via the Permitting website. 6. COP has 90-days (August 7, 2024) to submit to OCD its appropriate or final remediation closure report.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,  
Nelson Velez  
Environmental Specialist - Advanced  
505-469-6146  
[Nelson.Velez@emnrd.nm.gov](mailto:Nelson.Velez@emnrd.nm.gov)

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

**From:** [Knight, Tami C.](#)  
**To:** [Abbott, Sam](#)  
**Cc:** [Lull, Christian](#); [Barnes, Will](#); [Griffin, Becky R.](#); [David, Deon W.](#); [Elliott, April L.](#)  
**Subject:** RE: (Revised Remediation Work Plan Addendum) - Way South State Com #001H Tin Horn Release (NAB1821441824) - 7-28-2018 - Approved  
**Date:** Friday, June 21, 2024 12:54:06 PM  
**Attachments:** [image006.jpg](#)  
[image007.jpg](#)  
[image008.png](#)  
[image009.png](#)  
[image010.png](#)  
[image011.png](#)  
[image012.png](#)  
[image013.png](#)  
[image014.png](#)

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Sam

Documentation of proposed remediation actions for the subject release incident was received from your office on June 11, 2024. The NMSLO Environmental Compliance Office (ECO) has reviewed the plan, and based on the information provided in the document received from your office, ECO has approved the remediation plan and agrees to the NMOCD conditions of approval. Please submit the remediation closure report to [eco@slo.state.nm.us](mailto:eco@slo.state.nm.us).

Lessee and/or their contractor are responsible for ensuring the project manager and field personnel performing the work follow the approved work plan.

**Tami Knight, CHMM**  
*Environmental Specialist*  
NMSLO SRD-ECO  
505.670.1638  
[tknight@slo.state.nm.us](mailto:tknight@slo.state.nm.us)  
[nmstatelands.org](http://nmstatelands.org)

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**From:** Abbott, Sam <[Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)>

**Sent:** Tuesday, June 11, 2024 3:49 PM

**To:** SLO Spills <spills@slo.state.nm.us>

**Cc:** Knight, Tami C. <tknight@slo.state.nm.us>; Lull, Christian <Christian.Lull@tetrattech.com>

**Subject:** [EXTERNAL] (Revised Remediation Work Plan Addendum) - Way South State Com #001H Tin Horn Release (NAB1821441824) - 7-28-2018

Tami:

Attached is one pdf file Revised Remediation Work Plan Addendum report that includes the written narrative and associated attachments regarding proposed remedial activities at the Way South State Com #001H Tin Horn Release, Incident ID NAB1821441824, for your review and approval.

**Incident ID NAB1821441824 Details:**

- Release Location: 32.018655°, -104.120179°
- Site is located in Eddy County, NM.
- Landowner: NMSLO
  - Located within active oil and gas lease ID V074510003, which is listed under Chisolm Energy Operating, LLC.
- Date of Release: 7/28/2018
- According to the C-141, approximately 72 barrels (bbls) of produced water and 0.1 bbls of oil were reported released, of which 60 bbls of produced water and no oil were recovered.
  - The release was the result of a hole on the check valve in the tin horn.
- The Site is located in a high karst area.
- In November 2018, Talon/LPE conducted assessment activities.
  - Samples were collected from 2 locations (B1 and B2) within the release extent.
  - B2 had results above Site RRALs.
- On December 20, 2018, Tetra Tech conducted an additional soil assessment to vertically delineate the release area.
  - One boring (BH #1) was installed in the vicinity of B2.
  - A background boring was installed approximately 100 feet northwest and upgradient to evaluate native soils.
  - Both BH #1 and the background boring had chloride concentrations above the site RRAL to a depth of 15 feet bgs.
- Tetra Tech summarized the assessment results in a Work Plan dated February 13, 2019.
  - As written in the report, COG proposed to remove soils impacted with chloride to a depth of 3.5-4 feet bgs in one portion of the release and to 9-10 feet bgs in another area of the release extent.
  - The total estimated volume of soils to be excavated was 115 cubic yards.
- The 2019 Work Plan Report was rejected by NMOCD on November 28, 2022 for the following reasons:
  - *“The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29*

- NMAC in lieu of drilling to determine the depth to groundwater.
- Horizontal delineation submitted was incomplete and did not meet the requirements of [19.15.29.11](#) NMAC. The values for determination of horizontal impact are derived by Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for “on-pad” releases to ensure the release did not extend to the “off-pad”/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved “background” values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation.
  - 2RP-4888 closed. Please refer to incident #nAB1821441824 in all future communications.
  - Background sample(s) should be a grab, not composite, sample(s) should be gathered in areas undisturbed by oil and gas activities, nominally uphill from the release area, and no closer than 50 feet but no farther than 100 feet from the lateral and horizontal extents of a release’s impact. The background sampling should be representative of the entire horizontal and vertical extent of the release. The background sample cannot be approved based on delineation is incomplete.”
  - The release footprint is located on State Trust Lands, so Tetra Tech oversaw the completion of a cultural survey at the site, then applied for and received a permit from the State Land Office before conducting any additional assessment or remedial actions.
  - Tetra Tech completed additional assessment activities at the Way South State Com #001H incident site in May 2023.
    - Horizontal delineation was achieved during the May 2023 additional assessment activities.
  - Tetra Tech on behalf of COP prepared a Revised Work Plan dated December 1, 2023 in accordance with the NMOCD rejection and the 2023 additional assessment sampling results and submitted to the NMOCD and the NMSLO for approval.
  - The 2023 Revised Work Plan was rejected by NMOCD on December 28, 2023 for the following reasons:
    - “Due to the site being partially encompassed by a FEMA Flood Hazard Area Zone A, within 100 feet of a watercourse mapped by the NMOSE, in an area of high karst potential, in an area of shallow groundwater, and the age of the analytical data for the background; the OCD is requesting a new background borehole be installed within the vicinity of the 2018 background borehole before approving background chloride concentrations. Please send at least a 2-business day notification to the OCD Enviro email and Robert Hamlet ([robert.hamlet@emnrd.nm.gov](mailto:robert.hamlet@emnrd.nm.gov)), prior to installing the borehole and collecting background samples. OCD would like to witness the boring and sampling, if available.
    - Submit a complete report through the OCD Permitting website by 5/6/2024.”
  - The 2023 Revised Work Plan was also rejected by the NMSLO on January 4, 2024 for the following reasons:
    - “ECO has reviewed the workplan and NMOCD comments. We do agree with NMOCD and would like to witness a new background soil boring. However, we believe it would be more beneficial to determine background chlorides by selecting a new sample

location, not near the 2018 boring. We have also opened the discussion with NMOCD regarding the soil boring location. ECO has concerns about selecting a new sample point due the erosional features coming off the ROW north of the spill location which appears to have had releases along it's path also.

- *We are available to discuss this project with your team and NMOCD.”*
- A conference call was held on January 5, 2024 with representatives from ConocoPhillips and Tetra Tech, Ms. Brittany Hall of the NMOCD, and Ms. Tami Knight of the NMSLO, to discuss the ideal placement for the requested additional background soil boring.
  - After review of the site conditions in the vicinity of the tin horn and the right-of-way, a location approximately 100 feet due north of the release extent (presented in the image below) was selected for the background boring. That location was agreed upon by Tami Knight of NMSLO ECO and Brittany Hall of NMOCD.
  - ConocoPhillips then proceeded to procure a right-of-entry permit from the NMSLO Commercial Resources Division.
- Tetra Tech remobilized to the Site on April 17, 2024 to oversee the installation of the requested background boring (BG-24-1) at the previously agreed-upon location.
  - A notice of the scheduled activity was provided to the NMOCD and the NMSLO via email on April 15<sup>th</sup>.
  - Chloride concentrations at this new background boring location were 1340 mg/kg in the 0-1 foot bgs soil interval, increased to 5,040 mg/kg at 1-2 feet bgs, declined to 544 mg/kg at 4-5 feet bgs, and then were relatively consistent in from 5 to 19 feet bgs, ranging from 1230 mg/kg to 1810 mg/kg before declining to 688 mg/kg at the terminal sampling interval of 19-20 feet bgs.
- The results of the 2024 background boring soil sampling activities were incorporated into a Revised Remediation Work Plan Addendum dated May 6, 2024.
- The 2024 Revised Remediation Work Plan Addendum was approved by the NMOCD on May 9, 2024 with the following comments:
  - *“Remediation plan is approved under the following conditions; 1. Based on the sampling conducted, only Total Petroleum Hydrocarbons (TPH) and chloride are required for laboratory analysis from this point forward. 2. Based on the most recent background boring in determining the closure standard for chloride, OCD approves administering 1,400 mg/Kg (averaged taken below 4 ft.) for soils greater than four (4) feet (ft.) below grade. 3. Remediation of the top 4 ft. must meet the reclamation standards of 600 mg/Kg for chloride and 100 mg/Kg for TPH. 4. Site reclamation and restoration plan as described in the report is approved.*
  - *5. Per 19.15.29.13E NMAC, if a reclamation and/or revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and/or revegetation report will need to be submitted to the OCD via the Permitting website. 6. COP has 90-days (August 7, 2024) to submit to OCD its appropriate or final remediation closure report.”*

19.15.29.13 NMAC will be met, and reclamation details are provided in the attached plan.

Please let me know at your earliest convenience if we are cleared to proceed.

If you have any questions, please let me know.

Thank you,  
Sam

**Samantha Abbott, PG** | Project Manager  
Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | [Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)

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**From:** [Velez, Nelson, EMNRD](#)  
**To:** [Abbott, Sam](#)  
**Cc:** [Lull, Christian](#); [Hall, Brittany, EMNRD](#); [Bratcher, Michael, EMNRD](#)  
**Subject:** Re: [EXTERNAL] Extension Request - Way South State Com #001H Tinhorn Release (nAB1821441824)  
**Date:** Wednesday, August 14, 2024 9:39:16 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[Outlook-1mh5tdyd.png](#)

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Good morning Sam,

Thank you for the correspondence. In the future, please make sure your request is given prior to the remediation due date. After discussing with you this morning via telephone, the pipeline within the area to be remediated is operated by Solaris, not COG.

Please acknowledge if the last statement above is indeed the case.

Based on the above, your time extension is approved for 60-days (October 7, 2024) starting from the previous due date (August 7, 2024).

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

**Nelson Velez** • Environmental Specialist - Adv  
Environmental Bureau | EMNRD - Oil Conservation Division  
1000 Rio Brazos Road | Aztec, NM 87410  
(505) 469-6146 | [nelson.velez@emnrd.nm.gov](mailto:nelson.velez@emnrd.nm.gov)  
<http://www.emnrd.nm.gov/ocd>



---

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>  
**Sent:** Tuesday, August 13, 2024 3:33 PM  
**To:** Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>  
**Cc:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Subject:** FW: [EXTERNAL] Extension Request - Way South State Com #001H Tinhorn Release (nAB1821441824)

---

**From:** Abbott, Sam <Sam.Abbott@tetrattech.com>  
**Sent:** Tuesday, August 13, 2024 3:29 PM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Cc:** Llull, Christian <Christian.Llull@tetrattech.com>  
**Subject:** [EXTERNAL] Extension Request - Way South State Com #001H Tinhorn Release (nAB1821441824)

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To Whom it May Concern,

On behalf of ConocoPhillips, Tetra Tech is requesting a 90-day extension (November 5, 2024) to complete reporting for the Way South State Com #001H Tinhorn Release (nAB1821441824). The current deadline is August 7, 2024. Please excuse the late extension request.

The initiation of the remedial activities has been delayed to coordinate remedial activities with the third-party pipeline owner in the remediation area. The remedial activities are currently scheduled to begin in late August.

A closure report will be submitted to the NMOCD within the proposed timeframe.

Thank you in advance.

Sam

**Samantha Abbott, PG** | Project Manager  
Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | [Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)

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**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Lull, Christian](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 380418  
**Date:** Wednesday, September 4, 2024 10:50:04 AM

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To whom it may concern (c/o Christian LLuLL for COG OPERATING LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nAB1821441824.

The sampling event is expected to take place:

**When:** 09/09/2024 @ 10:00

**Where:** A-30-26S-28E 660 FNL 330 FEL (32.0186005,-104.1191635)

**Additional Information:** Additional information: sampling may continue through 9/10. Please contact Samantha Abbott, PG / Project Manager at 512-739-7874.

**Additional Instructions:** Navigation Info: Eddy County, NM, GPS Coordinates 32.018661°,-104.120319°

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

**From:** [Maxwell, Ashley, EMNRD](#)  
**To:** [Buchanan, Michael, EMNRD](#); [Abbott, Sam](#)  
**Cc:** [Lull, Christian](#)  
**Subject:** RE: [EXTERNAL] C-141N Variance Request - Way South State Com #001 Tin Horn Release (nAB1821441824)  
**Date:** Thursday, September 5, 2024 9:58:18 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)

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Good Morning Sam,

Please move forward with confirmation sampling as requested. Include this and all other sample variance request approvals in subsequent report submittals.

Thanks,  
Ashley

**Ashley Maxwell** • Environmental Specialist  
Environmental Bureau Projects Group  
EMNRD - Oil Conservation Division  
1000 Rio Brazos Road | Aztec, NM 87110  
505.635.5000 | [Ashley.Maxwell@emnrd.nm.gov](mailto:Ashley.Maxwell@emnrd.nm.gov)  
<http://www.emnrd.state.nm.us/OCD/>

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMNRD Website prior to submitting any C-141s. The guidance documents can be found at <https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/or> <https://www.emnrd.nm.gov/ocd/ocd-forms/>.

---

**From:** Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>  
**Sent:** Thursday, September 5, 2024 8:31 AM  
**To:** Abbott, Sam <Sam.Abbott@tetrattech.com>; Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>  
**Cc:** Lull, Christian <Christian.Lull@tetrattech.com>  
**Subject:** RE: [EXTERNAL] C-141N Variance Request - Way South State Com #001 Tin Horn Release (nAB1821441824)

Good morning, Sam

Thank you for submitting the variance request below for Way South State Com #001H Tinhorn Release (Site), incident nMAP1822950996. It is currently under review and a determination on the request will be given once it has been reviewed.

Kind regards,

---

**From:** Abbott, Sam <[Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)>  
**Sent:** Thursday, September 5, 2024 8:04 AM  
**To:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Llull, Christian <[Christian.Llull@tetrattech.com](mailto:Christian.Llull@tetrattech.com)>  
**Subject:** [EXTERNAL] C-141N Variance Request - Way South State Com #001 Tin Horn Release (nAB1821441824)

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

Good morning,

I am requesting a variance to begin confirmation sampling outside of the initial notice period with less than 48 hours' notice.

We are running ahead of schedule, and will be able to begin confirmation sampling today, which is 2 business days earlier than the submitted C-141N sampling date. Depending on progress made today, we may have additional samples to collect tomorrow.

Way South State Com #001H Tinhorn Release  
Eddy County, New Mexico  
Remediation Location: 32.018661°,-104.120319°  
Incident ID nMAP1822950996

Thank you,  
Sam

**Samantha Abbott, PG** | Project Manager  
Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | [Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)

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---

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us) <[OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)>  
**Sent:** Wednesday, September 4, 2024 10:50 AM  
**To:** Llull, Christian <[christian.llull@tetrattech.com](mailto:christian.llull@tetrattech.com)>

**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 380418

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

To whom it may concern (c/o Christian LLuLL for COG OPERATING LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nAB1821441824.

The sampling event is expected to take place:

**When:** 09/09/2024 @ 10:00

**Where:** A-30-26S-28E 660 FNL 330 FEL (32.0186005,-104.1191635)

**Additional Information:** Additional information: sampling may continue through 9/10. Please contact Samantha Abbott, PG / Project Manager at 512-739-7874.

**Additional Instructions:** Navigation Info: Eddy County, NM, GPS Coordinates 32.018661°,-104.120319°

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

**From:** [SLO Spills](#)  
**To:** [Abbott, Sam](#)  
**Subject:** RE: Way South State Com #001 Tin Horn Release (nAB1821441824) - Notice of Confirmation Sampling  
**Date:** Thursday, September 5, 2024 10:25:53 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Great! Thanks.. we don't officially approve those since that is an OCD rule, but thank you for the notification update.

Tami

---

**From:** Abbott, Sam <Sam.Abbott@tetrattech.com>  
**Sent:** Thursday, September 5, 2024 9:24 AM  
**To:** SLO Spills <spills@slo.state.nm.us>  
**Subject:** [EXTERNAL] RE: Way South State Com #001 Tin Horn Release (nAB1821441824) - Notice of Confirmation Sampling

Tami,

The NMOCD approved the variance this morning, please see attached.

Thank you,  
 Sam

**Samantha Abbott, PG** | Project Manager  
 Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | [Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)

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**From:** SLO Spills <[spills@slo.state.nm.us](mailto:spills@slo.state.nm.us)>  
**Sent:** Thursday, September 5, 2024 10:22 AM  
**To:** Abbott, Sam <[Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)>  
**Subject:** RE: Way South State Com #001 Tin Horn Release (nAB1821441824) - Notice of Confirmation

Sampling

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. **⚠**

Sam

The variance has to be approved by NMOCD.

Tami

---

**From:** Abbott, Sam <[Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)>  
**Sent:** Thursday, September 5, 2024 8:39 AM  
**To:** SLO Spills <[spills@slo.state.nm.us](mailto:spills@slo.state.nm.us)>  
**Subject:** [EXTERNAL] RE: Way South State Com #001 Tin Horn Release (nAB1821441824) - Notice of Confirmation Sampling

Good morning,

To follow up on the previous sampling notification, I have been informed that remediation activities are running ahead of schedule, and we will be able to begin sampling as early as today, perhaps extending into tomorrow.

I would like to request a variance for the 2-day sampling notification for confirmation sampling. I apologize for the late notice. Please feel free to call me at 512-417-5860 to discuss.

Thank you,  
Sam

**Samantha Abbott, PG** | Project Manager  
Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | [Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)

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---

**From:** Abbott, Sam  
**Sent:** Thursday, September 5, 2024 8:44 AM  
**To:** [eco@slo.state.nm.us](mailto:eco@slo.state.nm.us)  
**Subject:** Way South State Com #001 Tin Horn Release (nAB1821441824) - Notice of Confirmation

Sampling

To Whom it May Concern,

RE: **Way South State Com #001 Tin Horn Release (nAB1821441824)**

On Friday 6/21/2023, ECO approved the nAB1821441824 Work Plan via email.

In accordance with recent guidance, 2-day sampling notification is being provided for the following site.

**Way South State Com #001H Tinhorn Release  
Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico  
Remediation Location: 32.018635°, -104.120278°  
DOR 7/28/2018  
Incident ID nMAP1822950996**

Confirmation sampling will begin on Monday, September 9, 2024.

Please let me know if you have any questions.  
Thank you in advance.

**Samantha Abbott, PG** | Project Manager  
Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | [Sam.Abbott@tetrattech.com](mailto:Sam.Abbott@tetrattech.com)

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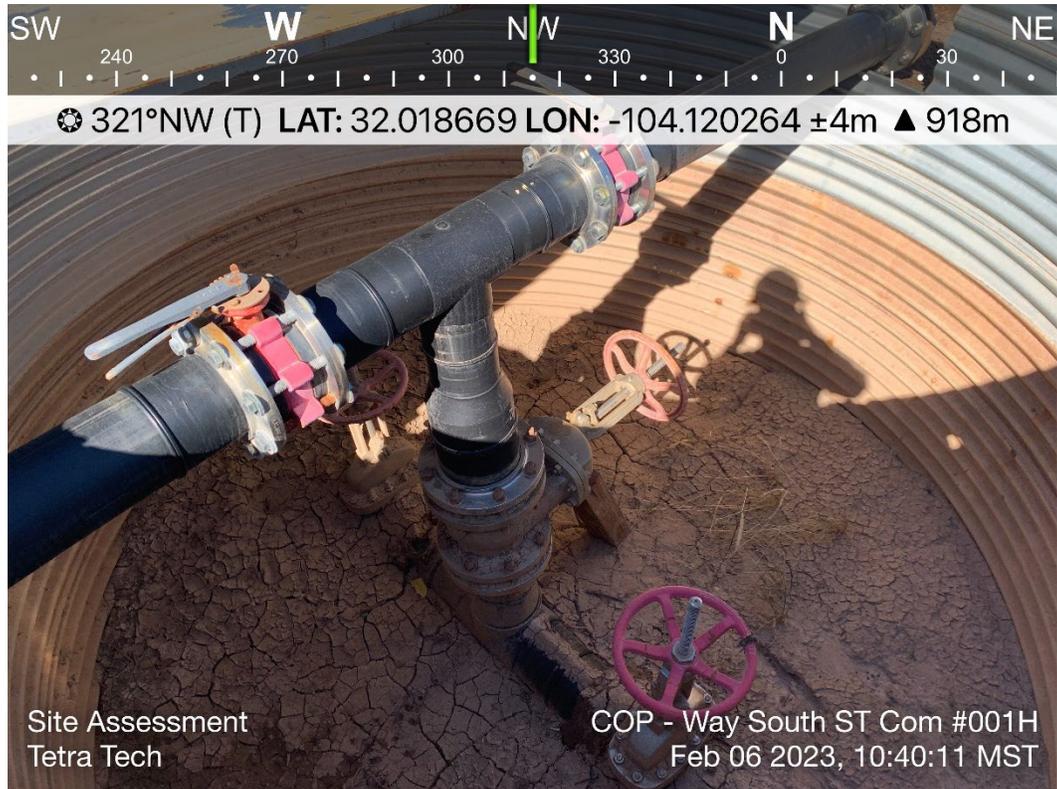


# **APPENDIX D**

## **Photographic Documentation**



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View north. View of tin horn and surface polyline during assessment phase.	1
	SITE NAME	Way South State Com Tinhorn Release	2/6/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View inside the tin horn during previous phase.	2
	SITE NAME	Way South State Com Tinhorn Release	2/6/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View northeast. View of tin horn and Way South State Com Tank battery prior to remediation.	3
	SITE NAME	Way South State Com Tinhorn Release	2/6/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View east-southeast. Excavation areas outlined with paint.	4
	SITE NAME	Way South State Com Tinhorn Release	9/4/2024



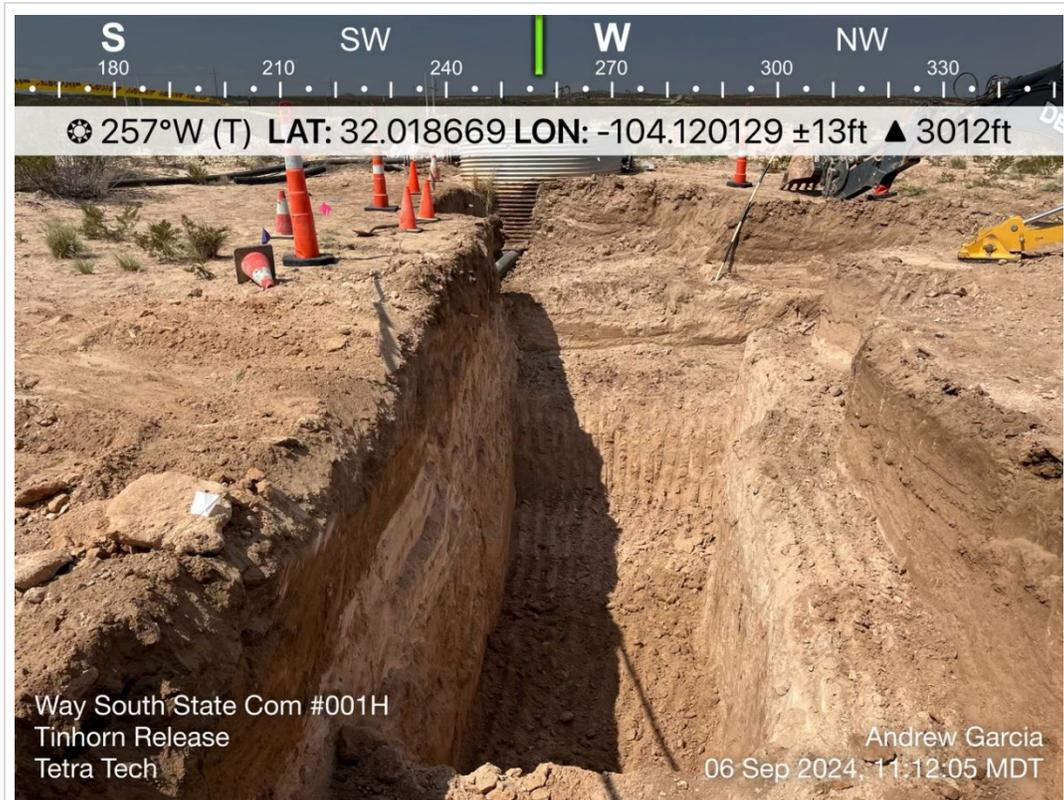
TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View west. Exposing subsurface line with hydrovac and removing impacted soils in area of remediation.	5
	SITE NAME	Way South State Com Tinhorn Release	9/4/2024



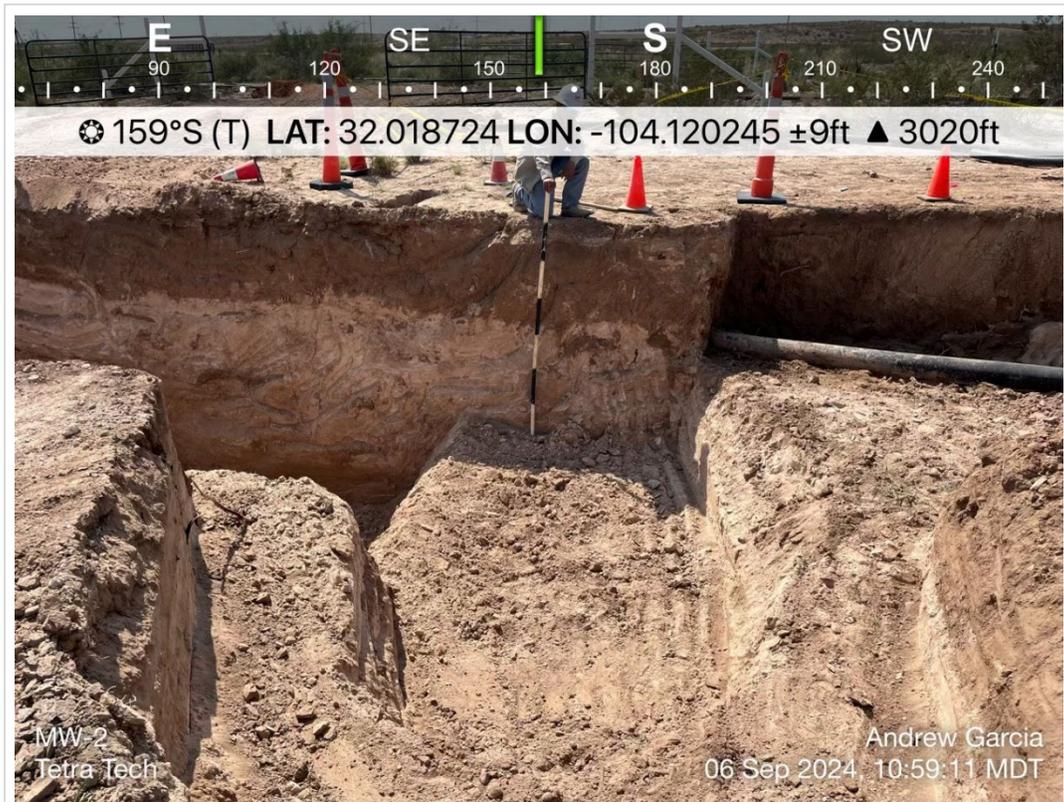
TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View east-northeast. Hydrovac area adjacent to remaining areas of excavation.	6
	SITE NAME	Way South State Com Tinhorn Release	9/4/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View southwest. Excavated area adjacent to tinhorn and previously excavated area.	7
	SITE NAME	Way South State Com Tinhorn Release	9/5/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View west. Ongoing excavation on northside, with survey rod for depth reference.	8
	SITE NAME	Way South State Com Tinhorn Release	9/6/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View south-southeast. Southern sidewall with survey road for reference.	9
	SITE NAME	Way South State Com Tinhorn Release	9/6/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View east. Finalized excavation extent.	10
	SITE NAME	Way South State Com Tinhorn Release	9/9/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View northeast. Excavation backfilled with clean materials.	11
	SITE NAME	Way South State Com Tinhorn Release	9/10/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02994	DESCRIPTION	View south-southwest. Excavation area backfilled with clean material.	12
	SITE NAME	Way South State Com Tinhorn Release	9/10/2024

# **APPENDIX E**

## **Laboratory Analytical Data**



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

September 06, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WAY SOUTH STATE COM #001H

Enclosed are the results of analyses for samples received by the laboratory on 09/05/24 16:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 SAM ABBOTT  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	09/05/2024	Sampling Date:	09/05/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	WAY SOUTH STATE COM #001H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02994A	Sample Received By:	Alyssa Parras
Project Location:	COP - EDDY CO NM		

**Sample ID: NSW - 1 (H245393-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	09/06/2024	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	193	96.3	200	0.474	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	186	93.0	200	2.12	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					
Surrogate: 1-Chlorooctane	110 %	48.2-134							
Surrogate: 1-Chlorooctadecane	111 %	49.1-148							

**Sample ID: ESW - 1 (H245393-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	09/06/2024	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	193	96.3	200	0.474	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	186	93.0	200	2.12	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					
Surrogate: 1-Chlorooctane	115 %	48.2-134							
Surrogate: 1-Chlorooctadecane	117 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 SAM ABBOTT  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	09/05/2024	Sampling Date:	09/05/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	WAY SOUTH STATE COM #001H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02994A	Sample Received By:	Alyssa Parras
Project Location:	COP - EDDY CO NM		

**Sample ID: SSW - 1 (H245393-03)**

**Chloride, SM4500Cl-B** **mg/kg** **Analyzed By: CT**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48.0</b>	16.0	09/06/2024	ND	416	104	400	0.00	

**TPH 8015M** **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	193	96.3	200	0.474	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	186	93.0	200	2.12	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Notes and Definitions**

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name: <b>Conoco Phillips</b> Project Manager: <b>Sam Abbott</b>		P.O. #: _____ Company: <b>TetraTech</b>	
Address: _____ City: _____ State: _____ Zip: _____		Attn: <b>Sam Abbott</b> Address: _____ City: _____ State: _____ Zip: _____	
Project #: <b>212E-MD-029944</b> Project Owner: _____ Project Name: <b>Way South State Cova #001HTR</b>		State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Project Location: <b>Eddy County</b> Sampler Name: <b>Andrew Garcia</b>		Fax #: _____	
FOR LAB USE ONLY			
Lab I.D. <b>H245893</b>	Sample I.D.	(G)RAB OR (C)OMP.	
		# CONTAINERS	
1 2 3	NSW-1 ESW-1 SSW-1	GROUNDWATER	
		WASTEWATER	
		MATRIX	
		SOIL	
		OIL	
		SLUDGE	
		OTHER:	
		ACID/BASE:	
		ICE / COOL	
		OTHER:	
		PRESERV	
		SAMPLING	
		DATE	
		TIME	
		ANALYSIS REQUEST	
		Chlorides	
		TPI	

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Relinquished By: **Andrew Garcia** Date: **09/05/24** Received By: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Received By: \_\_\_\_\_  
 Time: \_\_\_\_\_

Delivered By: (Circle One) Observed Temp. °C: **2.8°C** Sample Condition:  Cool  Intact  
 Sampler - UPS - Bus - Other: Corrected Temp. °C: **2.2°C**  Yes  No

Checked By: **AD** Verbal Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 All Results are emailed. Please provide Email address: **Sam.Abbott@TetraTech.com**  
 Remarks: **Lisbeth, Enavira e TetraTech.com**  
 Turnaround Time:  Standard  Rush **24 HR TAT**  
 Thermometer ID #140 Correction Factor -0.6°C Bacteria (only) Sample Condition:  Cool  Intact  Yes  No

† Cardinal cannot accept verbal changes. Please email changes to cely.keene@cardinallabsnm.com



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

September 09, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WAY SOUTH STATE COM #001H TINHORN RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 09/06/24 14:58.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 SAM ABBOTT  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	09/06/2024	Sampling Date:	09/06/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	WAY SOUTH STATE COM #001H TINHOI	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02994A	Sample Received By:	Alyssa Parras
Project Location:	COP - EDDY CO., NM		

**Sample ID: FS - 1 (H245413-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1180</b>	16.0	09/09/2024	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	196	98.1	200	2.65	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	191	95.4	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>90.1 %</i>	<i>48.2-134</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>107 %</i>	<i>49.1-148</i>							

**Sample ID: FS - 2 (H245413-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1170</b>	16.0	09/09/2024	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	196	98.1	200	2.65	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	191	95.4	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>104 %</i>	<i>48.2-134</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>123 %</i>	<i>49.1-148</i>							

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

TETRA TECH  
 SAM ABBOTT  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	09/06/2024	Sampling Date:	09/06/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	WAY SOUTH STATE COM #001H TINHOI	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02994A	Sample Received By:	Alyssa Parras
Project Location:	COP - EDDY CO., NM		

**Sample ID: FS - 3 (H245413-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1180</b>	16.0	09/09/2024	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	196	98.1	200	2.65	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	191	95.4	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>103 %</i>	<i>48.2-134</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>123 %</i>	<i>49.1-148</i>							

**Sample ID: ISW - 1 (H245413-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1060</b>	16.0	09/09/2024	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	196	98.1	200	2.65	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	191	95.4	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>97.7 %</i>	<i>48.2-134</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>116 %</i>	<i>49.1-148</i>							

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 SAM ABBOTT  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	09/06/2024	Sampling Date:	09/06/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	WAY SOUTH STATE COM #001H TINHOI	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02994A	Sample Received By:	Alyssa Parras
Project Location:	COP - EDDY CO., NM		

**Sample ID: ISW - 2 (H245413-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>864</b>	16.0	09/09/2024	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/06/2024	ND	196	98.1	200	2.65	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	191	95.4	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					
Surrogate: 1-Chlorooctane	100 %	48.2-134							
Surrogate: 1-Chlorooctadecane	118 %	49.1-148							

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Celey D. Keene, Lab Director/Quality Manager



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**Notes and Definitions**

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Conoco Phillips P.O. #:  
 Project Manager: Sam Abbott Company: Tetra Tech  
 Address: Attn: Sam Abbott  
 City: State: Zip: Address:  
 Phone #: Fax #: City: State: Zip: Phone #: Fax #:  
 Project #: 212C-MD-02994A Project Owner: State: Zip:  
 Project Name: Way South State Com #001H TR  
 Project Location: Eddy Co, NM  
 Sampler Name: Andrew Garcia Phone #:  
 FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER				
H2K5413	FS-1	6	1			X				X	2024 09/06	1000	Chloride
	FS-2	1	1									1030	TPH
	FS-3	1	1									1130	
	ISW-1	1	1									1230	
	ISW-2	1	1										

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Relinquished By: Andrew Garcia Date: 09/04/24 Received By: ADAVCO  
 Time: 11:58  
 Relinquished By: Date: Received By: Time:

Delivered By: (Circle One) Observed Temp. °C: 0.8 Sample Condition:  Cool  Intact  
 Corrected Temp. °C: -1.4  Yes  No  Yes  No  
 Sampler - UPS - Bus - Other: AD CHECKED BY: (Initials)  
 Turnaround Time: Standard  Standard  Rush  
 Thermometer ID #140 Correction Factor -0.6°C 24 HRTAT Bacteria (only)  Cool  Intact  
 Observed Temp. °C Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Luis Rivera  
 R360 ES Holdings Inc  
 507 N Marienfield  
 Midland, Texas 79701  
 Generated 9/9/2024 10:03:39 AM

## JOB DESCRIPTION

R360 -backfill

## JOB NUMBER

890-7071-1



# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated  
9/9/2024 10:03:39 AM

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

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Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Laboratory Job ID: 890-7071-1

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## Definitions/Glossary

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

## Qualifiers

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: R360 ES Holdings Inc  
Project: R360 -backfill

Job ID: 890-7071-1

**Job ID: 890-7071-1**

**Eurofins Carlsbad**

## Job Narrative 890-7071-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 9/5/2024 10:26 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C.

### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



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### Client Sample Results

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 160**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-1**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.0		5.02	0.397	mg/Kg			09/07/24 17:50	1

**Client Sample ID: E# 161**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-2**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.1		5.01	0.396	mg/Kg			09/07/24 18:15	1

**Client Sample ID: E# 162**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-3**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.9		5.02	0.397	mg/Kg			09/07/24 18:23	1

**Client Sample ID: E# 163**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-4**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.3		5.01	0.396	mg/Kg			09/07/24 18:31	1

**Client Sample ID: E# 164**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-5**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.5		5.05	0.399	mg/Kg			09/07/24 18:39	1

**Client Sample ID: E# 165**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-6**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.1		4.98	0.393	mg/Kg			09/07/24 19:04	1

**Client Sample ID: E# 166**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-7**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.8		5.04	0.398	mg/Kg			09/07/24 19:12	1

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### Client Sample Results

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 167**

**Lab Sample ID: 890-7071-8**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.8		4.96	0.392	mg/Kg			09/07/24 19:20	1

**Client Sample ID: E# 168**

**Lab Sample ID: 890-7071-9**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.0		5.02	0.397	mg/Kg			09/07/24 19:28	1

**Client Sample ID: E# 169**

**Lab Sample ID: 890-7071-10**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.4		5.00	0.395	mg/Kg			09/07/24 19:36	1

**Client Sample ID: E# 170**

**Lab Sample ID: 890-7071-11**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.4		4.96	0.392	mg/Kg			09/07/24 19:45	1

**Client Sample ID: E# 171**

**Lab Sample ID: 890-7071-12**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.5		5.02	0.397	mg/Kg			09/07/24 20:09	1

**Client Sample ID: E# 172**

**Lab Sample ID: 890-7071-13**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.8		5.01	0.396	mg/Kg			09/07/24 20:17	1

**Client Sample ID: E# 173**

**Lab Sample ID: 890-7071-14**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.6		5.02	0.397	mg/Kg			09/07/24 20:42	1

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### Client Sample Results

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 174**

**Lab Sample ID: 890-7071-15**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.4		5.05	0.399	mg/Kg			09/07/24 20:50	1

**Client Sample ID: E# 175**

**Lab Sample ID: 890-7071-16**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.3		4.97	0.393	mg/Kg			09/07/24 20:58	1

**Client Sample ID: E# 176**

**Lab Sample ID: 890-7071-17**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.6		4.97	0.393	mg/Kg			09/07/24 21:06	1

**Client Sample ID: E# 177**

**Lab Sample ID: 890-7071-18**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.9		4.99	0.394	mg/Kg			09/07/24 21:14	1

**Client Sample ID: E# 178**

**Lab Sample ID: 890-7071-19**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.5		4.98	0.393	mg/Kg			09/07/24 21:22	1

**Client Sample ID: E# 179**

**Lab Sample ID: 890-7071-20**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	163		4.96	0.392	mg/Kg			09/07/24 21:30	1

**Client Sample ID: E# 180**

**Lab Sample ID: 890-7071-21**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.3		1.00	0.0793	mg/Kg			09/07/24 16:37	1

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### Client Sample Results

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 181**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-22**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.1		1.00	0.0792	mg/Kg			09/07/24 17:03	1

**Client Sample ID: E# 182**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-23**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.3		0.996	0.0787	mg/Kg			09/07/24 17:12	1

**Client Sample ID: E# 183**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-24**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	102		0.992	0.0784	mg/Kg			09/07/24 17:21	1

**Client Sample ID: E# 184**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-25**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.2		0.994	0.0785	mg/Kg			09/07/24 17:30	1

**Client Sample ID: E# 185**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-26**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.6		0.992	0.0784	mg/Kg			09/07/24 17:57	1

**Client Sample ID: E# 186**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-27**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.42		1.01	0.0798	mg/Kg			09/07/24 18:05	1

**Client Sample ID: E# 187**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-28**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.9		0.996	0.0787	mg/Kg			09/07/24 18:14	1

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### Client Sample Results

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 188**

**Lab Sample ID: 890-7071-29**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.0		1.00	0.0793	mg/Kg			09/07/24 18:23	1

**Client Sample ID: E# 189**

**Lab Sample ID: 890-7071-30**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.88		0.994	0.0785	mg/Kg			09/07/24 18:32	1

**Client Sample ID: E# 190**

**Lab Sample ID: 890-7071-31**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.92		0.992	0.0784	mg/Kg			09/07/24 18:41	1

**Client Sample ID: E# 191**

**Lab Sample ID: 890-7071-32**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.9		1.01	0.0796	mg/Kg			09/07/24 19:07	1

**Client Sample ID: E# 192**

**Lab Sample ID: 890-7071-33**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.46		0.996	0.0787	mg/Kg			09/07/24 19:16	1

**Client Sample ID: E# 193**

**Lab Sample ID: 890-7071-34**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.9		1.00	0.0793	mg/Kg			09/07/24 19:43	1

**Client Sample ID: E# 194**

**Lab Sample ID: 890-7071-35**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.38		1.00	0.0792	mg/Kg			09/07/24 19:52	1

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### Client Sample Results

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 195**  
Date Collected: 09/05/24 07:00  
Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-36**  
Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.0		0.994	0.0785	mg/Kg			09/07/24 20:01	1

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### QC Sample Results

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-90144/1-A  
 Matrix: Solid  
 Analysis Batch: 90166

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			09/07/24 17:26	1

Lab Sample ID: LCS 880-90144/2-A  
 Matrix: Solid  
 Analysis Batch: 90166

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.6		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-90144/3-A  
 Matrix: Solid  
 Analysis Batch: 90166

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	242.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 890-7071-1 MS  
 Matrix: Solid  
 Analysis Batch: 90166

Client Sample ID: E# 160  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	39.0		251	278.9		mg/Kg		96	90 - 110

Lab Sample ID: 890-7071-1 MSD  
 Matrix: Solid  
 Analysis Batch: 90166

Client Sample ID: E# 160  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	39.0		251	279.2		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 890-7071-11 MS  
 Matrix: Solid  
 Analysis Batch: 90166

Client Sample ID: E# 170  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	96.4		248	340.2		mg/Kg		98	90 - 110

Lab Sample ID: 890-7071-11 MSD  
 Matrix: Solid  
 Analysis Batch: 90166

Client Sample ID: E# 170  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	96.4		248	340.2		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-90145/1-A  
 Matrix: Solid  
 Analysis Batch: 90169

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00	U	1.00	0.0790	mg/Kg			09/07/24 16:10	1

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### QC Sample Results

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

#### Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: LCS 880-90145/2-A**  
**Matrix: Solid**  
**Analysis Batch: 90169**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.29		mg/Kg		99	90 - 110

**Lab Sample ID: LCSD 880-90145/3-A**  
**Matrix: Solid**  
**Analysis Batch: 90169**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Soluble**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	49.28		mg/Kg		99	90 - 110	0	20

**Lab Sample ID: 890-7071-21 MS**  
**Matrix: Solid**  
**Analysis Batch: 90169**

**Client Sample ID: E# 180**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	54.3		50.2	101.0		mg/Kg		93	90 - 110

**Lab Sample ID: 890-7071-21 MSD**  
**Matrix: Solid**  
**Analysis Batch: 90169**

**Client Sample ID: E# 180**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	54.3		50.2	101.2		mg/Kg		93	90 - 110	0	20

**Lab Sample ID: 890-7071-31 MS**  
**Matrix: Solid**  
**Analysis Batch: 90169**

**Client Sample ID: E# 190**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7.92		49.6	56.61		mg/Kg		98	90 - 110

**Lab Sample ID: 890-7071-31 MSD**  
**Matrix: Solid**  
**Analysis Batch: 90169**

**Client Sample ID: E# 190**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7.92		49.6	56.30		mg/Kg		98	90 - 110	1	20

### QC Association Summary

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

#### HPLC/IC

##### Leach Batch: 90144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7071-1	E# 160	Soluble	Solid	DI Leach	
890-7071-2	E# 161	Soluble	Solid	DI Leach	
890-7071-3	E# 162	Soluble	Solid	DI Leach	
890-7071-4	E# 163	Soluble	Solid	DI Leach	
890-7071-5	E# 164	Soluble	Solid	DI Leach	
890-7071-6	E# 165	Soluble	Solid	DI Leach	
890-7071-7	E# 166	Soluble	Solid	DI Leach	
890-7071-8	E# 167	Soluble	Solid	DI Leach	
890-7071-9	E# 168	Soluble	Solid	DI Leach	
890-7071-10	E# 169	Soluble	Solid	DI Leach	
890-7071-11	E# 170	Soluble	Solid	DI Leach	
890-7071-12	E# 171	Soluble	Solid	DI Leach	
890-7071-13	E# 172	Soluble	Solid	DI Leach	
890-7071-14	E# 173	Soluble	Solid	DI Leach	
890-7071-15	E# 174	Soluble	Solid	DI Leach	
890-7071-16	E# 175	Soluble	Solid	DI Leach	
890-7071-17	E# 176	Soluble	Solid	DI Leach	
890-7071-18	E# 177	Soluble	Solid	DI Leach	
890-7071-19	E# 178	Soluble	Solid	DI Leach	
890-7071-20	E# 179	Soluble	Solid	DI Leach	
MB 880-90144/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-90144/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-90144/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7071-1 MS	E# 160	Soluble	Solid	DI Leach	
890-7071-1 MSD	E# 160	Soluble	Solid	DI Leach	
890-7071-11 MS	E# 170	Soluble	Solid	DI Leach	
890-7071-11 MSD	E# 170	Soluble	Solid	DI Leach	

##### Leach Batch: 90145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7071-21	E# 180	Soluble	Solid	DI Leach	
890-7071-22	E# 181	Soluble	Solid	DI Leach	
890-7071-23	E# 182	Soluble	Solid	DI Leach	
890-7071-24	E# 183	Soluble	Solid	DI Leach	
890-7071-25	E# 184	Soluble	Solid	DI Leach	
890-7071-26	E# 185	Soluble	Solid	DI Leach	
890-7071-27	E# 186	Soluble	Solid	DI Leach	
890-7071-28	E# 187	Soluble	Solid	DI Leach	
890-7071-29	E# 188	Soluble	Solid	DI Leach	
890-7071-30	E# 189	Soluble	Solid	DI Leach	
890-7071-31	E# 190	Soluble	Solid	DI Leach	
890-7071-32	E# 191	Soluble	Solid	DI Leach	
890-7071-33	E# 192	Soluble	Solid	DI Leach	
890-7071-34	E# 193	Soluble	Solid	DI Leach	
890-7071-35	E# 194	Soluble	Solid	DI Leach	
890-7071-36	E# 195	Soluble	Solid	DI Leach	
MB 880-90145/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-90145/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-90145/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7071-21 MS	E# 180	Soluble	Solid	DI Leach	
890-7071-21 MSD	E# 180	Soluble	Solid	DI Leach	

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### QC Association Summary

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

#### HPLC/IC (Continued)

##### Leach Batch: 90145 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7071-31 MS	E# 190	Soluble	Solid	DI Leach	
890-7071-31 MSD	E# 190	Soluble	Solid	DI Leach	

##### Analysis Batch: 90166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7071-1	E# 160	Soluble	Solid	300.0	90144
890-7071-2	E# 161	Soluble	Solid	300.0	90144
890-7071-3	E# 162	Soluble	Solid	300.0	90144
890-7071-4	E# 163	Soluble	Solid	300.0	90144
890-7071-5	E# 164	Soluble	Solid	300.0	90144
890-7071-6	E# 165	Soluble	Solid	300.0	90144
890-7071-7	E# 166	Soluble	Solid	300.0	90144
890-7071-8	E# 167	Soluble	Solid	300.0	90144
890-7071-9	E# 168	Soluble	Solid	300.0	90144
890-7071-10	E# 169	Soluble	Solid	300.0	90144
890-7071-11	E# 170	Soluble	Solid	300.0	90144
890-7071-12	E# 171	Soluble	Solid	300.0	90144
890-7071-13	E# 172	Soluble	Solid	300.0	90144
890-7071-14	E# 173	Soluble	Solid	300.0	90144
890-7071-15	E# 174	Soluble	Solid	300.0	90144
890-7071-16	E# 175	Soluble	Solid	300.0	90144
890-7071-17	E# 176	Soluble	Solid	300.0	90144
890-7071-18	E# 177	Soluble	Solid	300.0	90144
890-7071-19	E# 178	Soluble	Solid	300.0	90144
890-7071-20	E# 179	Soluble	Solid	300.0	90144
MB 880-90144/1-A	Method Blank	Soluble	Solid	300.0	90144
LCS 880-90144/2-A	Lab Control Sample	Soluble	Solid	300.0	90144
LCSD 880-90144/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	90144
890-7071-1 MS	E# 160	Soluble	Solid	300.0	90144
890-7071-1 MSD	E# 160	Soluble	Solid	300.0	90144
890-7071-11 MS	E# 170	Soluble	Solid	300.0	90144
890-7071-11 MSD	E# 170	Soluble	Solid	300.0	90144

##### Analysis Batch: 90169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7071-21	E# 180	Soluble	Solid	300.0	90145
890-7071-22	E# 181	Soluble	Solid	300.0	90145
890-7071-23	E# 182	Soluble	Solid	300.0	90145
890-7071-24	E# 183	Soluble	Solid	300.0	90145
890-7071-25	E# 184	Soluble	Solid	300.0	90145
890-7071-26	E# 185	Soluble	Solid	300.0	90145
890-7071-27	E# 186	Soluble	Solid	300.0	90145
890-7071-28	E# 187	Soluble	Solid	300.0	90145
890-7071-29	E# 188	Soluble	Solid	300.0	90145
890-7071-30	E# 189	Soluble	Solid	300.0	90145
890-7071-31	E# 190	Soluble	Solid	300.0	90145
890-7071-32	E# 191	Soluble	Solid	300.0	90145
890-7071-33	E# 192	Soluble	Solid	300.0	90145
890-7071-34	E# 193	Soluble	Solid	300.0	90145
890-7071-35	E# 194	Soluble	Solid	300.0	90145
890-7071-36	E# 195	Soluble	Solid	300.0	90145

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### QC Association Summary

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

#### HPLC/IC (Continued)

#### Analysis Batch: 90169 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-90145/1-A	Method Blank	Soluble	Solid	300.0	90145
LCS 880-90145/2-A	Lab Control Sample	Soluble	Solid	300.0	90145
LCSD 880-90145/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	90145
890-7071-21 MS	E# 180	Soluble	Solid	300.0	90145
890-7071-21 MSD	E# 180	Soluble	Solid	300.0	90145
890-7071-31 MS	E# 190	Soluble	Solid	300.0	90145
890-7071-31 MSD	E# 190	Soluble	Solid	300.0	90145

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### Lab Chronicle

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 160**  
Date Collected: 09/05/24 07:00  
Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-1**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 17:50	CH	EET MID

**Client Sample ID: E# 161**  
Date Collected: 09/05/24 07:00  
Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-2**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 18:15	CH	EET MID

**Client Sample ID: E# 162**  
Date Collected: 09/05/24 07:00  
Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-3**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 18:23	CH	EET MID

**Client Sample ID: E# 163**  
Date Collected: 09/05/24 07:00  
Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-4**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 18:31	CH	EET MID

**Client Sample ID: E# 164**  
Date Collected: 09/05/24 07:00  
Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-5**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 18:39	CH	EET MID

**Client Sample ID: E# 165**  
Date Collected: 09/05/24 07:00  
Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-6**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 19:04	CH	EET MID

Eurofins Carlsbad

### Lab Chronicle

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 166**

**Lab Sample ID: 890-7071-7**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 19:12	CH	EET MID

**Client Sample ID: E# 167**

**Lab Sample ID: 890-7071-8**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 19:20	CH	EET MID

**Client Sample ID: E# 168**

**Lab Sample ID: 890-7071-9**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 19:28	CH	EET MID

**Client Sample ID: E# 169**

**Lab Sample ID: 890-7071-10**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.00 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 19:36	CH	EET MID

**Client Sample ID: E# 170**

**Lab Sample ID: 890-7071-11**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 19:45	CH	EET MID

**Client Sample ID: E# 171**

**Lab Sample ID: 890-7071-12**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 20:09	CH	EET MID

Eurofins Carlsbad

### Lab Chronicle

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 172**

**Lab Sample ID: 890-7071-13**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 20:17	CH	EET MID

**Client Sample ID: E# 173**

**Lab Sample ID: 890-7071-14**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 20:42	CH	EET MID

**Client Sample ID: E# 174**

**Lab Sample ID: 890-7071-15**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 20:50	CH	EET MID

**Client Sample ID: E# 175**

**Lab Sample ID: 890-7071-16**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 20:58	CH	EET MID

**Client Sample ID: E# 176**

**Lab Sample ID: 890-7071-17**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 21:06	CH	EET MID

**Client Sample ID: E# 177**

**Lab Sample ID: 890-7071-18**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 21:14	CH	EET MID

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### Lab Chronicle

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 178**

**Lab Sample ID: 890-7071-19**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 21:22	CH	EET MID

**Client Sample ID: E# 179**

**Lab Sample ID: 890-7071-20**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	90144	09/05/24 11:52	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90166	09/07/24 21:30	CH	EET MID

**Client Sample ID: E# 180**

**Lab Sample ID: 890-7071-21**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 16:37	CH	EET MID

**Client Sample ID: E# 181**

**Lab Sample ID: 890-7071-22**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 17:03	CH	EET MID

**Client Sample ID: E# 182**

**Lab Sample ID: 890-7071-23**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 17:12	CH	EET MID

**Client Sample ID: E# 183**

**Lab Sample ID: 890-7071-24**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 17:21	CH	EET MID

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### Lab Chronicle

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 184**

**Lab Sample ID: 890-7071-25**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 17:30	CH	EET MID

**Client Sample ID: E# 185**

**Lab Sample ID: 890-7071-26**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 17:57	CH	EET MID

**Client Sample ID: E# 186**

**Lab Sample ID: 890-7071-27**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 18:05	CH	EET MID

**Client Sample ID: E# 187**

**Lab Sample ID: 890-7071-28**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 18:14	CH	EET MID

**Client Sample ID: E# 188**

**Lab Sample ID: 890-7071-29**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 18:23	CH	EET MID

**Client Sample ID: E# 189**

**Lab Sample ID: 890-7071-30**

Date Collected: 09/05/24 07:00

Matrix: Solid

Date Received: 09/05/24 10:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 18:32	CH	EET MID

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### Lab Chronicle

Client: R360 ES Holdings Inc  
 Project/Site: R360 -backfill

Job ID: 890-7071-1

**Client Sample ID: E# 190**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-31**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 18:41	CH	EET MID

**Client Sample ID: E# 191**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-32**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 19:07	CH	EET MID

**Client Sample ID: E# 192**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-33**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 19:16	CH	EET MID

**Client Sample ID: E# 193**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-34**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 19:43	CH	EET MID

**Client Sample ID: E# 194**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-35**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 19:52	CH	EET MID

**Client Sample ID: E# 195**  
 Date Collected: 09/05/24 07:00  
 Date Received: 09/05/24 10:26

**Lab Sample ID: 890-7071-36**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	10 mL	90145	09/05/24 11:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90169	09/07/24 20:01	CH	EET MID

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

### Accreditation/Certification Summary

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

#### Laboratory: Eurofins Midland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

- 1
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### Method Summary

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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### Sample Summary

Client: R360 ES Holdings Inc  
Project/Site: R360 -backfill

Job ID: 890-7071-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7071-1	E# 160	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-2	E# 161	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-3	E# 162	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-4	E# 163	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-5	E# 164	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-6	E# 165	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-7	E# 166	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-8	E# 167	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-9	E# 168	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-10	E# 169	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-11	E# 170	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-12	E# 171	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-13	E# 172	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-14	E# 173	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-15	E# 174	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-16	E# 175	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-17	E# 176	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-18	E# 177	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-19	E# 178	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-20	E# 179	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-21	E# 180	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-22	E# 181	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-23	E# 182	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-24	E# 183	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-25	E# 184	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-26	E# 185	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-27	E# 186	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-28	E# 187	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-29	E# 188	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-30	E# 189	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-31	E# 190	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-32	E# 191	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-33	E# 192	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-34	E# 193	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-35	E# 194	Solid	09/05/24 07:00	09/05/24 10:26
890-7071-36	E# 195	Solid	09/05/24 07:00	09/05/24 10:26

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Work Order No:

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Chain of C  
Houston, TX (281) 240-4200, D  
Midland, TX (432) 704-5440, San A  
EL Paso, TX (915) 585-3443, Lubl  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing  
Xenco



Project Manager: Luis Rivera  
 Company Name: R360 ES  
 Address: 5053 US Hwy 285  
 City, State ZIP: Orla TX 79720  
 Phone: (805) 351-2694  
 Email: Luis.Rivera@es.com

Bill to: (if different)  
 Company Name:  
 Address:  
 City, State ZIP:

Turn Around  
 Routine  Rush  
 Due Date:  
 TAT starts the day received by the lab, if received by 4:30pm

Temp Blank:  Yes  No  
 Thermometer ID: TM1007  
 Correction Factor: -0.2  
 Temperature Reading: 5.51  
 Corrected Temperature: 5.2

Work Order Comments  
 Program:  UST/PST  PRP  Brownfields  RRC  Superfund   
 State of Project:  Level II  Level III  Level IV   
 Reporting:  Level II  Level III  Level IV   
 Deliverables:  EDD  ADAPT  Other:

Project Name: Backfill  
 Project Number:  
 Project Location:  
 Sampler's Name: Luis Rivera  
 PO #:

ANALYSIS REQUEST

Pres. Code  
 Parameters  
 # of Cont

Grab/Comp  
 Depth  
 Time Sampled  
 Date Sampled  
 Matrix  
 Sample Identification

None: NO  
 DI Water: H<sub>2</sub>O  
 Cool: Cool  
 MeOH: Me  
 HCL: HC  
 HNO<sub>3</sub>: HN  
 H<sub>2</sub>SO<sub>4</sub>: H<sub>2</sub>  
 NaOH: Na  
 H<sub>3</sub>PO<sub>4</sub>: HP  
 NaHSO<sub>4</sub>: NABIS  
 Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>: NaSO<sub>3</sub>  
 Zn Acetate+NaOH: Zn  
 NaOH+Ascorbic Acid: SAPC

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code	ANALYSIS REQUEST	Preservative Codes
E# 160		9/5/24	7:00AM			1				
E# 161						1				
E# 162						1				
E# 163						1				
E# 164						1				
E# 165						1				
E# 166						1				
E# 167						1				
E# 168						1				
E# 169						1				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Tl Sn U V Zn  
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Note: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
[Signature]	[Signature]	9/5 10:26			

Revised Date: 08/25/2020 Rev. 2020.2





# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing  
Xenco

Work Order No: \_\_\_\_\_

www.xenco.com Page 3 of 4

Project Manager: <i>Luis Rivera</i>	Bill to: (if different)
Company Name: <i>ES</i>	Company Name:
Address: <i>5053 US Hwy 285</i>	Address:
City, State ZIP: <i>Orla TX 79770</i>	City, State ZIP:
Phone: <i>(409) 351-2694</i>	Email: <i>Luis.Rivera@xenco.com</i>

Project Name:	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number:	<input type="checkbox"/> Routine <input type="checkbox"/> Rush			None: NO DI Water: H <sub>2</sub> O
Project Location:	Due Date:			Cool: Cool MeOH: Me
Sampler's Name:	TAT starts the day received by the lab, if received by 4:30pm			HCL: HC HNO <sub>3</sub> : HN
PO #:				H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na

SAMPLE RECEIPT	Temp Blank:		Wet Ice:		Thermometer ID:	Correction Factor:	Temperature Reading:	Corrected Temperature:	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Conts	Parameters
	Yes	No	Yes	No										
<i>EH180</i>									<i>9/15/24</i>	<i>7:38 AM</i>			<i>1</i>	
<i>EH181</i>													<i>1</i>	
<i>EH182</i>													<i>1</i>	
<i>EH183</i>													<i>1</i>	
<i>EH184</i>													<i>1</i>	
<i>EH185</i>													<i>1</i>	
<i>EH186</i>													<i>1</i>	
<i>EH187</i>													<i>1</i>	
<i>EH188</i>													<i>1</i>	
<i>EH189</i>													<i>1</i>	

Total 200.7 / 6010    200.8 / 6020:    8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mig Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Tl Sn U V Zn  
Circle Method(s) and Metal(s) to be analyzed    TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U    Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date/Time <i>alsh</i>	Relinquished by: (Signature)	Received by: (Signature)	Date/Time

Revised Date: 08/25/2020 Rev. 2002





### Login Sample Receipt Checklist

Client: R360 ES Holdings Inc

Job Number: 890-7071-1

Login Number: 7071

List Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

### Login Sample Receipt Checklist

Client: R360 ES Holdings Inc

Job Number: 890-7071-1

Login Number: 7071

List Number: 2

Creator: Vasquez, Julisa

List Source: Eurofins Midland

List Creation: 09/06/24 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

- 1
- 2
- 3
- 4
- 5
- 6
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- 8
- 9
- 10
- 11
- 12
- 13

# **APPENDIX F Waste Manifests**

TRANSPORTER'S MANIFEST

MANIFEST # 1

SHIPPING FACILITY NAME & ADDRESS:

Company: CONOCO PHILLIPS  
Address: 600 W. ILLINOIS AVE, Midland, TX 79701  
Project Lead: IKE TAVAREZ@conocPhillips.com  
432.486.8630

waysouthstate.com #001# Tinhorn Release  
GL Account No. 702000  
WBS ELEMENT WAD. 000.7352, RM

LOCATION OF MATERIAL:

Location: Way South State Com #001# Tinhorn Release (AOC 7352)  
Company: Conoco Phillips

S 30 T 265 R 28E

Lea County, New Mexico

TRANSPORTER NAME & ADDRESS:

McNabb Partners  
4008 N. Grimes #270  
Hobbs, NM 88240

DESCRIPTION OF WASTE:

Impacted Soil Quantity: 15

FACILITY CONTACT:

Date: 9-6-24 Contact Signature: Ray Garcia  
(Agent for ConocoPhillips)

NAME OF TRANSPORTER: (Driver)

Date: 9-6-24 Driver Signature: VICTOR MORALES

DISPOSAL SITE:

Name of Disposal:

Address:

Date:

**R360 Environmental Solutions**  
**5053 US Hwy 285**  
**Orla, TX 79779**

Representative  
Signature: Joyce Garcia

# TRANSPORTER'S MANIFEST

MANIFEST # 2

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavaréz  
Ike.Tavaréz@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release – RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

*Impacted Soil*

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/6/24

Signature of Contact:  
(Agent for ConocoPhillips)

Andrew Garcia  
432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/6/24

Signature Driver:

VICTOR MANZANO

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date:

9/6/24

Representative  
Signature

[Signature]

# TRANSPORTER'S MANIFEST

MANIFEST # 3

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike.Tavarez@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release – RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

*Impacted Soil*

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/6/24

Signature of Contact:  
(Agent for ConocoPhillips)

Andrew Garcia  
432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/6/24

Signature Driver:

VICTOR MANZANO

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date: 9-6-24

Representative  
Signature

[Signature]

# TRANSPORTER'S MANIFEST

MANIFEST # 4

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavaréz  
Ike.Tavaréz@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release – RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM  
**API# 30-015-37234**

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

*Impacted Soil*

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/9/24

Signature of Contact:  
(Agent for ConocoPhillips)

*Andrew Garcia*  
**Andrew Garcia 432-270-0197**

**NAME OF TRANSPORTER (Driver):**

Date: 09/9/24

Signature Driver:

*VICTOR MANZANO*

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date: 9/9/24

Representative  
Signature

*J Y*

# TRANSPORTER'S MANIFEST

MANIFEST # 5

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike. Tavarez @conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release – RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

*API - 30-015-37234*

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

*M-38*

**DESCRIPTION OF WASTE:**

*Impacted Soil*

TRUCK CAPACITY:

*15 cu yds*

APPROXIMATE % FULL

*90%*

APPROXIMATE VOLUME HAULED OFF

*15 cu yds*

**FACILITY CONTACT:**

Date: *09/9/24*

Signature of Contact:  
(Agent for ConocoPhillips)

*Andrew Garcia*  
*432-270-0197*

**NAME OF TRANSPORTER (Driver):**

Date: *09/9/24*

Signature Driver:

*VICTOR MANZANO*

**DISPOSAL SITE:**

*R360 Red Bluff*  
*5053 Us Hwy 285*  
*Orla, Tx 79770*

Date:

*9/9/24*

Representative  
Signature

*[Signature]*

# TRANSPORTER'S MANIFEST

MANIFEST # 6

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike.Tavarez@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release – RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

API 30-015-37234

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK # M-38

**DESCRIPTION OF WASTE:**

Impacted Soil

TRUCK CAPACITY: 15 cu yds

APPROXIMATE % FULL 90%

APPROXIMATE VOLUME HAULED OFF 15 cu yds

**FACILITY CONTACT:**

Date: 09/9/24

Signature of Contact:   
(Agent for ConocoPhillips) Andrew Garcia 432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/9/24

Signature Driver: 

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date: 9/9/24

Representative  
Signature 

# TRANSPORTER'S MANIFEST

MANIFEST # 7

**SHIPPING FACILITY NAME & ADDRESS:**

ConocoPhillips Company  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike.Tavarez@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release - RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

*API 30-015-37234*

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

*Impacted Soil*

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/9/24

Signature of Contact:  
(Agent for ConocoPhillips)

*Andrew Garcia*  
Andrew Garcia 432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/9/24

Signature Driver:

*VICTOR MANZANO*

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date:

9/9/24

Representative  
Signature

*[Signature]*

# TRANSPORTER'S MANIFEST

MANIFEST # 7

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike.Tavarez@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release – RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

30-015-37734

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

Impacted Soil

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/10/24

Signature of Contact:  
(Agent for ConocoPhillips)

*Andrew Garcia*  
Andrew Garcia 432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/10/24

Signature Driver:

*VICTOR MANZANO*

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date:

Sep 10, 2024

Representative  
Signature

*Jorge Garcia*

# TRANSPORTER'S MANIFEST

MANIFEST #

8

**SHIPPING FACILITY NAME & ADDRESS:**

ConocoPhillips Company  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike.Tavarez@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release – RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

Impacted Soil

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/10/24

Signature of Contact:  
(Agent for ConocoPhillips)

Andrew Garcia  
432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/10/24

Signature Driver:

VICTOR MANZANO

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date:

Sep 10, 2024

Representative  
Signature

[Signature]

# TRANSPORTER'S MANIFEST

MANIFEST # 8

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike.Tavarez@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release - RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

*API-30-015-37734*

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

*Impacted Soil*

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/10/24

Signature of Contact:  
(Agent for ConocoPhillips)

*Andrew Garcia*  
Andrew Garcia 432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/10/24

Signature Driver:

*SILVIA MANSANO*

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date:

Sep 10, 2024

Representative  
Signature

*Jorge Moreno*

# TRANSPORTER'S MANIFEST

MANIFEST # 9

**SHIPPING FACILITY NAME & ADDRESS:**

**ConocoPhillips Company**  
600 W. Illinois Avenue, Midland, TX 79701  
Attn. Ike Tavarez  
Ike.Tavarez@conocophillips.com  
432.486.8630

**ACCOUNTING INFORMATION**

Way South State Com #001H Tinhorn Release - RMR Project  
GL Account No.: 702000  
WBS Element: WAO.000.7352.00.RM

*API - 30-015-37234*

**LOCATION OF MATERIAL:**

ConocoPhillips Company

Way South State Com #001H Tinhorn Release (AoC 7352)  
Unit Letter A, Section 30, Township 26 South, Range 28 East  
Eddy County, New Mexico

**TRANSPORTER NAME AND ADDRESS:**

McNabb Partners  
4008 N. Grimes  
Hobbs, New Mexico 88240  
575.397.0050

TRUCK #

M-38

**DESCRIPTION OF WASTE:**

*Impacted Soil*

TRUCK CAPACITY:

15 cu yds

APPROXIMATE % FULL

90%

APPROXIMATE VOLUME HAULED OFF

15 cu yds

**FACILITY CONTACT:**

Date: 09/10/24

Signature of Contact: *Andrew Garcia*  
(Agent for ConocoPhillips) Andrew Garcia 432-270-0197

**NAME OF TRANSPORTER (Driver):**

Date: 09/10/24

Signature Driver: *VICTOR MANZANO*

**DISPOSAL SITE:**

R360 Red Bluff  
5053 Us Hwy 285  
Orla, Tx 79770

Date:

Sep 10, 2024

Representative  
Signature

*JY*

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**

QUESTIONS

Action 389858

**QUESTIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAB1821441824
Incident Name	NAB1821441824 WAY SOUTH STATE COM #001H @ 30-015-37234
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received
Incident Well	[30-015-37234] WAY SOUTH STATE COM #001H

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	WAY SOUTH STATE COM #001H
Date Release Discovered	07/28/2018
Surface Owner	State

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

<b>Nature and Volume of Release</b>	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: Equipment Failure   Valve   Crude Oil   Released: 0 BBL   Recovered: 0 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Valve   Produced Water   Released: 72 BBL   Recovered: 60 BBL   Lost: 12 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 389858

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>Yes</b>
Reasons why this would be considered a submission for a notification of a major release	<b>From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.</b>
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

**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	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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.

I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetrattech.com Date: 10/03/2024
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QUESTIONS, Page 3

Action 389858

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Site Characterization**  
*Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 100 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Zero feet, overlying, or within area
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**  
*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	12400
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	44.3
GRO+DRO (EPA SW-846 Method 8015M)	25.9
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

On what estimated date will the remediation commence	08/07/2024
On what date will (or did) the final sampling or liner inspection occur	08/14/2024
On what date will (or was) the remediation complete(d)	08/15/2024
What is the estimated surface area (in square feet) that will be reclaimed	530
What is the estimated volume (in cubic yards) that will be reclaimed	120
What is the estimated surface area (in square feet) that will be remediated	530
What is the estimated volume (in cubic yards) that will be remediated	120

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*  
*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 4

Action 389858

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	OWL LANDFILL JAL [JEG1635837366]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	No
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetrattech.com Date: 10/03/2024
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 389858

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 389858

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>380418</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>09/09/2024</b>
What was the (estimated) number of samples that were to be gathered	<b>8</b>
What was the sampling surface area in square feet	<b>650</b>

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	625
What was the total volume (cubic yards) remediated	165
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	625
What was the total volume (in cubic yards) reclaimed	165

Summarize any additional remediation activities not included by answers (above)	<p>Following excavation, confirmation floor and sidewall samples were collected from the entire remediated area and submitted for laboratory analysis to verify efficacy of remediation activities. Per the NMOCD approved confirmation sampling plan, confirmation samples were collected such that each discrete sample (sidewall and floor) was representative of no more than 200 square feet of excavated area. A total of three (3) confirmation floor sample locations, three (3) confirmation sidewall sample locations, and two (2) confirmation interior sidewall locations were collected for laboratory analysis during remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with FS-#. Internal sidewall samples were collected from the vertical faces of the excavation between the 4-foot and 6-foot areas and labeled with ISW-#.</p>
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*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 (in .pdf format) 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.*

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.

I hereby agree and sign off to the above statement	<p>Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetrattech.com Date: 10/03/2024</p>
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QUESTIONS, Page 7

Action 389858

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	625
What was the total volume of replacement material (in cubic yards) for this site	165
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	09/10/2024
Summarize any additional reclamation activities not included by answers (above)	Once acceptable confirmation sample results were received, the excavation was backfilled with clean material to pre-release grade. In accordance with 19.15.29.12 NMAC, the reclaimed area contained a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0. The soil cover included a top layer consisting of one foot of suitable material to establish vegetation at the site. The backfilled areas in the pasture were seeded following backfilling, to aid in revegetation. Based on the soils of the site, the NMSLO Loamy (L) Sites Seed Mixture was used for seeding and was planted in the amount specified in the pounds pure live seed (PLS) per acre.
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetrattech.com Date: 10/03/2024

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Action 389858

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Revegetation Report</b>	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 389858

**CONDITIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 389858
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**CONDITIONS**

Created By	Condition	Condition Date
bhall	Remediation closure and reclamation report approved.	12/26/2024
bhall	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	12/26/2024
bhall	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	12/26/2024
bhall	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	12/26/2024