



August 26, 2024

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

**Re: Remediation Closure and Reclamation Report
ConocoPhillips (Heritage COG Operating LLC)
West Brushy 8 Federal SWD #001 Release
Unit Letter A, Section 08, Township 26 South, Range 29 East
Eddy County, New Mexico
Incident ID# nAB1529948530
2RP-3353**

Ms. Hall,

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (ConocoPhillips) to evaluate a historical Heritage COG Operating (COG) release and subsequent remedial actions performed at the West Brushy 8 Federal SWD #001 release site (API No. 30-015-31675). The release footprint is located in Public Land Survey System (PLSS) Unit Letter A, Section 08, Township 26 South, Range 29 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.063845° -103.997697° as shown on Figures 1 and 2. The site is located on federal lands managed by the Bureau of Land Management (BLM).

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on September 13, 2015. The release occurred when a poly flowline was damaged by a crew working in the area. Vacuum trucks were dispatched to remove all freestanding fluids. Approximately 30 barrels (bbls) of produced water were released on pasture alongside the road, of which approximately 3 bbls were recovered. The approximate release extent is shown in Figure 3.

The NMOCD approved the initial C-141 on October 26, 2015, and subsequently assigned the release the Incident ID nAB1529948530 and the remediation permit (RP) number 2RP-3353. The initial C-141 form is included in Appendix A.

COG SITE ASSESSMENT, 2016 WORK PLAN AND CLOSURE LETTER

A site assessment for this incident was conducted by COG in October 2015. Assessment activities consisted of advancing three (3) borings (S1, S2, and S3) in the release extent footprint. Two (2) samples per boring were collected, one from the surface and one from 1-foot bgs. The assessment sampling locations are presented in Figure 3. A total of six (6) samples were collected from the locations and transferred under chain of custody to Cardinal Laboratories (Cardinal). All soil samples were analyzed for chloride via Method SM4500Cl-B. Analytical results associated with samples collected during the October 2015 assessment activities are summarized in Table 1.

Based on the assessment results, COG prepared and submitted a Work Plan to the NMOCD in January 2016. In the report, COG proposed the following:

Tetra Tech

901 West Wall St., Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com

- *“COG Operating LLC proposes that no excavation other than a surface scrape be required due to high-risk hazards in the area.*
- *The area consists of three high pressure gas lines associated with a neighboring compressor station, a water line, a crude oil line that runs east and west, and overhead power lines.”*

Through a desktop review, Tetra Tech located copies of the email correspondence over multiple dates from COG, NMOCD, and BLM regarding this incident. The following comments are in response to the submitted Work Plan, from an email sent by Mike Bratcher of the NMOCD on January 11, 2016:

- *“A Final Report C-141 would be accepted for record only. The release/site would be deferred and remain open in OCD database. It is also noted that this site is approximately 600 yards uphill from, and adjacent to a drainage feature, to the Pecos River.*
- *OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health, or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.”*

The following comments were provided by Shelly Tucker of the BLM in an email dated January 19, 2016:

- *“BLM concurs with the NMOCD. This site will be deferred for clean-up.”*

COG prepared a closure letter dated March 30, 2016 that included a Final C-141 form. The closure letter indicated that the proposed surface scrape had been completed over the release footprint.

The following comments are in response to the closure letter, from an email sent by Heather Patterson of the NMOCD on April 4, 2016:

- *“The OCD cannot accept your closure request for the above listed site. In addition, a deferral for this release is problematic. In general, a deferral is granted for releases that occur on location that can be tracked till site abandonment. With a release in the pasture, there is no effective end date at which remediation can be expected. The OCD also requires a full vertical and horizontal delineation before a site ranking can be assigned and a deferral granted.*
- *OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.”*

The surface scrape extent is presented in Figure 4. Copies of the 2016 COG Work Plan, associated laboratory analytical data, and related regulatory correspondence are included in the Remediation Work Plan dated April 18, 2024, available on the NMOCD permitting website.

BBC REMEDIAL ACTION (COINCIDENT RELEASE REMEDIATION) AND 2019 CLOSURE REPORT

As mentioned, the vicinity of the West Brushy 8 Federal SWD #001 was subject to numerous releases from the years of 2015 to 2018. Based on available correspondence, BBC elected to address multiple release extents on behalf of COG in one remedial action.

The remedial activities were conducted in the second half of 2018. BBC then submitted a Closure Report which incorporated remedial actions covering differing portions of four individual releases which were documented over the three-year period. The 2019 BBC Closure Report contains photographic documentation of remedial activities that were executed per reportedly approved work plans.

The 2019 BBC Closure Report for four separate releases that occurred at the West Brushy 8 Federal SWD #001 Site, including Incident nAB1529948530, was submitted on January 22, 2019. The 2019 BBC Closure Report was rejected by NMOCD for Incident nAB1529948530 on May 1, 2023 with the following comments:

- *“Closure/deferral was rejected for this release in 2016 based on the location of the release and the release not being fully delineated. There are numerous releases that have occurred at this site and have not been closed. If there was overlap of the releases, the approved workplans will need to be provided as stated in this closure report.*
- *Submit a complete report through the OCD Permitting website by 8/1/2023.*
- *2RP-3353 closed. Refer to incident #NAB1529948530 in all future correspondence.”*

A copy of the 2019 BBC Closure Report and NMOCD rejection is included in the Remediation Work Plan dated April 18, 2024, available on the NMOCD permitting website.

EVALUATION OF REMEDIAL ACTION

Following receipt of the Closure Report rejection, ConocoPhillips engaged Tetra Tech to review all available historical documentation for all release incidents associated with the West Brushy 8 Federal SWD #001 facility, and to perform visual site inspections of the numerous release incidents in order to ascertain the extent of the remedial actions taken by BBC. No laboratory analytical data or other evidence of confirmation sampling was discovered during the file review.

Tetra Tech personnel visited the release Site in February and August 2023 in order to geolocate the photographs of excavated and backfilled areas included in the Closure Report and to determine current site conditions. The remediated area presented in Figure 4 were identified in the field based on the figure included in the approved Work Plan and Closure Report and corroborated by the photographs included in the Closure Report as well as observations made during the 2023 visual site inspections. The remediated area is located in an active production area with numerous surface lines, overhead power lines, and vehicular traffic corridors. Vegetative growth was observed in portions of the remediated extent, and no staining or other visible evidence of the release were present at the time of the site visit. Photographic documentation of the 2018 remedial activities and the 2023 site conditions is presented in the Remediation Work Plan dated April 18, 2024, available on the NMOCD permitting website.

2023 CLOSURE REQUEST AND NMOCD REJECTION

A Revised Closure Report dated October 30, 2023 was prepared by Tetra Tech following the February and August 2023 Site visits. ConocoPhillips requested closure for this incident based on the current site conditions and documentation of the previous remedial work completed. The NMOCD rejected the Revised Closure Request in an email dated November 30, 2023 for the following reason:

- *“Closure denied. Photo documentation and visual inspections are not accepted in place of laboratory reports. The release is subject to 19.15.29.12 E NMAC and cannot be closed until all conditions are met. Submit a report via the OCD permitting portal by February 21, 2024.”*

A copy of the regulatory correspondence is included in the Remediation Work Plan dated April 18, 2024, available on the NMOCD permitting website.

SITE CHARACTERIZATION

The Site Characterization performed by COG at the time of the assessment (and ensuing proposed Work Plan) established a depth to groundwater at 75 feet bgs based on the NMOSE reporting system. This Site Characterization was accepted when the Work Plan was approved.

Given the age of the release and the associated actions, a contemporized site characterization was performed for the release footprint. The Site assessment and remediation activities are described in subsequent sections of this report.

A contemporaneous site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, streams, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of medium karst potential. The Pecos River is located approximately 1,800 feet northwest of the Site. Two OSE stream bodies are located approximately 600 and 1000 feet from the release areas, respectively.

There are no water wells listed in the NMOSE database located within approximately ½ mile (800 meters) of the site. According to data from two (2) wells listed in the NMOSE database located approximately 1.5 miles (2,400 meters) from the Site, groundwater was encountered at a minimum depth of 75 feet below ground surface (bgs). The Site characterization data is presented in Appendix B.

REGULATORY FRAMEWORK

Based upon the lack of groundwater data within a ½ mile radius and the proximity to the Pecos River and stream bodies, 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 recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization, depth to groundwater, and in accordance with Table I of 19.15.29.12 NMAC, the recommended remedial action levels (RRALs) for the Site are as follows:

Constituent	Site RRALs
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule* (19.15.29 NMAC) (September 6, 2019), the following reclamation requirements for surface soils (0-4 ft bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH	100 mg/kg

2023-2024 ADDITIONAL ASSESSMENT ACTIVITIES

Tetra Tech conducted additional assessment sampling at the Site on behalf of ConocoPhillips in order to evaluate current soil concentrations and confirm the reported remedial actions taken at the nAB1529948530 release Site, as well as the two adjacent and overlapping historical releases (incident IDs nAB1715742101 and nAB1619432451). The nAB1619432451 release extent largely encompasses both of the other two historical release footprints. On September 21, 2023 Tetra Tech installed fifteen (15) hand auger borings (AH-23-1 through AH-23-15) to depths ranging from 1 to 4 feet bgs in a cross section pattern across the release extent of the overlapping nAB1715742101 incident.

Tetra Tech personnel returned to the Site on November 30, 2023 to install two (2) soil trenches (T-1 and T-5) in the northern drainage area in an attempt to vertically delineate the release in this area, as well as two (2) hand auger borings (AH-23-16 and AH-23-17) to further delineate the release horizontally. Due to the proximity of a buried Energy Transfer pipeline, the soil trenches were placed 25 feet east of the buried line and were not centered within the release extent.

In coordination with all third-party utility operators in the area, Tetra Tech personnel returned to the Site on January 4-5, 2024 to install an additional sixteen (16) soil trenches (T-24-1 through T-24-16) and four (4) hand auger borings (H-24-1 through H-24-4).

Tetra Tech personnel returned to the Site on January 10, 2024 to oversee the installation of six (6) borings with an air rotary drill rig. Boring locations were chosen based on all previous sampling results in order to vertically delineate soil impacts from the various historical releases.

All 2023-2024 sampling locations are presented along with the nAB1715742101 and nAB1619432451 release incident extents in Figure 5. Photographic documentation from the 2023-2024 assessment activities is included in the Remediation Work Plan dated April 18, 2024, available on the NMOCD permitting website.

A total of ninety-seven (97) soil samples were collected from forty-five (45) sampling locations during the four (4) mobilizations and submitted to Cardinal under five (5) separate chain-of-custody and analysis requests to be analyzed for chloride via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8261B. A copy of the laboratory analytical reports and chain-of-custody documentation for the 2023-2024 sampling events are included in the Remediation Work Plan dated April 18, 2024, available on the NMOCD permitting website.

Analytical results from the 2023-2024 soil assessment efforts are summarized in Table 2. The analytical results associated with the 0-1 foot bgs soil interval at trench location T-24-6 exceeded the reclamation limit of 100 mg/kg for TPH. There were no other TPH or BTEX results which exceeded the applicable reclamation limits or RRALs in any of the analyzed samples.

Chloride concentrations were detected in surface soils (0-4 feet bgs) at levels above the reclamation limit of 600 mg/kg at seventeen (17) of the sample locations. There were no analytical results associated with subsurface (greater than 4 feet bgs) soils which exceeded the chloride RRAL of 10,000 mg/kg.

The sampling locations which exceeded the reclamation limits were those associated with trench locations T-24-1 through T-24-7, T-24-10 through T-24-11, and T-24-13 through T-24-15. Horizontal and vertical delineation of the release extent using Table I of 19.15.29.12 NMAC constituents was achieved in accordance with 19.15.29.11(5) NMAC as a result of the 2023-2024 sampling events.

REMEDIATION WORK PLAN AND REGULATORY APPROVAL

Tetra Tech, on behalf of ConocoPhillips, prepared a Remediation Work Plan dated April 18, 2024 and submitted it to the NMOCD and the BLM for approval. The Remediation Work Plan described the results of the assessment activities and proposed to remove soils that exceeded the Site reclamation limits and RRALs as determined by the results of the assessment activities. Confirmation bottom and sidewall samples representative of no more than 400 square feet were proposed for verification of remedial activities. The proposed remedial action addressed the nAB1529948530 incident, which is the subject of this report, as well as the two adjacent and overlapping historical releases (incident IDs nAB1715742101 and nAB1619432451).

The Remediation Work Plan was approved via email by Ashley Maxwell of the NMOCD on April 24, 2024, with the following conditions:

- *“Remediation plan approved.*
- *Submit a report via the OCD permitting portal by August 28, 2024.”*

Copies of the regulatory correspondence are included in Appendix C.

CULTURAL SURVEY

In associated correspondence, the BLM conditionally approved the proposed remedial action in an email dated February 29, 2024, upon the condition that a full archeological survey be conducted to include any

areas that will be disturbed in order to access the release area. Tetra Tech subcontracted SWCA Environmental Consultants (SWCA) to conduct an intensive pedestrian cultural resources survey for the West Brushy 8 Federal SWD #1- Proposed Remediation Project in Eddy County, New Mexico. The survey included the pipe location encompassed by the release remediation area and a 30-meter (m) (100-foot) cultural resources buffer as well as a portion of LA 66112. Portions of the proposed project are covered by three previous qualifying surveys, surveyed within the past 10 years (New Mexico Cultural Resource Information System [NMCRIS] Activity Numbers 132233, 137329, and 145263); these areas were not resurveyed at this time. The total survey area is 6.08 acres (2.46 hectare [ha]). No new historic cultural properties, archaeological sites, or isolated occurrences were identified during the investigation. One previously recorded archaeological site, LA 66112, was visited due to its proximity to the inadvertent release. The western third of the site was updated based on communication with Aaron Whaley at the BLM Carlsbad Field Office (CFO) (2/26/2024).

In accordance with Section 106 of the National Historic Preservation Act (Public Law 89-665), as amended, a cultural resources inventory was completed to locate, identify, and record any cultural resources that may be affected within the area of potential effects (APE) of the proposed project, and provide recommendations regarding their eligibility for listing in the National Register of Historic Places (NRHP).

LA 66112 was determined eligible for the NRHP. The observed portion of the site does not contribute to the eligibility. The inadvertent release area does not extend into the site, and no remediation activities will take place within 100 feet of the site. No additional investigation or treatment is recommended regarding the current undertaking. If subsurface cultural materials are encountered during remediation, all work should cease, and the BLM CFO should be notified immediately.

The BLM approved ConocoPhillips to proceed with the remedial action following the completion of the cultural survey in an email dated June 26, 2024. Copies of the regulatory correspondence are included in Appendix C.

REMEDIAL ACTIVITIES AND CONFIRMATION SAMPLING

From July 10 through August 7, 2024, Tetra Tech personnel were onsite to supervise the remedial activities proposed in the approved Remediation Work Plan, including excavation, disposal, and confirmation sampling. Prior to confirmation sampling, on July 11, 2024, the NMOCD district office was first notified via the OCD Portal (C-141N) in accordance with Subsection D of 19.15.29.12 NMAC. Further release notifications and variance requests are documented in Appendix C.

Impacted soils were excavated as indicated in Figure 6. The areas within the release footprint were excavated to a maximum depth of 4 feet below surrounding grade. 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 associated with incident nAB1529948530 was comprised of approximately 6,150 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 400 square feet of excavated area. The combined remediated extent had a surface area of approximately 19,890 square feet. Fifty-one (51) confirmation floor sample locations and twenty-two (22) confirmation sidewall sample 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 1-ft and 4-ft areas and labeled with ISW-#.

At select sidewall locations where the initial confirmation soil sampling analytical results exceeded the reclamation limits, the sidewalls were expanded, and iterative confirmation samples were collected to encompass the original sample locations that triggered removal (nomenclature defined in Table 3) post-additional excavation. Final excavated areas, depths and confirmation sample locations are indicated in Figure 6.

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 limits and established Site RRALs to demonstrate compliance.

The results of the July and August 2024 confirmation sampling events are summarized in Table 3. All final confirmation soil samples (floor and sidewall) were below applicable cleanup levels for chloride, TPH, and BTEX. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E.

All excavated material was transported offsite for proper disposal. Approximately 1,850 cubic yards of material were transported to the R360 Red Bluff Facility in Orla, Texas.

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 6. The results of the July and August 2024 confirmation sampling events are summarized in Table 3.

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 BLM Seed Mix #2 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. Twenty-one (21) representative soil samples were collected by R360 from the backfill material used for the reclamation of the project site on July 22, 2024 and sent to Eurofins in Carlsbad, New Mexico to be analyzed for chlorides by EPA Method 300.0. Tetra Tech collected one additional backfill sample from the R360 Red Bluff facility on August 22, 2024 and submitted to Cardinal to be analyzed for TPH (GRO+DRO+MRO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chlorides by SM4500Cl-B. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. The analytical results associated with the backfill sample collected by Tetra Tech are summarized in Table 4.

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 BLM.

nAB1529948530 Remediation Closure and Reclamation Report
August 26, 2024

ConocoPhillips

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.

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 K. Abbott, P.G
Project Manager



Christian M. Llull, P.G.
Program Manager

cc:
Mr. Ike Tavarez – ConocoPhillips
Ms. Shelly Taylor, BLM

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent and Site Assessment
- Figure 4 – Remediation Extents and Initial Scrape (COG)
- Figure 5 – Additional Delineation (TT 2023-2024)
- Figure 6 – Remediation Extents and Confirmation Sampling Locations

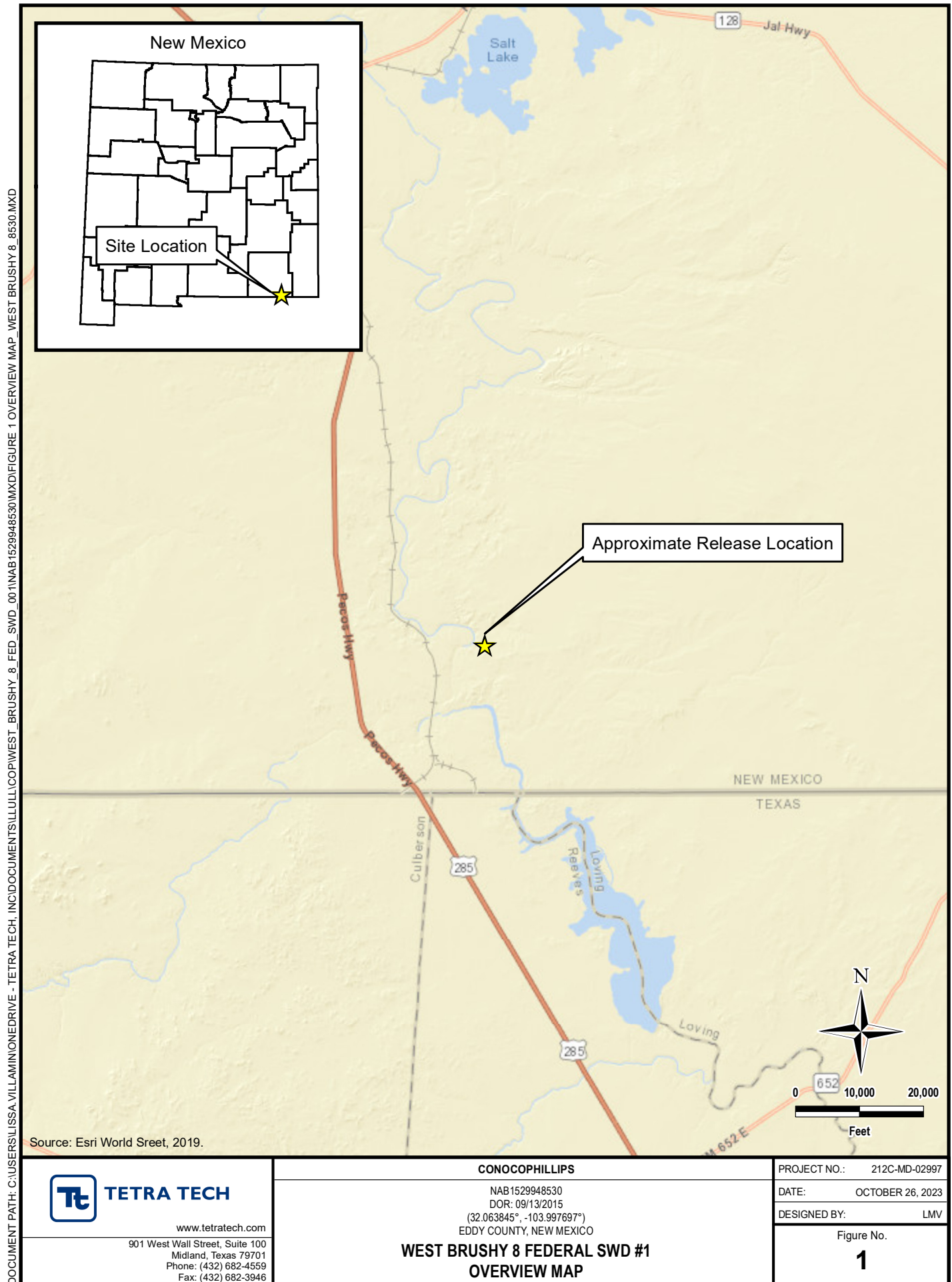
Tables:

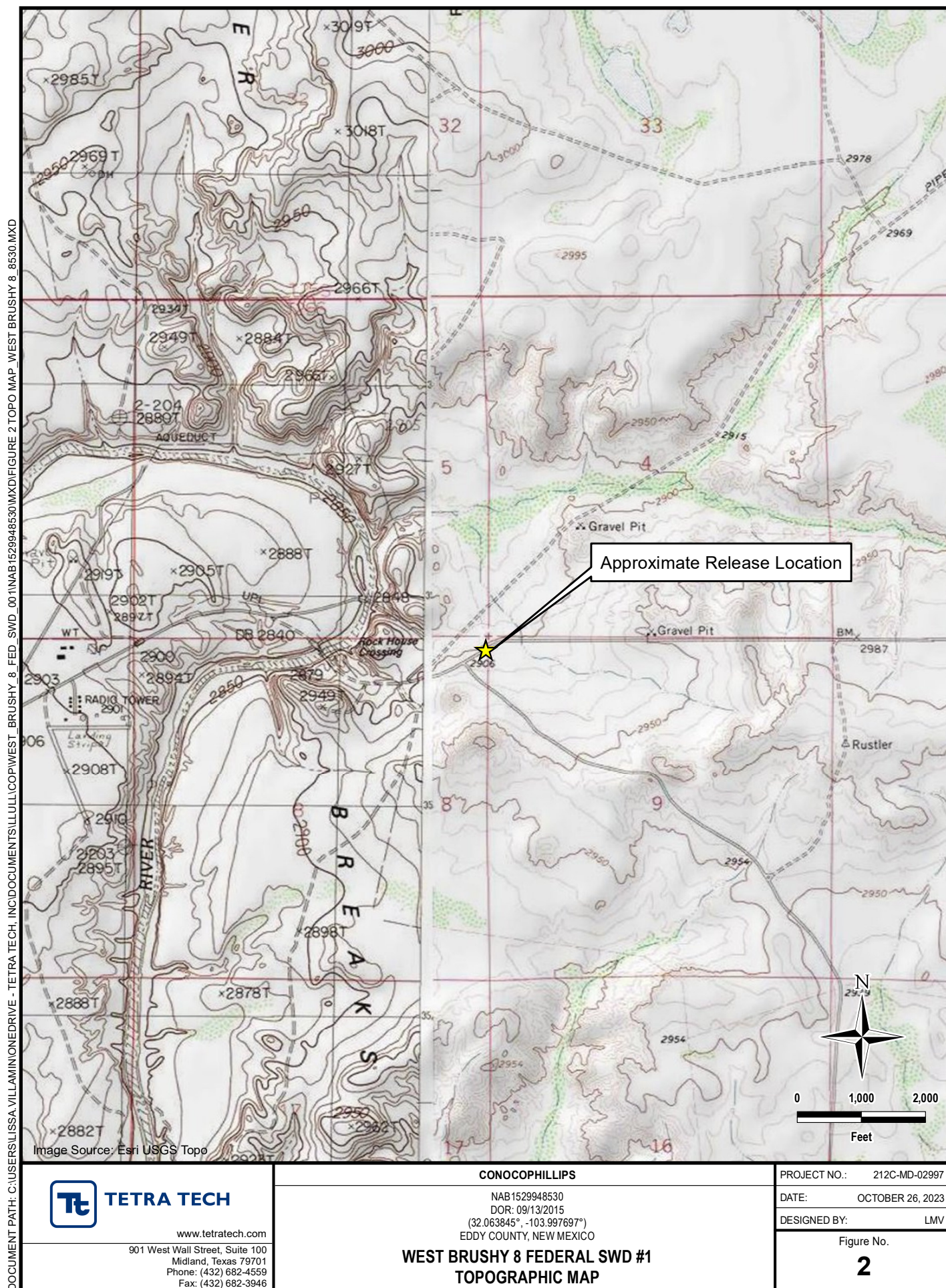
- Table 1 – Summary of Analytical Results – 2015 COG Soil Assessment
- Table 2 – Summary of Analytical Results – 2023-2024 Additional Soil Assessment
- Table 3 – Summary of Analytical Results – Soil Remediation
- Table 4 – Summary of Analytical Results – Soil Backfill

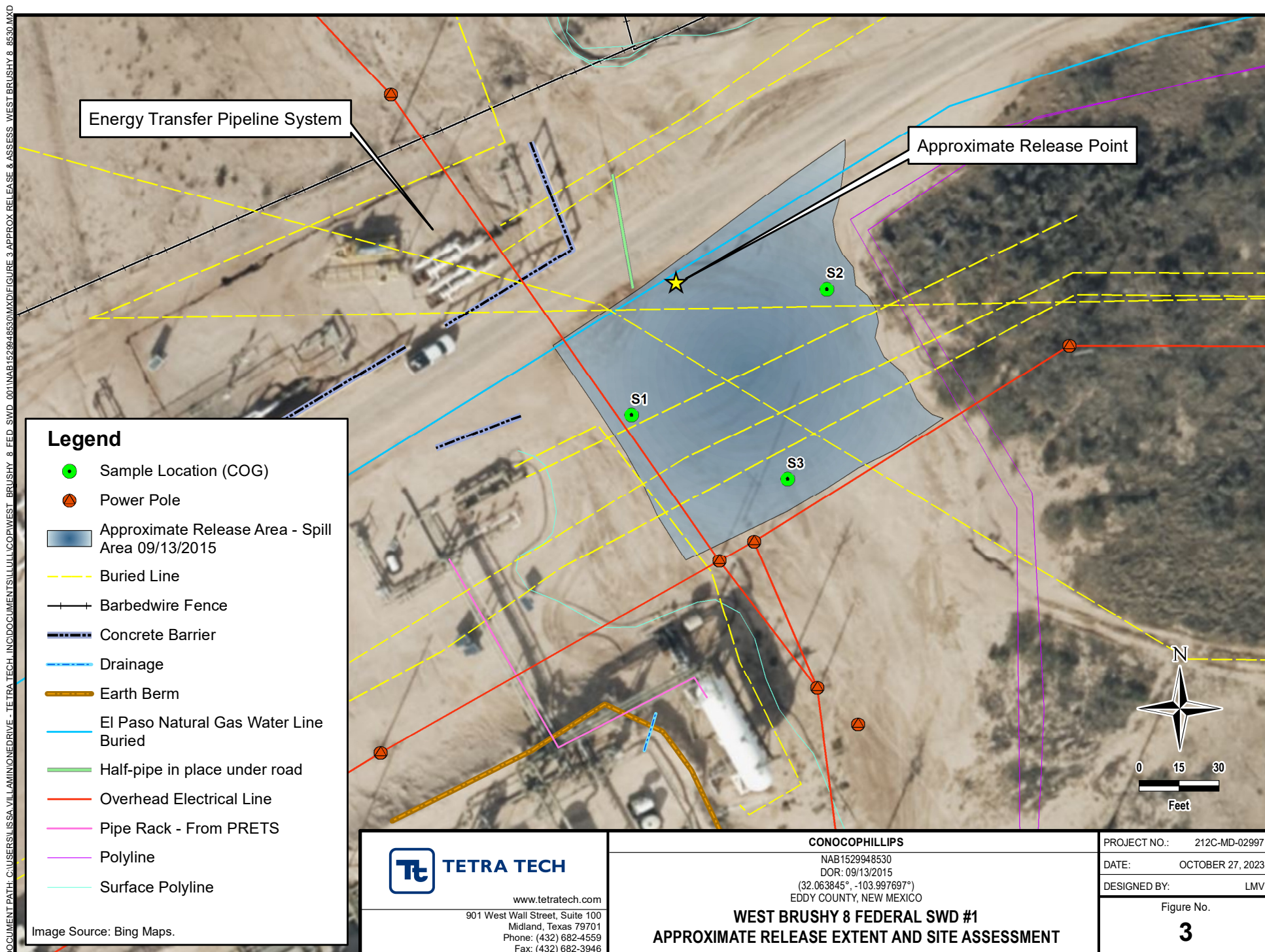
Appendices:

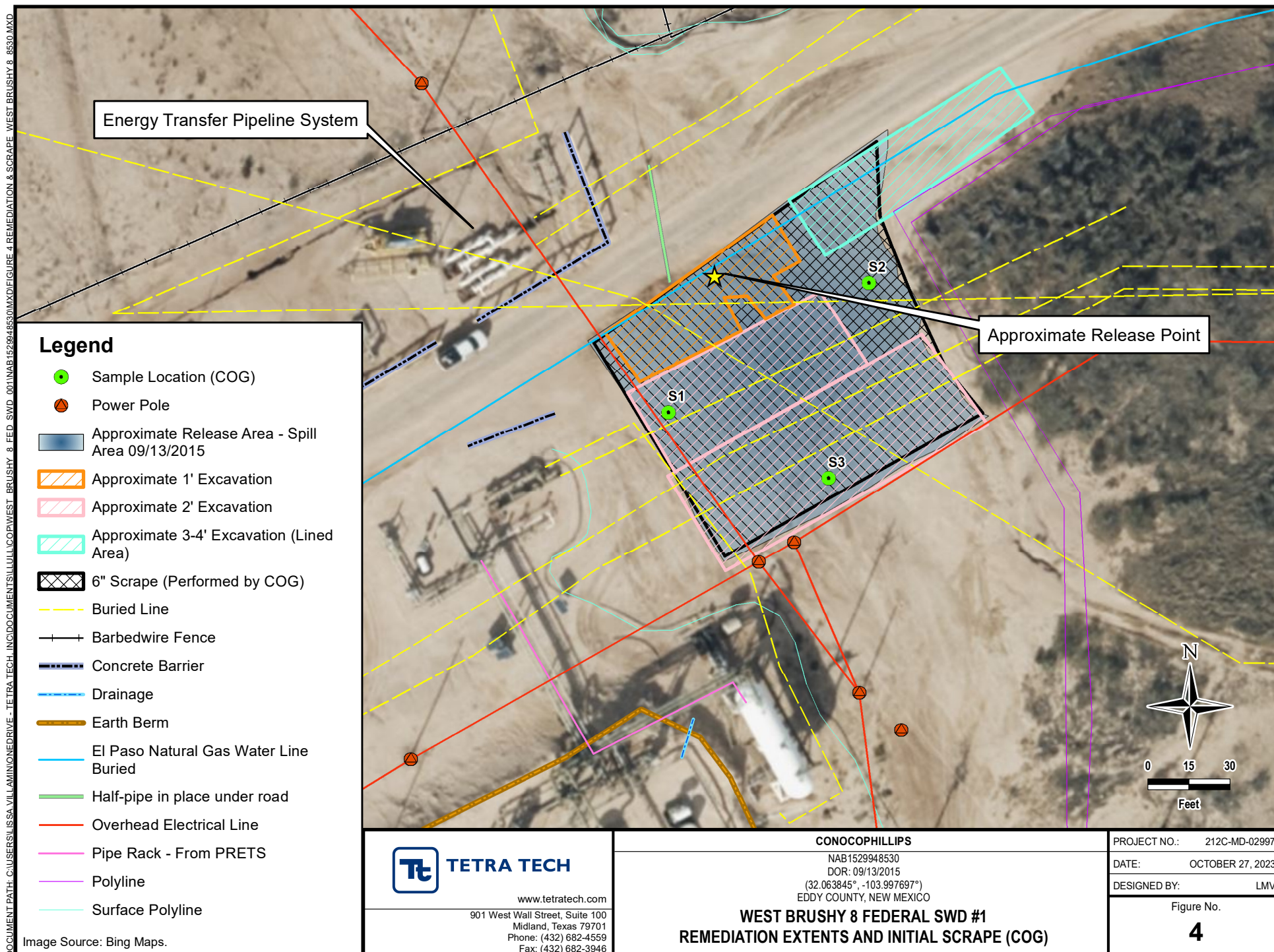
- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Regulatory Correspondence
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Analytical Data

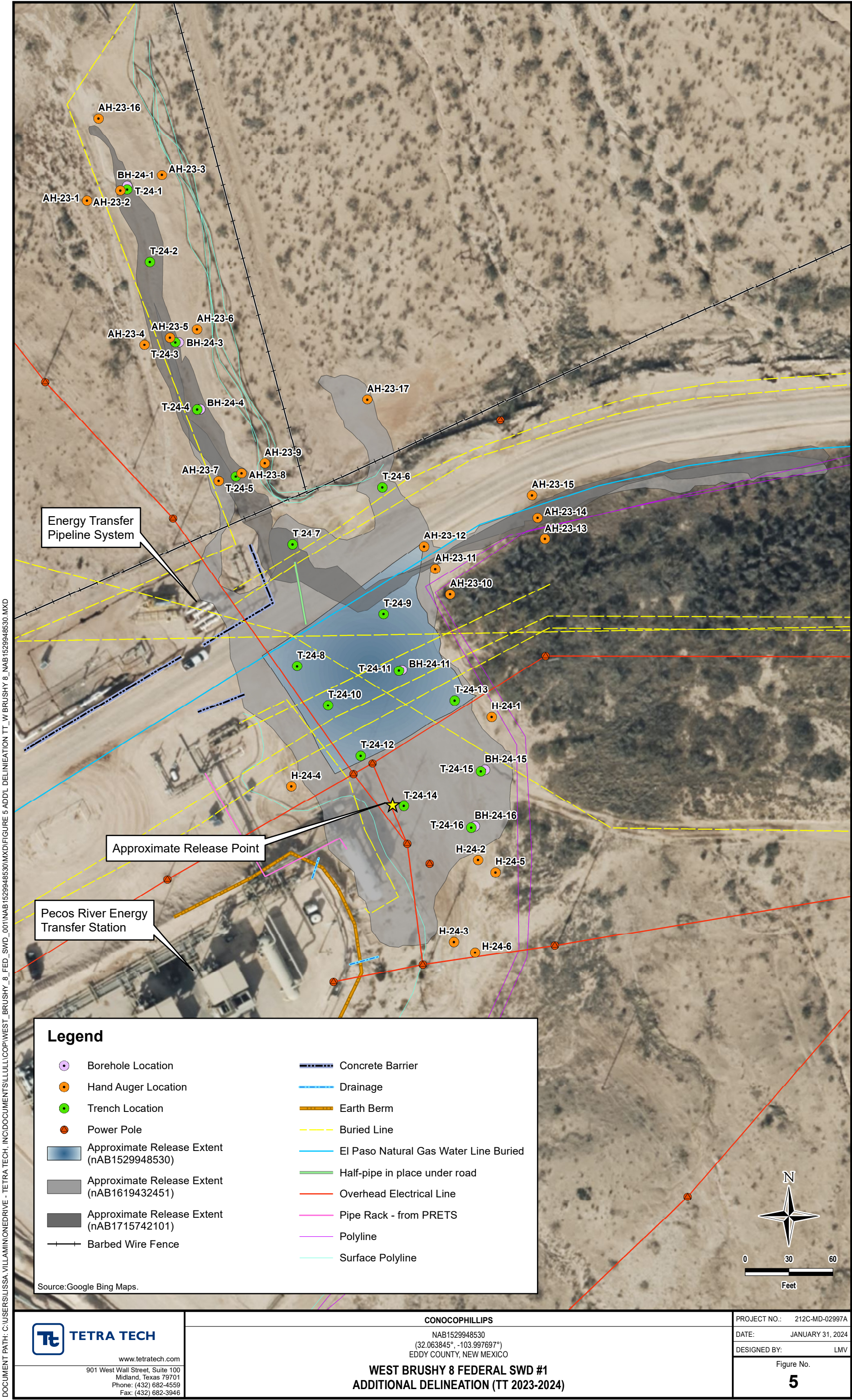
FIGURES

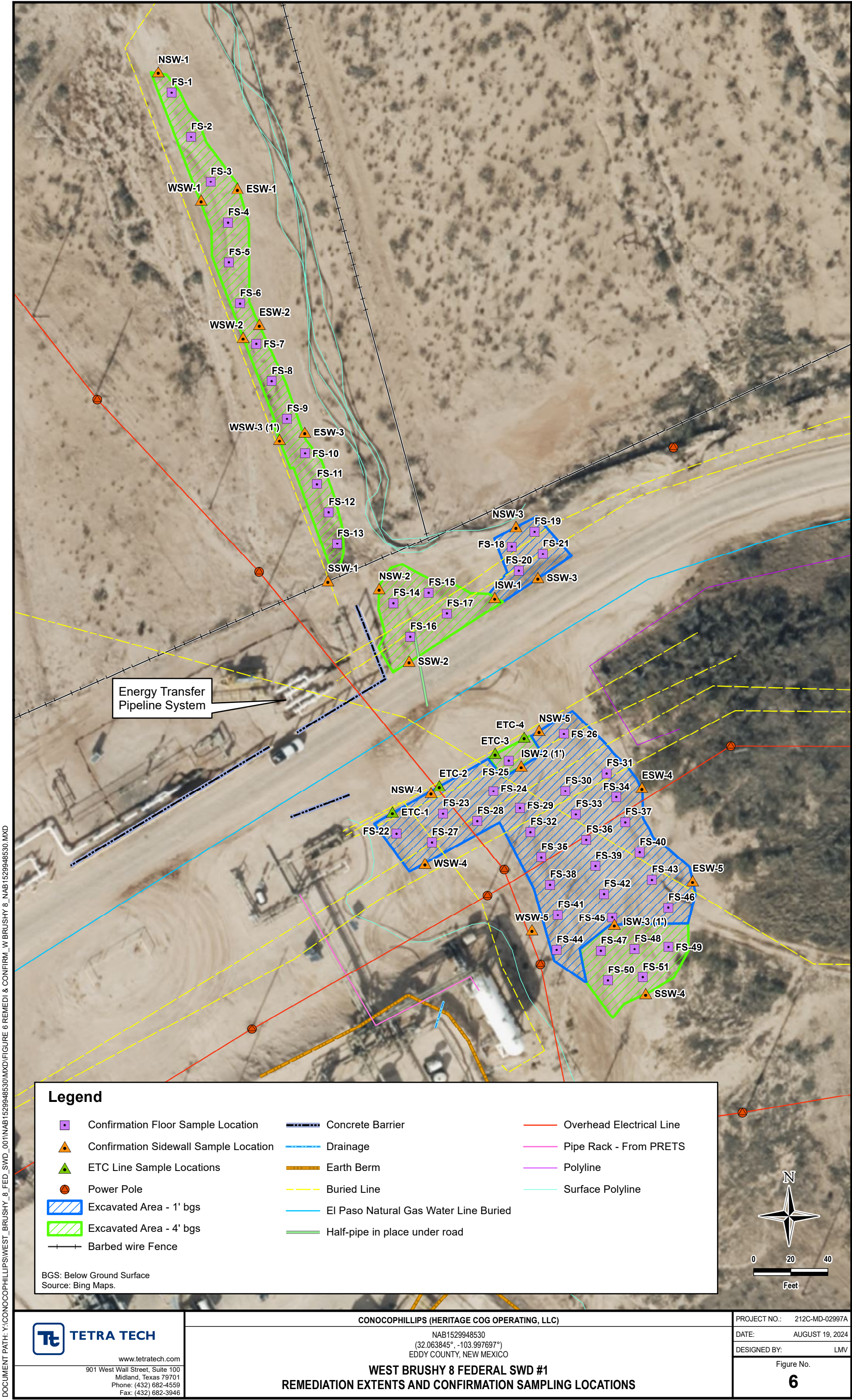












DOCUMENT PATH: Y:\CONOCOPHILLIPS\WEST_BRUSHY_8_FED_SWD_001\NAB1529948530\MXD\FIGURE 6 REMEDI & CONFIRM_W BRUSHY 8_NAB1529948530.MXD

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2015 COG SOIL ASSESSMENT- nAB1529948530
CONOCOPHILLIPS
WEST BRUSHY 8 FEDERAL SWD #1
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹
		ft. bgs	mg/kg
S1	10/15/2015	SURFACE	528
		1	4,000
S2	10/15/2015	SURFACE	2,930
		1	304
S3	10/15/2015	SURFACE	2,130
		1	4,240

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

1 Method SM4500CI-B

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2023-2024 ADDITIONAL SOIL ASSESSMENT
nAB1715742101 AND nAB1619432451 AND nAB1529948530
CONOCOPHILLIPS
WEST BRUSHY 8 FEDERAL SWD #001
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride		BTEX ²										TPH ³								
			ExStik	Titration			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		(GRO+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	mg/kg	Q				
																						ft. bgs			ppm
		Reclamation Limit for Soils 0-4' bgs:	--		600 mg/kg		10 mg/kg		--		--		--		50 mg/kg		--		--		--		--		100 mg/kg
		RRAL for Soils >4' bgs (GW 50-100 ft):	--		10,000 mg/kg		10 mg/kg		--		--		--		50 mg/kg		--		--		--		1,000 mg/kg		2,500 mg/kg
AH-23-1	9/21/2023	0-1	392	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		19.1		-	19.1	
AH-23-2	9/21/2023	0-1	2230	-	2,400		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		2-3	2690	-	2,080		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		27.5		<10.0		27.5	27.5	
T-1	11/30/2023	0-1	627	-	304		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
T-24-1	1/4/2024	3-4	2,080	-	1,630		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		5-6	1,130	-	928		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		6-7	1,110		1,020		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
BH-24-1	1/10/2024	7-8	-	500	512		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		8-9	1,130	600	912		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		9-10	1,080	400	1,090		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
AH-23-3	9/21/2023	0-1	267	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
T-24-2	1/4/2024	0-1	4,670	-	4,120		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		2-3	1,840	-	1,700		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		3-4	2,950	-	2,440		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		5-5.5	1,660	-	768		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
AH-23-4	9/21/2023	0-1	369	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
AH-23-5	9/21/2023	0-1	1560	-	928		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		2-3	4950	-	3,760		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
T-24-3	1/4/2024	3-4	3,940	-	4,080		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		5-6	3,060	-	3,360		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		6-7	2,420	-	2,400		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		7-7.5	1,670	-	1,140		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
BH-24-3	1/10/2024	8-9	1,620	900	976		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		9-10	1,550	600	768		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		90.7		98.1		90.7	188.8	
		10-11	958	400	656		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
AH-23-6	9/21/2023	0-1	284	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
T-24-4	1/4/2024	0-1	1,950	-	1,090		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		2-3	1,990	-	1,550		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		3-4	2,730	-	3,200		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		5-6	2,420	-	2,240		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		6-7	2,210	-	1,150		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		8-8.5	2,060	-	1,380		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
BH-24-4	1/10/2024	9-10	1,280	800	1,120		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	
		10-11	1,170	400	608		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0	

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2023-2024 ADDITIONAL SOIL ASSESSMENT
nAB1715742101 AND nAB1619432451 AND nAB1529948530
CONOCOPHILLIPS
WEST BRUSHY 8 FEDERAL SWD #001
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride		BTEX ²										TPH ³									
			ExStik	Titration			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		(GRO+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							
																				ft. bgs	ppm	mg/kg			Q	mg/kg
		Reclamation Limit for Soils 0-4' bgs:	--	600 mg/kg	10 mg/kg	--	--	50 mg/kg	--	--	100 mg/kg															
RRAL for Soils >4' bgs (GW 50-100 ft):	--	10,000 mg/kg	10 mg/kg	--	--	50 mg/kg	--	--	1,000 mg/kg	2,500 mg/kg																
AH-23-7	9/21/2023	0-1	465	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-8	9/21/2023	0-1	2530	-	2,000		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		43.1		<10.0		43.1	43.1		
		2-3	3420	-	2,400		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		3-4	4380	-	3,600		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-5	11/30/2023	0-1	-	-	176		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-9	9/21/2023	0-1	468	-	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-6	1/5/2024	0-1	-	-	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		211		<10.0		211	211		
		1-2	404	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		11.2		<10.0		11.2	11.2		
T-24-7	1/5/2024	0-1	4,520	-	2,000		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	-	-	4,280		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		3-4	-	-	1,800		<0.050		<0.050		<0.050	GC-NC	0.271	GC-NC1	<0.300		21.2		45.9		<10.0		67.1	67.1		
		5-6	669	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		6-7	407	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-10	9/21/2023	0-1	580	-	320		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-11	9/21/2023	0-1	416	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	353	-	96		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-12	9/21/2023	0-1	792	-	240		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-13	9/21/2023	0-1	216	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-14	9/21/2023	0-1	198	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	286	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-15	9/21/2023	0-1	392	-	64		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-16	11/30/2023	0-1	379	-	160		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
AH-23-17	11/30/2023	0-1	-	-	192		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-5	1/4/2024	3-4	1,750	-	1,140	QM-07	<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		5-6	1,770	-	736		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		6-7	1,040	-	800		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-8	1/5/2024	0-1	1,510	-	496		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	1,110	-	464		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		3-4	469	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-9	1/5/2024	0-1	857	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	415	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-10	1/5/2024	0-1	1,140	-	640		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	310	-	112		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2023-2024 ADDITIONAL SOIL ASSESSMENT
nAB1715742101 AND nAB1619432451 AND nAB1529948530
CONOCOPHILLIPS
WEST BRUSHY 8 FEDERAL SWD #001
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride		BTEX ²										TPH ³									
			ExStik	Titration			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		(GRO+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	mg/kg	Q					
																						ft. bgs			ppm	mg/kg
		Reclamation Limit for Soils 0-4' bgs:	--	600 mg/kg	10 mg/kg	--	--	50 mg/kg	--	--	50 mg/kg	--	--	50 mg/kg	--	--	50 mg/kg	--	--	--	--	100 mg/kg				
RRAL for Soils >4' bgs (GW 50-100 ft):	--	10,000 mg/kg	10 mg/kg	--	--	50 mg/kg	--	--	50 mg/kg	--	--	50 mg/kg	--	--	50 mg/kg	--	--	--	1,000 mg/kg	2,500 mg/kg						
T-24-11	1/5/2024	0-1	1,260	-	784		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	2,410	-	1,200		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		3-4	1,310	-	608		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
BH-24-11	1/10/2024	4-5	1,820	600	1,710		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		5-6	2,160	800	1,460		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		8-9	1,300	575	1,070		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-12	1/5/2024	0-1	536	-	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-13	1/5/2024	0-1	3,690	-	4,000		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	248	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-14	1/5/2024	0-1	1,030	-	944		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0	QM-07	<10.0		<10.0		-	<10.0		
		2-3	252	-	64		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-15	1/5/2024	0-1	1500	-	1,470		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		1-2	1,050	-	304		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
BH-24-15	1/10/2024	2-3	873	300	272		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		3-4	1,230	350	416		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		5-6	1,040	200	288		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		6-7	898	200	352		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
T-24-16	1/5/2024	0-1	2,470	-	2,160		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		2-3	3,730	-	3,240		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		3-4	3,390	-	3,040		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		5-6	1,940	-	1,010		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
B-24-16	1/10/2024	6-7	1,890	800	1,090		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		7-8	2,040	600	1,010		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		8-9	1,690	840	1,020		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		9-10	1,470	580	896		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
		14-15	1,580	400	1,100		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
H-24-1	1/5/2024	0-1	334	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
H-24-2	1/5/2024	0-1	1,760	-	416		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
H-24-3	1/5/2024	0-1	1,180	-	304		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	<10.0		
H-24-4	1/5/2024	0-1	310	-	96		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<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 8021B

3 Method 8015M

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

QUALIFIERS:

QM-07 The spike recovery was outside of lab established statistical control limits but still within method limits. Data is not adversely affected.

GC-NC 8620 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND (not detected at or above the reporting limit).

GC-NC1 8620 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
SOIL REMEDIATION
nAB1529948530, nAB1619432451, and nAB1715742101
CONOCOPHILLIPS
WEST BRUSHY 8 SWD #001 RELEASE
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride ¹	BTEX ²					TPH ³			
			Chloride	PID		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	Total TPH (GRO+DRO+EXT DRO)
		C ₆ - C ₁₀			> C ₁₀ - C ₂₈						> C ₂₈ - C ₃₆			
		ft bgs	ppm		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Reclamation Closure Criteria for Soils 0-4 ft bgs:					600 mg/kq	10 mg/kq	--	--	--	50 mg/kq	--	--	--	100 mg/kq
Site RRALs for Soils >4 ft bgs (GW >50 ft):					10,000 mg/kq	10 mg/kq	--	--	--	50 mg/kq	--	--	--	2,500 mg/kq
FS-1	7/22/2024	4			320	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-2	7/22/2024	4			1,010	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-3	7/22/2024	4			2720	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-4	7/22/2024	4			2,120	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-5	7/22/2024	4			1,800	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-6	7/22/2024	4			2,320	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-7	7/22/2024	4			992	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-8	7/22/2024	4			2270	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-9	7/22/2024	4			2080	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-10	7/22/2024	4			1660	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-11	7/22/2024	4			720	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-12	7/22/2024	4			4120	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-13	7/22/2024	4			384	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-14	7/26/2024	4			1170	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-15	7/26/2024	4			832	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-16	7/26/2024	4			1040	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-17	7/26/2024	4			1020	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-18	7/31/2024	1			48.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-19	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-20	7/31/2024	1			<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-21	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-22	7/26/2024	1			192	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-23	7/26/2024	1			192	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-24	7/26/2024	1			176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-25	8/5/2024	4			832	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-26	8/5/2024	1			112	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-27	7/26/2024	1			224	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-28	7/26/2024	1			192	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-29	7/26/2024	1			176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-30	7/26/2024	1			208	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-31	7/26/2024	1			160	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	10.4	<10.0	10.4
FS-32	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-33	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
SOIL REMEDIATION
nAB1529948530, nAB1619432451, and nAB1715742101
CONOCOPHILLIPS
WEST BRUSHY 8 SWD #001 RELEASE
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride ¹	BTEX ²					TPH ³			
			Chloride	PID		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	Total TPH (GRO+DRO+EXT DRO)
		C ₆ - C ₁₀			> C ₁₀ - C ₂₈						> C ₂₈ - C ₃₆			
ft bgs					ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Reclamation Closure Criteria for Soils 0-4 ft bgs:					600 mg/kq	10 mg/kq	--	--	--	50 mg/kq	--	--	--	100 mg/kq
Site RRALs for Soils >4 ft bgs (GW >50 ft):					10,000 mg/kq	10 mg/kq	--	--	--	50 mg/kq	--	--	--	2,500 mg/kq
FS-34	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-35	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-36	7/31/2024	1			64.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-37	7/31/2024	1			80.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-38	7/31/2024	1			48.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-39	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-40	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-41	7/31/2024	1			64.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-42	7/31/2024	1			48.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-43	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-44	7/31/2024	1			16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-45	7/31/2024	1			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-46	7/31/2024	1			16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-47	7/31/2024	4			1490	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-48	7/31/2024	4			1100	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-49	7/31/2024	4			1100	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-50	7/31/2024	4			1170	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
FS-51	7/31/2024	4			1230	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
NSW-1	7/22/2024	-			128	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
NSW-2	7/26/2024	-			384	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
NSW-3	7/31/2024	-			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
NSW-4	7/31/2024	-			64.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
NSW-5	7/31/2024	-			64.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
SSW-1	7/22/2024	-			208	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
SSW-2	7/26/2024	-			480	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
SSW-3	7/31/2024	-			16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
SSW-4	7/31/2024	-			16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
WSW-1	7/22/2024	-			144	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
WSW-2	7/22/2024	-			160	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
WSW-3	7/22/2024	-			640	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
WSW-3 (1')	7/26/2024	-			336	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
WSW-4	7/26/2024	-			176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
SOIL REMEDIATION
nAB1529948530, nAB1619432451, and nAB1715742101
CONOCOPHILLIPS
WEST BRUSHY 8 SWD #001 RELEASE
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride ¹	BTEX ²					TPH ³			
			Chloride	PID		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	Total TPH (GRO+DRO+EXT DRO)
		C ₆ - C ₁₀									> C ₁₀ - C ₂₈	> C ₂₈ - C ₃₆		
		ft bgs	ppm		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Reclamation Closure Criteria for Soils 0-4 ft bgs:					600 mg/kq	10 mg/kq	--	--	--	50 mg/kq	--	--	--	100 mg/kq
Site RRALs for Soils >4 ft bgs (GW >50 ft):					10,000 mg/kq	10 mg/kq	--	--	--	50 mg/kq	--	--	--	2,500 mg/kq
WSW-5	7/31/2024	-			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ESW-1	7/22/2024	-			48.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ESW-2	7/22/2024	-			80.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ESW-3	7/22/2024	-			144	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ESW-4	7/26/2024	-			176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ESW-5	7/31/2024	-			32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ISW-1	7/26/2024	-			368	<0.050	0.124	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ISW-2	8/1/2024	-			624	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	12.1	<10.0	12.1
ISW-2 (1')	8/5/2024	-			96.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	-
ISW-3	8/1/2024	-			720	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	17.2	<10.0	17.2
ISW-3 (1')	8/5/2024	-			112	<0.050	<0.050	<0.050	<0.150	<0.300	<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 SM4500Cl-B
- 2 Method 8021B
- 3 Method 8015M

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

Gold highlight represents soil horizons that were removed during deepening of excavation floors.

Green highlight represents soil horizons that were removed during horizontal expansion of excavation sidewalls.

* These iterative samples are located to encompass the original sample location that triggered removal, with further excavation in each area indicated in ().

** These sample results are below the Site RRALs, but are elevated above the Merchant SUCA requirements.

*** These samples were collected outside of the excavation extents as additional delineation points.

TABLE 4
SUMMARY OF ANALYTICAL RESULTS
SOIL BACKFILL - R360 RED BLUFF FACILITY
CONOCOPHILLIPS
WEST BRUSHY 8 SWD #001
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Chloride ¹		BTEX ²										TPH ³							
				Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
		C ₆ - C ₁₀												> C ₁₀ - C ₂₈		> C ₂₈ - C ₃₆					
		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	
BACKFILL - COMPOSITE	8/22/2024	128		<0.025		<0.050		<0.050		<0.150		<0.2.75		<10.0		<10.0		<10.0		-	

- NOTES:
- 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

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

NAB1529948530 **229137**

Name of Company: COG Operating LLC		Contact: Robert McNeill	
Address: 600 West Illinois Avenue, Midland TX 79701		Telephone No. 432-230-0077	
Facility Name: West Brushy 8 Federal SWD #1		Facility Type: SWD	
Surface Owner: Federal		Mineral Owner: Federal	API No. 30-015-31675

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	8	26S	29E	660	North	330	East	Eddy

Latitude 32.0625249053514 Longitude -103.99867482237

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 30 bbls	Volume Recovered: 3 bbls
Source of Release: Poly Flowline	Date and Hour of Occurrence: 9/13/2015 3:00 pm	Date and Hour of Discovery: 9/13/2015 3:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher - OCD / James Amos - BLM	
By Whom? Amanda Trujillo	Date and Hour: Tue 9/15/2015 6:05 PM	
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.* This release was caused by a poly flowline damaged by a crew working in the area. Vacuum truck trucks were dispatched to remove all standing fluid.		
Describe Area Affected and Cleanup Action Taken.* The impacted area is located in the pasture alongside the road. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.		
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:	OIL CONSERVATION DIVISION	
Printed Name: Amanda Trujillo Davis	Approved by Environmental Specialist:	
Title: Senior Environmental Coordinator	Approval Date: 10/26/15	Expiration Date: N/A
E-mail Address: atrujillo@concho.com	Conditions of Approval:	
Date: October 24, 2015 Phone: 575-748-6940	Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 11/26/15	

* Attach Additional Sheets If Necessary

229-3353

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 not 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.

<p>Characterization Report Checklist: <i>Each of the following items must be included in the report.</i></p> <div><input type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.<input type="checkbox"/> Field data<input type="checkbox"/> Data table of soil contaminant concentration data<input type="checkbox"/> Depth to water determination<input type="checkbox"/> Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release<input type="checkbox"/> Boring or excavation logs<input type="checkbox"/> Photographs including date and GIS information<input type="checkbox"/> Topographic/Aerial maps<input type="checkbox"/> Laboratory data including chain of custody</div>

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

State of New Mexico
Oil Conservation Division

Page 4

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

OCD - Land Ownership



9/26/2023, 10:14:09 AM

Mineral Ownership

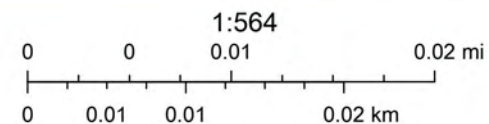


A-All minerals are owned by U.S.

Land Ownership



BLM



U.S. BLM, Maxar, Microsoft, Esri, HERE, Garmin, iPC

National Flood Hazard Layer FIRMMette



104°0'10"W 32°4'4"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



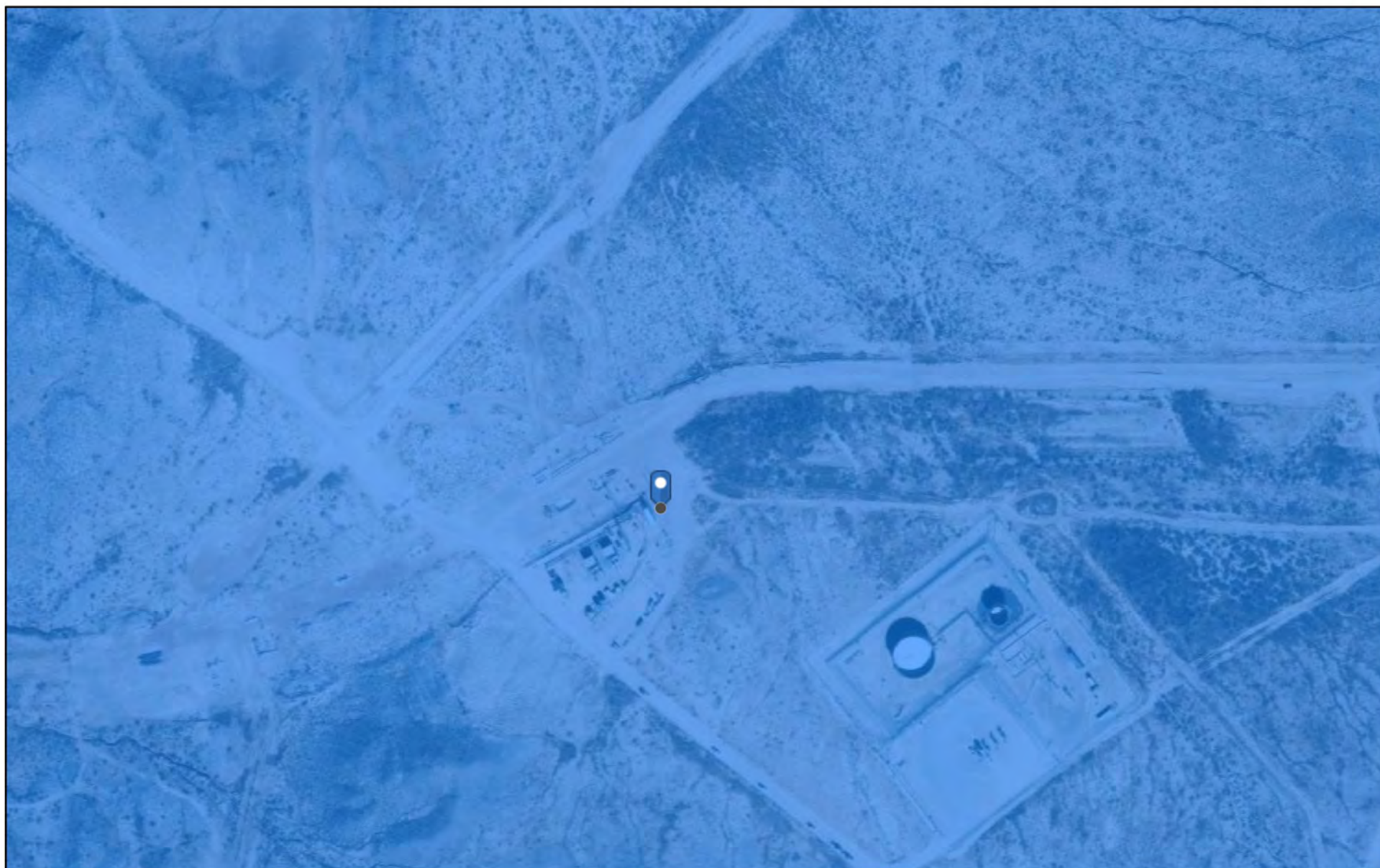
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/26/2023 at 10:39 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

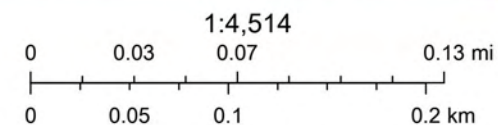
OCD - Karst Areas



9/26/2023, 10:23:19 AM

Karst Occurrence Potential

Medium



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



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
C 03507 POD1	C		ED	1	3	3	05	26S	29E	593064	3548313	1611	140	78	62
C 03508 POD1	C		ED	1	3	3	05	26S	29E	593063	3548361	1624	140	75	65

Average Depth to Water: 76 feet

Minimum Depth: 75 feet

Maximum Depth: 78 feet

Record Count: 2

UTMNAD83 Radius Search (in meters):

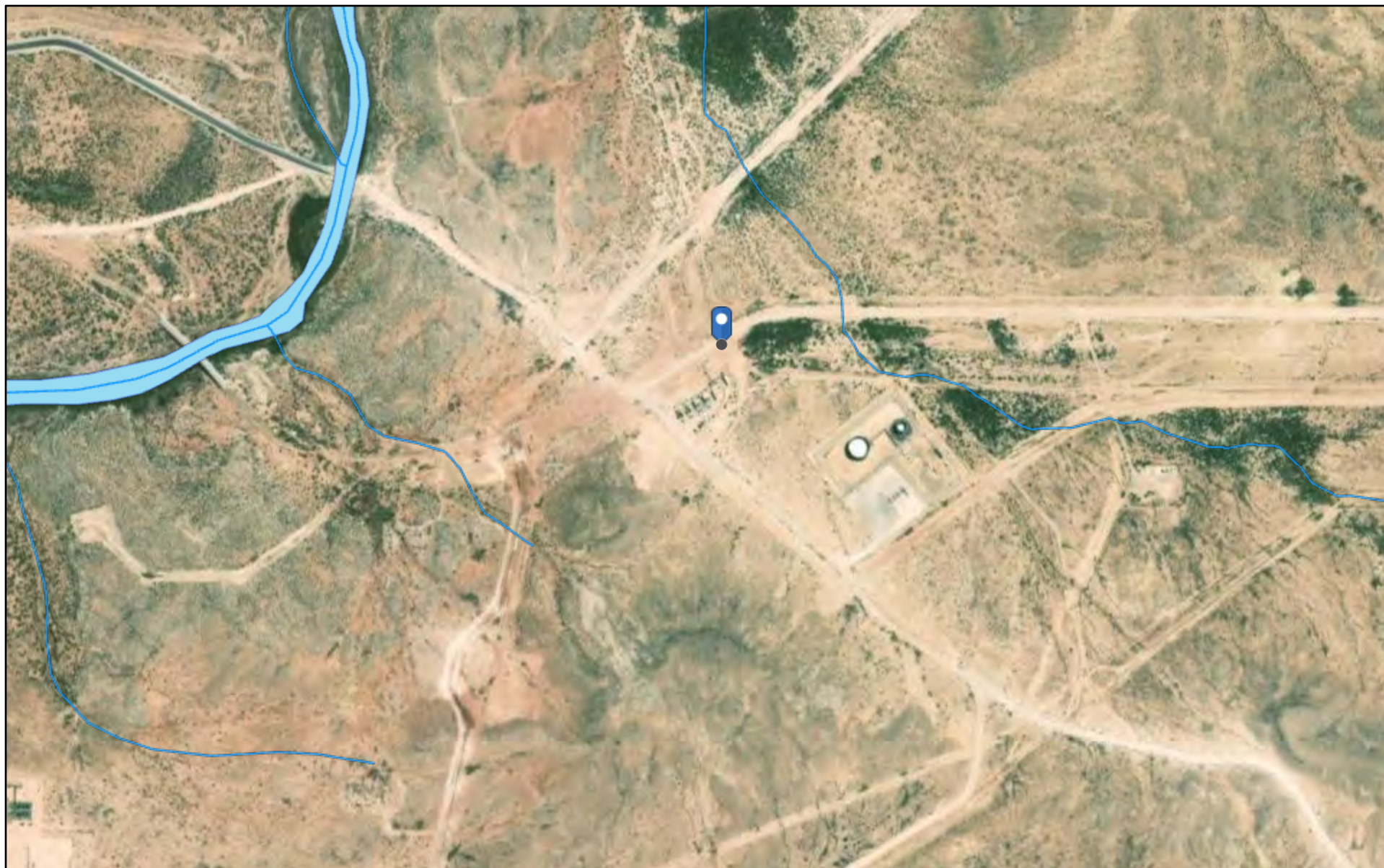
Easting (X): 594622.15

Northing (Y): 3547903.47

Radius: 1700

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.

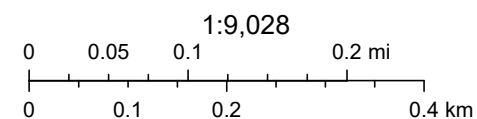
OCD Waterbodies



1/25/2024, 9:30:55 AM

 OSW Water Bodys

 OSE Streams



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

APPENDIX C

Regulatory Correspondence

From: OCDOnline@state.nm.us
To: [Lull, Christian](#)
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 335300
Date: Wednesday, April 24, 2024 8:08:42 AM

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 approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAB1529948530, with the following conditions:

- **Remediation plan approved.**
- **Submit a report via the OCD permitting portal by August 28, 2024.**

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,
Ashley Maxwell
Projects Environmental Specialist - A
505-635-5000
Ashley.Maxwell@emnrd.nm.gov

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

From: [Taylor, Shelly J](#)
To: [Lull, Christian](#)
Cc: [Allen, Samantha](#); [Abbott, Sam](#)
Subject: Re: [EXTERNAL] RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan
Date: Thursday, February 29, 2024 1:22:52 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[Outlook-akaiv03p.png](#)
[Outlook-mbhjgqig.png](#)

You don't often get email from sjtaylor@blm.gov. [Learn why this is important](#)

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

1. ROW Company, Name & Number: **ETC - WEST BRUSHY 8 FEDERAL SWD #001_**
2. Release Date: **07/03/2016**
3. GPS: **32.063500°**, **-103.997560°**
4. The point of release occurred **within an area not covered under a previous archeological survey**, *a full survey will be required including any areas that will be disturbed in order to access the release area. Based on survey results, an archeological monitor maybe required.*
5. The release **did not** impact any known archaeological areas based on available data.
6. This area **is** located within a **Medium karst zone**; a karst survey **will not be required**.
7. This site is **located within hydrological feature**.
8. Site **is** located within a **Special Status Plant Species** area.
9. The site **is not** located within a wildlife T&E species habitat. No survey will be required.
10. Area **is not** located within *Shinnery Oak PDO*.
11. Soils are within the **Pajarito-Dune Land**
12. **BLM Seed Mix: #2**.
13. Area is noted to be within N/A.
14. Site **is not** located within a *Special Area of concern*:
15. Site **is not** located within **ACEC**.
16. Site **is not** located within a Potash buffer area.

You will be cleared to proceed upon the completion of the archeological survey.

Sincerely,

Shelly J Taylor

Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.200.0614
sjtaylor@blm.gov



Spill/Release email: BLM_NM_CFO_REALTY_SPILL@BLM.GOV

From: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Thursday, February 29, 2024 10:11 AM
To: Llull, Christian <Christian.Llull@tetrattech.com>
Cc: Allen, Samantha <SAMANTHA.ALLEN@tetrattech.com>; Abbott, Sam <Sam.Abbott@tetrattech.com>
Subject: Re: [EXTERNAL] RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan

Apologies... thought I replied. You are cleared to proceed with remedial activities.

Respectfully,

Shelly J Taylor

Assistant Field Manager
Lands & Minerals - Acting

Bureau of Land Management
Pecos District/Roswell Field Office
2909 W 2nd St
Roswell, NM 88201

Direct 575.627.0250
Mobile 575.200.0614
sjtaylor@blm.gov



From: Llull, Christian <Christian.Llull@tetrattech.com>
Sent: Tuesday, February 27, 2024 11:36 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>

Cc: Allen, Samantha <SAMANTHA.ALLEN@tetrattech.com>; Abbott, Sam <Sam.Abbott@tetrattech.com>

Subject: [EXTERNAL] RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hey Shelly, we are still looking for the BLM response re: these aggregate WPs.
Please advise.

Christian

From: Abbott, Sam <Sam.Abbott@tetrattech.com>
Sent: Wednesday, February 21, 2024 1:54 PM
To: Llull, Christian <Christian.Llull@tetrattech.com>; Tucker, Shelly J <stucker@blm.gov>
Cc: Allen, Samantha <SAMANTHA.ALLEN@tetrattech.com>
Subject: RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan

Here is the KML.

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

Tetra Tech, Inc. | *Leading with Science*[®] | OGA
8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetrattech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



Please consider the environment before printing. [Read more](#)



From: Abbott, Sam
Sent: Wednesday, February 21, 2024 1:49 PM
To: Llull, Christian <Christian.Llull@tetrattech.com>; Tucker, Shelly J <stucker@blm.gov>
Cc: Allen, Samantha <SAMANTHA.ALLEN@tetrattech.com>
Subject: RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan

Attached is a KMZ with the release extent, assessment sampling locations, and proposed remedial extents. Mapped utilities are also included.

This is the same remedial action proposed for the other West Brushy 8 Federal SWD #001 release (nAB1715742101).

Samantha Abbott, PG | Project Manager

Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | Sam.Abbott@tetrattech.com

Tetra Tech, Inc. | *Leading with Science®* | OGA

8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetrattech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



Please consider the environment before printing. [Read more](#)



From: Llull, Christian <Christian.Llull@tetrattech.com>

Sent: Wednesday, January 31, 2024 1:23 PM

To: Taylor, Shelly J <sjtaylor@blm.gov>

Cc: Abbott, Sam <Sam.Abbott@tetrattech.com>; Allen, Samantha <SAMANTHA.ALLEN@tetrattech.com>

Subject: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan

Shelly:

Attached for your review is the Remediation Work Plan for the West Brushy 8 Federal SWD #001 Release - **nAB1619432451 (DOR 7/3/2016)**.

- *This WP has been approved by NMOCD.*
- Approval attached.
- There are three similar WPs that you will receive, the remedial action is the same for all 3 sites based on the combined assessment.

WEST BRUSHY 8 FEDERAL SWD #001

Eddy County, NM

GPS Coordinates: 32.063500°, -103.997560°

Incident ID: nAB1619432451

BACKGROUND:

- According to the Form C-141, the release was discovered on July 3, 2016.
 - The release consisted of 25 bbls of produced water, of which 0 bbls were recovered.
 - The cause of the release was noted as a damaged poly flowline.
- BBC conducted a site assessment from January 2017.

- Soil samples were collected from twelve (12) locations within the extent of the release and four (4) locations along the perimeter of the extent.
- A total of forty-three (43) soil samples were collected from the sixteen (16) sampling locations and submitted to Cardinal Laboratories in Hobbs, New Mexico (Cardinal) for analysis.
- Analytical results were above the reclamation limit for chloride (600 mg/kg) in surface (0-4 feet bgs) soils at eight (8) of the sampling locations (SP5 through SP12).
- A Delineation Workplan was prepared by BBC based on the results of the 2017 BBC assessment activities.
 - A copy of the approved remediation proposal Mr. Bratcher refers to in an email from February 22, 2018, could not be located.
- A Closure Report for four separate releases that occurred at the West Brushy 8 Federal SWD #001 Site, including Incident nAB1619432451, was rejected by NMOCD on May 1, 2023, with the following comments:
 - *"Email correspondence provided by operator stated that an email dated 2/22/2018 an email from OCD personnel stated "2RP-3353 and 2RP-3774 releases cover basically the same area and have approved remediation proposals". Based on the information found under 2RP-3353 (NAB1529948530) closed was not approved in 2016.*
 - *The closure report is not clear as to what activities occurred for remediation of this site.*
 - *Submit a complete report though the OCD Permitting website by 8/1/2023.*
 - *2RP-3774 closed. Refer to incident #NAB1619432451 in all future communication."*

ADDITIONAL ASSESSMENT:

- Tetra Tech personnel were onsite to conduct additional assessment sampling on September 21, 2023.
 - Fifteen (15) hand auger borings (AH-23-1 through AH-23-15) were installed to depths ranging from 1 to 4 feet bgs in a cross-section pattern across the release extent.
- Tetra Tech remobilized to the site on November 30, 2023, and January 4-5, 2024, and January 10, 2024, to achieve delineation.
 - Two (2) soil trenches (T-1 and T-5) and two (2) hand auger borings (AH-23-16 and AH-23-17) were installed in the northern drainage area.
 - Sixteen (16) soil trenches (T-24-1 through T-24-16) and four (4) hand auger borings (H-24-1 through H-24-4) were installed near the release area.
 - Six (6) borings with an air rotary drill rig were installed near the release area.
 - A total of ninety-seven (97) soil samples were collected analyzed for chloride via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8261B.
 - Analytical results associated with the 0–1-foot bgs soil interval at trench location T-24-6 exceeded the reclamation limit of 100 mg/kg for TPH.
 - Chloride concentrations were detected in surface soils (0-4 feet bgs) at levels above the reclamation limit of 600 mg/kg at seventeen (17) of the sample locations.

WORK PLAN:

Based on the analytical results from the assessment, impacted material within the release extent is proposed to be removed to a maximum depth of 4'.

The total proposed volume to be removed and disposed of is 1,920 cubic yards.

- Confirmation floor samples and confirmation sidewall samples will be collected for verification of remedial activities.
 - Confirmation sidewall and floor samples will be representative of no more than approximately 400 square feet of excavated area.
- Once acceptable confirmation sample results are received the excavation will then be backfilled with clean material to surface grade.
- The seed mixture for LPC Sand/Shinnery Sites will be used for seeding.
- Remediation activities at the Site are proposed to begin within **120** days.

Let me know what you think,

Christian

Christian Llull, P.G. | Program Manager

Mobile +1 (512) 565-0190 | christian.llull@tetrattech.com

Tetra Tech | *Leading with Science*® | OGA

8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | tetrattech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



Please consider the environment before printing. [Read more](#)



From: [Taylor, Shelly J](#)
To: [Abbott, Sam](#)
Cc: [Llull, Christian](#)
Subject: Re: [EXTERNAL] RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan
Date: Wednesday, June 26, 2024 10:32:13 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image011.png](#)
[image012.png](#)
[image013.png](#)
[image014.png](#)
[image015.png](#)
[image016.png](#)
[Outlook-v2hu0l1w.png](#)

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

BLM approves for you to proceed with remedial actions.

Respectfully,

Shelly J Taylor

Assistant Field Manager
Lands & Minerals - Acting

Bureau of Land Management
Pecos District/Roswell Field Office
2909 W 2nd St
Roswell, NM 88201

Direct 575.627.0250
Mobile 575.200.0614
sjtaylor@blm.gov



From: Abbott, Sam <Sam.Abbott@tetrattech.com>
Sent: Tuesday, June 25, 2024 2:43 PM
To: Taylor, Shelly J <sjtaylor@blm.gov>
Cc: Llull, Christian <Christian.Llull@tetrattech.com>
Subject: RE: [EXTERNAL] RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan

Good afternoon Shelly,

I am writing to follow up on this Remediation Work Plan conditional approval. We hope to begin this remediation project on Monday, July 1st, and continue through most of July.

Tetra Tech subcontracted SWCA to complete the archeological survey in April 2024. The attached report (redacted) was submitted to the BLM and NMCRIS by SWCA.

If subsurface cultural materials are encountered during remediation, all work should cease, and the BLM will be notified immediately. No work will be performed within 100 feet of the known site (LA 66112).

Can you confirm that Tetra Tech and ConocoPhillips are cleared to proceed with the proposed work without the presence of a cultural monitor?

Thank you,
Sam

Samantha Abbott, PG | Project Manager

Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | Sam.Abbott@tetrattech.com

Tetra Tech, Inc. | *Leading with Science*® | OGA

8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetrattech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



Please consider the environment before printing. [Read more](#)



From: Taylor, Shelly J <sjtaylor@blm.gov>

Sent: Thursday, February 29, 2024 1:23 PM

To: Llull, Christian <Christian.Llull@tetrattech.com>

Cc: Allen, Samantha <SAMANTHA.ALLEN@tetrattech.com>; Abbott, Sam <Sam.Abbott@tetrattech.com>

Subject: Re: [EXTERNAL] RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 - Remediation Work Plan

You don't often get email from sjtaylor@blm.gov. [Learn why this is important](#)

archeological survey, a full survey will be required including any areas that will be disturbed in order to access the release area. Based on survey results, an archeological monitor maybe required.

5. The release **did not** impact any known archaeological areas based on available data.
6. This area **is** located within a **Medium karst zone**; a karst survey **will not be required**.
7. This site is **located within hydrological feature**.
8. Site **is** located within a **Special Status Plant Species** area.
9. The site **is not** located within a wildlife T&E species habitat. No survey will be required.
10. Area **is not** located within Shinnery Oak PDO.
11. Soils are within the **Pajarito-Dune Land**
12. BLM Seed Mix: **#2**.
13. Area is noted to be within N/A.
14. Site **is not** located within a Special Area of concern:
15. Site **is not** located within **ACEC**.
16. Site **is not** located within a Potash buffer area.

You will be cleared to proceed upon the completion of the archeological survey.

Sincerely,

Shelly J Taylor

Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.200.0614
sjtaylor@blm.gov



Spill/Release email: BLM_NM_CFO_REALTY_SPILL@BLM.GOV

From: Taylor, Shelly J <sjtaylor@blm.gov>

Sent: Thursday, February 29, 2024 10:11 AM

To: Llull, Christian <Christian.Llull@tetrattech.com>

Cc: Allen, Samantha <SAMANTHA.ALLEN@tetrattech.com>; Abbott, Sam
<Sam.Abbott@tetrattech.com>

Subject: Re: [EXTERNAL] RE: WEST BRUSHY 8 FEDERAL SWD #001 Release - nAB1619432451 -

From: OCDOnline@state.nm.us
To: [Lull, Christian](#)
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 363490
Date: Thursday, July 11, 2024 4:27:23 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 LLuLL for COG OPERATING LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAB1529948530.

The sampling event is expected to take place:

When: 07/16/2024 @ 10:00

Where: A-08-26S-29E 660 FNL 330 FEL (32.0625267,-103.9986572)

Additional Information: Please contact
Samantha Abbott, PG | Project Manager
Direct Mobile +1 (512) 739-7874

Additional Instructions: WEST BRUSHY 8 FEDERAL SWD #001

Eddy County, NM

GPS Coordinates: 32.063500°, -103.997560°

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: [Wells, Shelly, EMNRD](#)
To: [Abbott, Sam](#)
Cc: [Llull, Christian](#); [Bratcher, Michael, EMNRD](#)
Subject: RE: [EXTERNAL] RE: The Oil Conservation Division (OCD) has accepted the application, Application ID: 363490
Date: Friday, July 26, 2024 5:32:46 PM
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.

Hi Sam,

When requesting these variances please use the Incident # in the subject line. You will still need to submit a C-141N for each day you plan to collect confirmation samples. A variance to the two business day sampling notice is approved for NAB1529948530 WEST BRUSHY 8 FEDERAL SWD #001 for 7/30/24. Submit a C-141N today for 7/31 and no variance needed. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Kind regards,

Shelly

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

From: Abbott, Sam <Sam.Abbott@tetrattech.com>
Sent: Friday, July 26, 2024 4:21 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; ocdonline, emnrd, EMNRD <emnrd.ocdonline@emnrd.nm.gov>
Cc: Llull, Christian <Christian.Llull@tetrattech.com>
Subject: [EXTERNAL] RE: The Oil Conservation Division (OCD) has accepted the application, Application ID: 363490

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

Good afternoon,

I am requesting a variance to continue final confirmation sampling outside of the initial notice period. We experienced delays at the beginning of our remedial action due to pipeline daylighting activities and coordination efforts with various pipeline operators.

We initially planned to begin sampling activities on 7/16/2024 at 10 am. Following the delays mentioned, we were not able to begin final confirmation sampling until 7/22/2024. We also collected confirmation samples today, 7/26/2024.

The remediation activities are ongoing, and we will be collecting additional confirmation samples next week, likely on 7/30 and/or 7/31. We will submit an additional C-141N today for the additional sampling planned for next week.

Thank you,
Sam

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

Tetra Tech, Inc. | *Leading with Science*® | OGA
8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetrattech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



Please consider the environment before printing. [Read more](#)



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>

Sent: Thursday, July 11, 2024 4:27 PM

To: Llull, Christian <christian.llull@tetrattech.com>

Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 363490



When: 07/16/2024 @ 10:00

Where: A-08-26S-29E 660 FNL 330 FEL (32.0625267,-103.9986572)

Additional Information: Please contact
Samantha Abbott, PG | Project Manager
Direct Mobile +1 (512) 739-7874

Additional Instructions: WEST BRUSHY 8 FEDERAL SWD #001
Eddy County, NM
GPS Coordinates: 32.063500°, -103.997560°

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: OCDOnline@state.nm.us
To: [Lull, Christian](#)
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 367768
Date: Friday, July 26, 2024 6:17:07 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 LLuLL for COG OPERATING LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAB1529948530.

The sampling event is expected to take place:

When: 07/31/2024 @ 10:00

Where: A-08-26S-29E 660 FNL 330 FEL (32.0625267,-103.9986572)

Additional Information: Additional information: sampling previously collected on 7/22 and 7/26. Sampling may continue through 8/1. Please contact Samantha Abbott, PG / Project Manager at 512-739-7874

Additional Instructions: Navigation Info: WEST BRUSHY 8 FEDERAL SWD #001 Eddy County, NM GPS Coordinates: 32.063500°, -103.997560°

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.

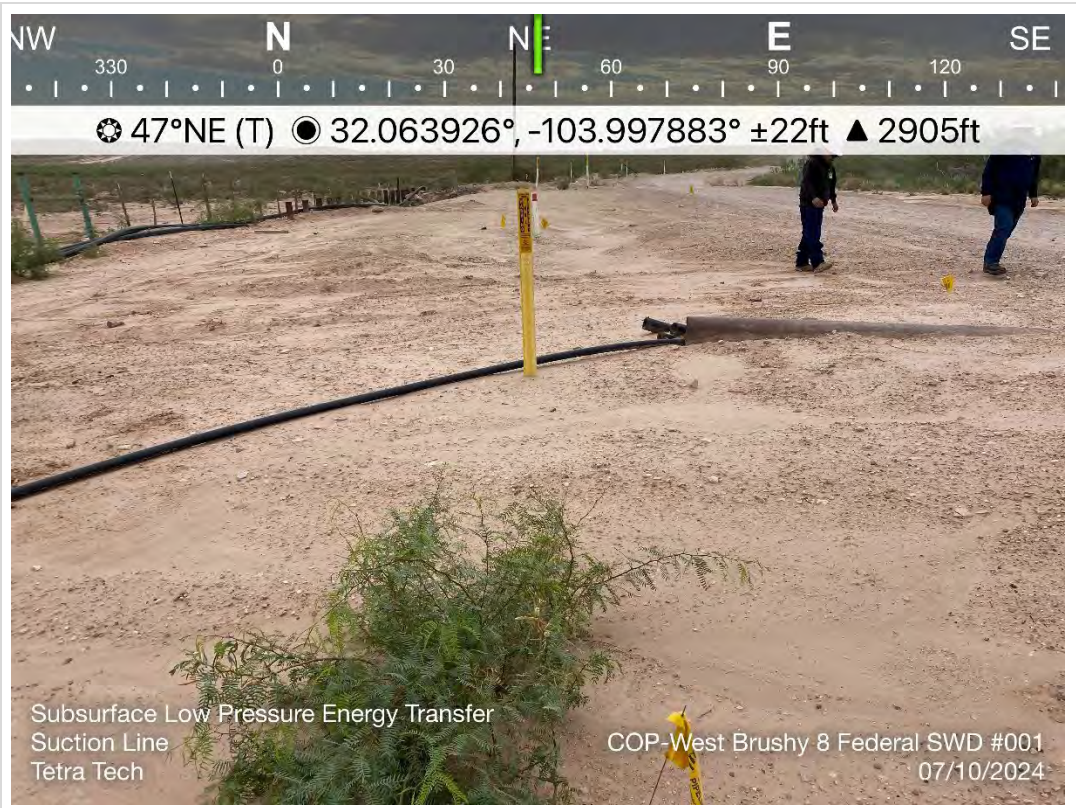
- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

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

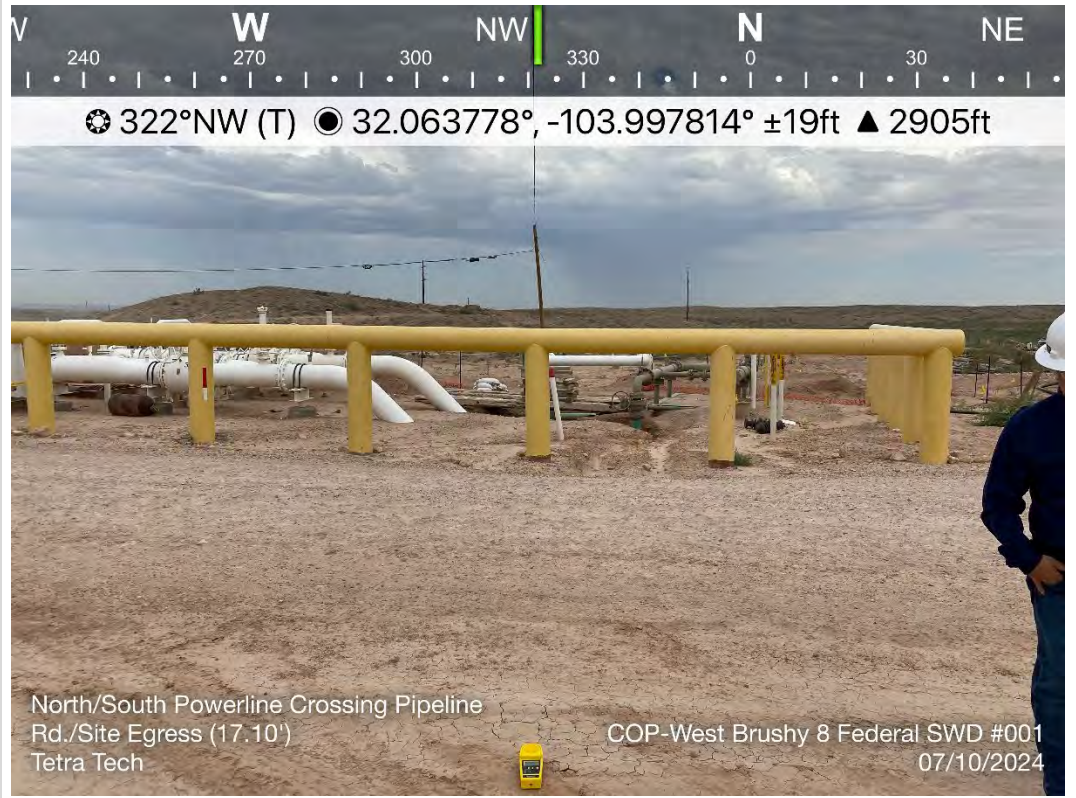
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

APPENDIX D

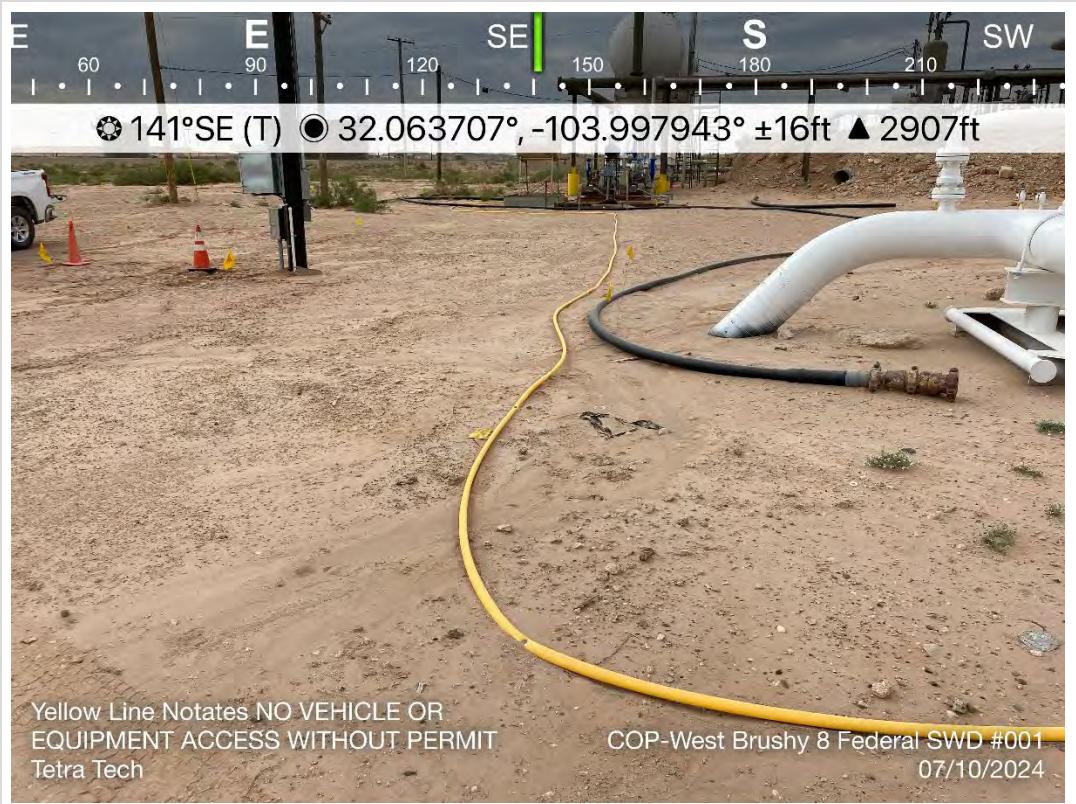
Photographic Documentation



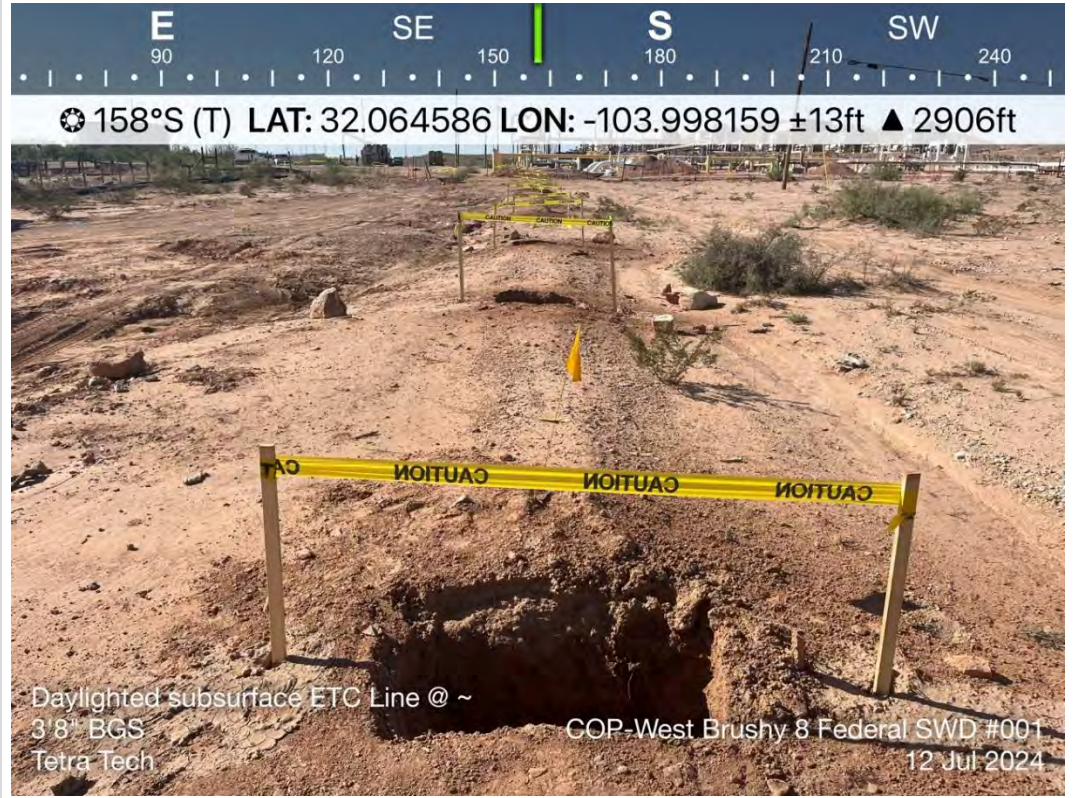
TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View northeast, site walk and review of utility lines and associated markings prior to excavation.	1
	SITE NAME	West Brushy 8 SWD #001	7/10/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View northwest, confirming powerline height for safety walk ahead of excavation.	2
	SITE NAME	West Brushy 8 SWD #001	7/10/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View southeast, setting safety boundary for vehicle access around critical infrastructure.	3
	SITE NAME	West Brushy 8 SWD #001	7/10/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View south-southeast, hydrovac of subsurface to confirm location. Potholes indicate intervals of spotted location.	4
	SITE NAME	West Brushy 8 SWD #001	7/12/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View southwest, initial scrape of 1-foot excavation area.	5
	SITE NAME	West Brushy 8 SWD #001	7/24/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View southwest, excavation of northern section of release associated with nAB1529948530.	6
	SITE NAME	West Brushy 8 SWD #001	7/26/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View west, localized 4-foot excavation adjacent to subsurface line.	7
	SITE NAME	West Brushy 8 SWD #001	8/1/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View southwest, 4-foot excavation adjacent to subsurface line in northern section of release extent.	8
	SITE NAME	West Brushy 8 SWD #001	8/1/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View northwest, removal of 1 foot of materials as per approved work plan.	9
	SITE NAME	West Brushy 8 SWD #001	8/6/2024



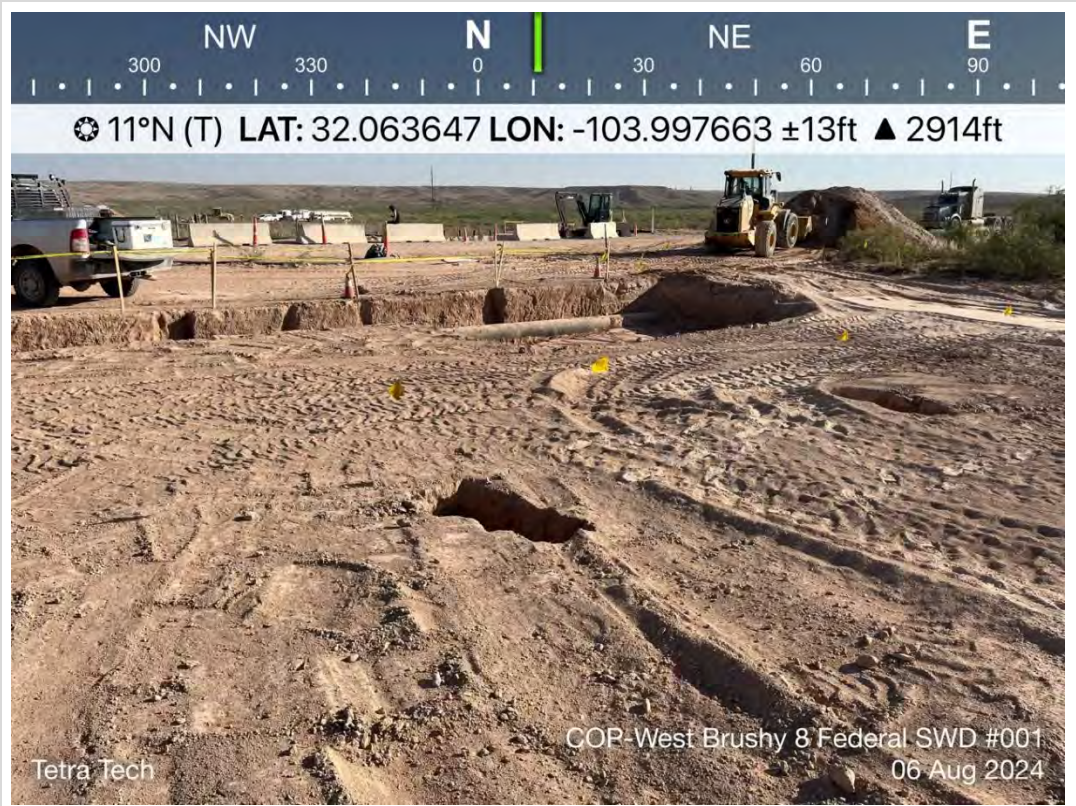
TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View north, area of excavation in conjunction with approved work plan for release nAB1619432451.	10
	SITE NAME	West Brushy 8 SWD #001	8/6/2024



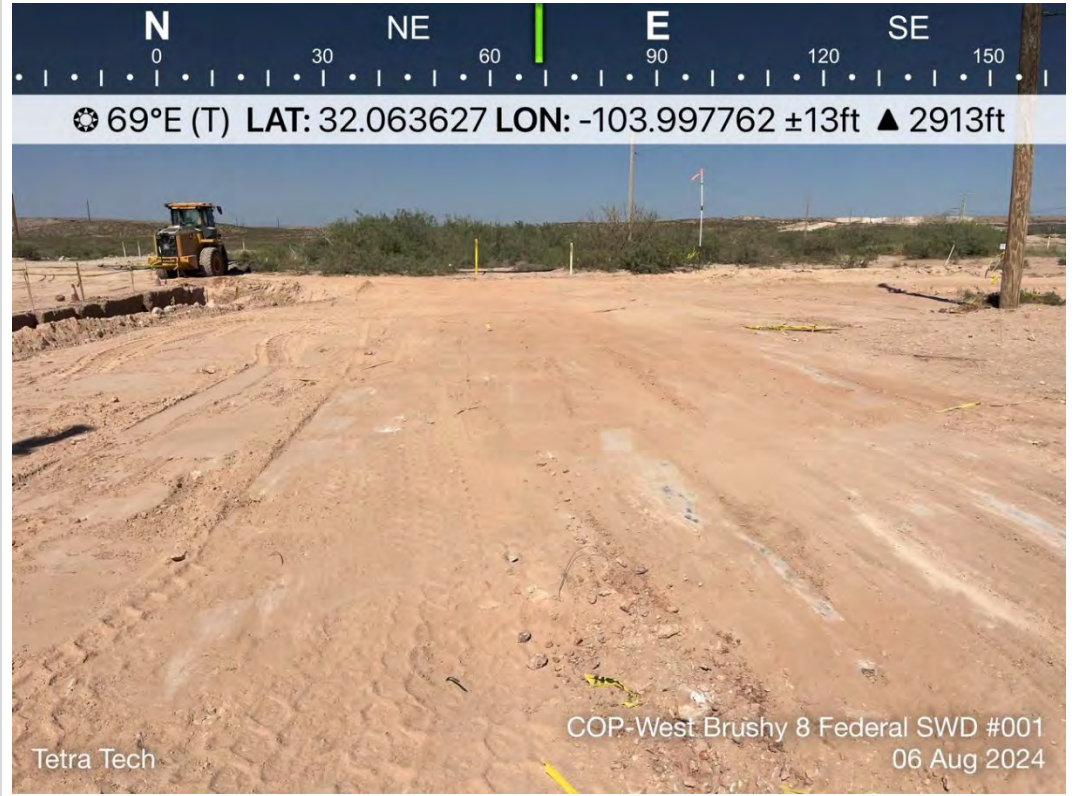
TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View north, area of 1-foot excavation in conjunction with coincident release extent.	11
	SITE NAME	West Brushy 8 SWD #001	8/6/2024



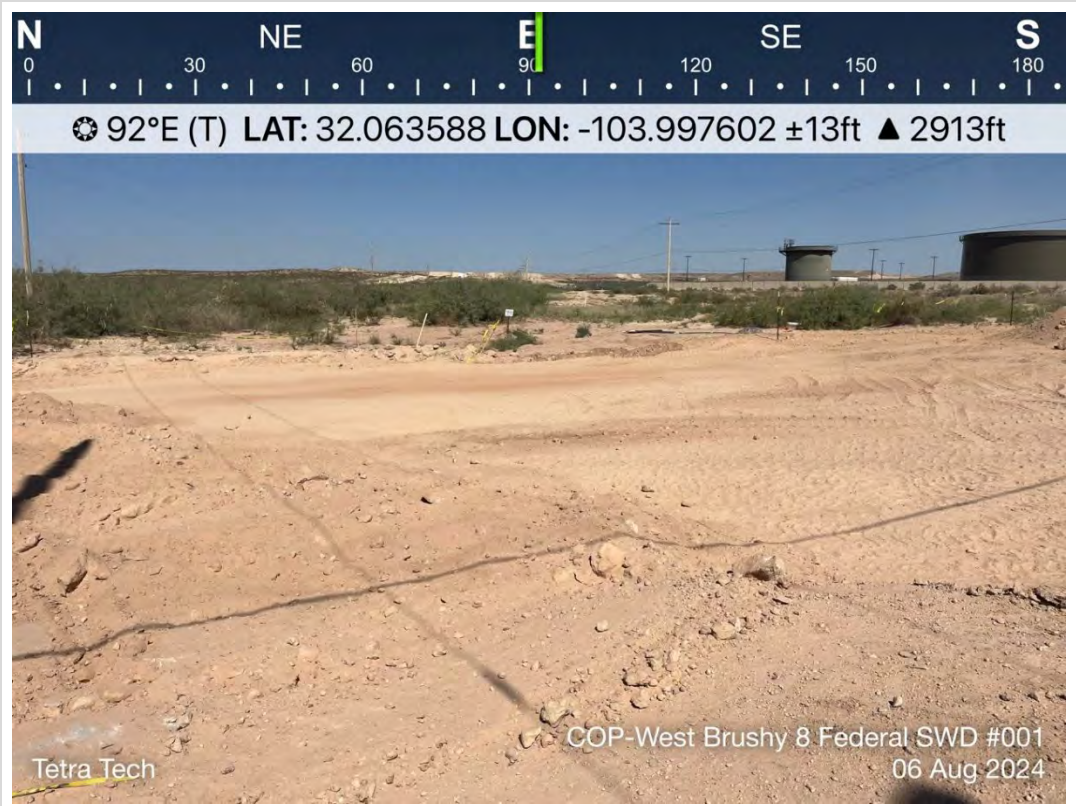
TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View east-northeast, 1-foot excavation.	12
	SITE NAME	West Brushy 8 SWD #001	8/6/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View north, potholes over subsurface line visible within area of excavation.	13
	SITE NAME	West Brushy 8 SWD #001	8/6/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View east-northeast, backfill of excavation extent.	14
	SITE NAME	West Brushy 8 SWD #001	8/6/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View east, backfill of excavation extent.	15
	SITE NAME	West Brushy 8 SWD #001	8/6/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-02997	DESCRIPTION	View east-southwest, backfill of excavated extent.	16
	SITE NAME	West Brushy 8 SWD #001	8/6/2024

APPENDIX E

Laboratory Analytical Data



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

July 24, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WEST BRUSHY 8 FED SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 07/23/24 8:56.

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.

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". The signature is written in a cursive, flowing style.

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:	07/23/2024	Sampling Date:	07/22/2024
Reported:	07/24/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Shalyn Rodriguez
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: NSW - 1 (H244359-01)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404	
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44	
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58	
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12	
Total BTX	<0.300	0.300	07/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: ESW - 1 (H244359-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: ESW - 2 (H244359-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: ESW - 3 (H244359-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SSW - 1 (H244359-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: WSW - 1 (H244359-06)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404	
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44	
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58	
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12	
Total BTEx	<0.300	0.300	07/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: WSW - 2 (H244359-07)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 92.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: WSW - 3 (H244359-08)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	640	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 1 (H244359-09)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEx	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	07/23/2024	ND	448	112	400	3.64	

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 2 (H244359-10)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1010	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 3 (H244359-11)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404	
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44	
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58	
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12	
Total BTEX	<0.300	0.300	07/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2720	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 4 (H244359-12)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404	
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44	
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58	
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12	
Total BTEX	<0.300	0.300	07/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2120	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 5 (H244359-13)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEx	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1800	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 6 (H244359-14)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2320	16.0	07/23/2024	ND	448	112	400	3.64		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 7 (H244359-15)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	992	16.0	07/23/2024	ND	416	104	400	3.77		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 8 (H244359-16)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2270	16.0	07/23/2024	ND	416	104	400	3.77		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 9 (H244359-17)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2080	16.0	07/23/2024	ND	416	104	400	3.77		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 10 (H244359-18)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1660	16.0	07/23/2024	ND	416	104	400	3.77		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 11 (H244359-19)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	720	16.0	07/23/2024	ND	416	104	400	3.77		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 12 (H244359-20)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.30	115	2.00	0.404		
Toluene*	<0.050	0.050	07/23/2024	ND	2.42	121	2.00	2.44		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.56	128	2.00	4.58		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	7.68	128	6.00	5.12		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4120	16.0	07/23/2024	ND	416	104	400	3.77		

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	07/23/2024	ND	190	95.2	200	3.32	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	199	99.5	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/23/2024
 Reported: 07/24/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 13 (H244359-21)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2024	ND	2.00	99.9	2.00	1.74		
Toluene*	<0.050	0.050	07/23/2024	ND	1.98	99.1	2.00	2.47		
Ethylbenzene*	<0.050	0.050	07/23/2024	ND	2.00	99.9	2.00	2.44		
Total Xylenes*	<0.150	0.150	07/23/2024	ND	5.89	98.1	6.00	2.54		
Total BTEX	<0.300	0.300	07/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	07/23/2024	ND	416	104	400	3.77		

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	07/23/2024	ND	180	89.9	200	0.447	
DRO >C10-C28*	<10.0	10.0	07/23/2024	ND	171	85.6	200	0.339	
EXT DRO >C28-C36	<10.0	10.0	07/23/2024	ND					

Surrogate: 1-Chlorooctane 95.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CARDINAL
Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

pg 1 of 3

Company Name: Canoco Phillips Project Manager: Sam Abbott Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: 212C-MD-02997 Project Owner: _____ Project Name: West Brushy & Federal SWD Pool Project Location: Eddy Co, NM Sample Name: Andrew Garcia FOR LAB USE ONLY				BILL TO P.O. #: _____ Company: Tetra Tech Attn: Sam Abbott Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____				ANALYSIS REQUEST			
Lab I.D. Sample I.D. 11244359				Matrix (G)RAB OR (C)OMP. _____ # CONTAINERS _____ GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____				Preserv DATE: 7/22/2024 TIME: 0800 DATE: _____ TIME: _____			
NSW-1 ESU-1 ESU-2 ESU-3 SSU-1 WSW-1 WSW-2 WSW-3 FS-1 FS-2				1015 1000 0945 0930 0915 0905 0845 0830 0815				TPH BTEX Chloride			
PLEASE NOTE: Liability and Damages. Cardinal's liability and clients exclude remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.				Relinquished By: _____ Date: 7/23/24 Time: _____ Received By: _____ Date: 0850 Time: _____ Received By: _____				Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: Sam. Abbott@TetraTech.com REMARKS: Andrew Garcia@TetraTech.com			
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____ POKIT000 K 3.3 07/16/22				Observed Temp. °C: -8.1 Corrected Temp. °C: _____ Sample Condition: <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No CHECKED BY: _____ (Signature) Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID: #140 Correction Factor: 24WK Bacteria (only) Sample Condition: <input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C: _____				† Cardinal cannot accept verbal changes. Please email changes to cardinal@tetra-tech.com			



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 3

Company Name: Canaco Phillips		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: Sam Abbott		City:		Company: Tetra Tech			
Address:		State:		Attn: Sam Abbott			
Phone #:		Zip:		Address:			
Project #: 212C-MD-02997		Project Owner:		City:			
Project Name: West Brushy & Federal SWD #001		State:		Zip:			
Project Location: Eddy Co, NM		Phone #:		Fax #:			
Sample Name: Andrew Garcia		FOR LAB USE ONLY					

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING	TPH	BTEX	Chloride
1244359	FS-3					2024 DATE 7/22 TIME 1030	X	X	X
12	FS-4					1045			
13	FS-5					1106			
14	FS-6					1115			
15	FS-7					1130			
16	FS-8					1145			
17	FS-9					1200			
18	FS-10					1215			
19	FS-11					1230			
20	FS-12					1245			

LEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claims be based upon any of the above stated contracts or otherwise.

Relinquished By: **Andrew Garcia** Date: **7/23/24** Received By: **Speciquest**

Delivered By: (Circle One) **UPS** Observed Temp. °C: **-8.1** Corrected Temp. °C: **-8.1** Sample Condition: **Intact** CHECKED BY: **(initials)**

Turnaround Time: **Standard** Bacteria (only) Sample Condition: **Intact** Observed Temp. °C: **24.4** Corrected Temp. °C: **24.4**

Remarks: **Andrew Garcia@tetratech.com**

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address: **Sam. Abbott@TetraTech.com**

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

pg 3 of 3

Company Name: Canoco Phillips		BILL TO		ANALYSIS REQUEST	
Project Manager: Sam Abbott		P.O. #:			
Address:		Company: Tetra Tech			
City:		Address:			
Phone #:		Attn: Sam Abbott			
Fax #:		City:			
Project #: 212C-MD-32947		State:			
Project Name: West Brushy & Federal SWD #001		Zip:			
Project Location: Eddy Co, NM		Phone #:			
Sample Name: Andrew Garcia		Fax #:			
FOR LAB USE ONLY					
Lab I.D. H944359	Sample I.D.				
81	FS-13				
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.					
Relinquished By:					
Date: 7/23/24					
Received By:					
Time: 8:50					
Date: 8/2/24					
Received By:					
Time:					
Delivered By: (Circle One)					
Sampler - UPS - Bus - Other:					
Observed Temp. °C -8.1					
Corrected Temp. °C					
Sample Condition					
Cool Intact <input checked="" type="checkbox"/>					
Yes <input type="checkbox"/> No <input type="checkbox"/>					
CHECKED BY: 8K					
Turnaround Time: 48 HRS					
Thermometer ID: 9713					
Correction Factor: -0.03					
Standard <input checked="" type="checkbox"/>					
Bacteria (only) Sample Condition					
Cool Intact <input type="checkbox"/>					
Yes <input type="checkbox"/> No <input type="checkbox"/>					
Observed Temp. °C					
Corrected Temp. °C					
REMARKS: Andrew Garcia @tetratech.com					
Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>					
All Results are emailed. Please provide Email address:					
Email: Sam.Abbott@tetratech.com					
Cardinal cannot accept verbal changes. Please email changes to cardinal@tetratech.com					



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

July 26, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WEST BRUSHY 8 FED SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 07/24/24 16:57.

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.

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". The signature is written in a cursive, flowing style.

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:	07/24/2024	Sampling Date:	07/23/2024
Reported:	07/26/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: ETC-1 (H244412-01)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/26/2024	ND	1.95	97.4	2.00	6.30		
Toluene*	<0.050	0.050	07/26/2024	ND	1.90	94.9	2.00	6.09		
Ethylbenzene*	<0.050	0.050	07/26/2024	ND	1.90	95.2	2.00	5.46		
Total Xylenes*	<0.150	0.150	07/26/2024	ND	5.67	94.5	6.00	5.09		
Total BTX	<0.300	0.300	07/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	07/26/2024	ND	448	112	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	07/26/2024	ND	195	97.7	200	0.931	
DRO >C10-C28*	<10.0	10.0	07/26/2024	ND	184	91.8	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	07/26/2024	ND					

Surrogate: 1-Chlorooctane 75.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 73.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/24/2024
 Reported: 07/26/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/23/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: ETC-2 (H244412-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/26/2024	ND	1.95	97.4	2.00	6.30		
Toluene*	<0.050	0.050	07/26/2024	ND	1.90	94.9	2.00	6.09		
Ethylbenzene*	<0.050	0.050	07/26/2024	ND	1.90	95.2	2.00	5.46		
Total Xylenes*	<0.150	0.150	07/26/2024	ND	5.67	94.5	6.00	5.09		
Total BTEX	<0.300	0.300	07/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	944	16.0	07/26/2024	ND	448	112	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	07/26/2024	ND	195	97.7	200	0.931	
DRO >C10-C28*	<10.0	10.0	07/26/2024	ND	184	91.8	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	07/26/2024	ND					

Surrogate: 1-Chlorooctane 83.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/24/2024
 Reported: 07/26/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/23/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: ETC-3 (H244412-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/26/2024	ND	1.95	97.4	2.00	6.30		
Toluene*	<0.050	0.050	07/26/2024	ND	1.90	94.9	2.00	6.09		
Ethylbenzene*	<0.050	0.050	07/26/2024	ND	1.90	95.2	2.00	5.46		
Total Xylenes*	<0.150	0.150	07/26/2024	ND	5.67	94.5	6.00	5.09		
Total BTEX	<0.300	0.300	07/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4000	16.0	07/26/2024	ND	448	112	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	07/26/2024	ND	195	97.7	200	0.931	
DRO >C10-C28*	<10.0	10.0	07/26/2024	ND	184	91.8	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	07/26/2024	ND					

Surrogate: 1-Chlorooctane 85.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/24/2024
 Reported: 07/26/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/23/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: ETC-4 (H244412-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/26/2024	ND	1.95	97.4	2.00	6.30		
Toluene*	<0.050	0.050	07/26/2024	ND	1.90	94.9	2.00	6.09		
Ethylbenzene*	<0.050	0.050	07/26/2024	ND	1.90	95.2	2.00	5.46		
Total Xylenes*	<0.150	0.150	07/26/2024	ND	5.67	94.5	6.00	5.09		
Total BTEX	<0.300	0.300	07/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	640	16.0	07/26/2024	ND	448	112	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	07/26/2024	ND	195	97.7	200	0.931	
DRO >C10-C28*	<10.0	10.0	07/26/2024	ND	184	91.8	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	07/26/2024	ND					

Surrogate: 1-Chlorooctane 92.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4569
Fax (432) 682-3946

Client Name:

Conoco Phillips

Site Manager:

Sam Abbott

Project Name:

West Brushy & Federal SWD # 001

Project Location:

Eddy Lee County, NM

Project #:

212C-MD-02997

Invoice to:

Attn: Sam. Abbott@TetraTech.com

Receiving Laboratory:

Cardinal Labs

Sampler Signature:

Jorge Fernandez AG
Andres Garcia

Comments:

Include: Andres. Garcia @TetraTech.com

SAMPLE IDENTIFICATION

HAZARDOUS
LAB #
(LAB USE ONLY)

DATE	TIME	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		

1	ETC-1	7/23/2024	800	X				X	1	2
2	ETC-2	7/23/2024	900	X				X	1	2
3	ETC-3	7/23/2024	1000	X				X	1	2
4	ETC-4	7/23/2024	1100	X				X	1	2

ANALYSIS REQUEST
(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	

Hold

Removed @ 1106 AM 7/23/24

Relinquished by:

Andres Garcia

Date: 7/24/24

Relinquished by:

Andres Garcia

Date: 7/24/24

Time: 17:00

Received by:

Date: 7/24/24

Time: 10:57

REMARKS: Standard TAT

LAB USE ONLY

Sample Temperature

☒ RUSH: Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

ORIGINAL COPY



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

July 30, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WEST BRUSHY 8 FED SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 07/29/24 9:51.

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.

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". The signature is written in a cursive, flowing style.

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:	07/29/2024	Sampling Date:	07/26/2024
Reported:	07/30/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Shalyn Rodriguez
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: ESW - 4 (H244486-01)

BTX 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/29/2024	ND	464	116	400	7.14	

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 71.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 72.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: WSW - 4 (H244486-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/29/2024	ND	464	116	400	7.14		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 83.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 14 (H244486-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74		
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0		
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3		
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8		
Total BTEX	<0.300	0.300	07/29/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1170	16.0	07/29/2024	ND	464	116	400	7.14		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 94.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 15 (H244486-04)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	07/29/2024	ND	464	116	400	7.14	

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 92.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 16 (H244486-05)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1040	16.0	07/29/2024	ND	464	116	400	7.14		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 82.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 17 (H244486-06)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1020	16.0	07/29/2024	ND	464	116	400	7.14		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 86.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: WSW - 3 (1') (H244486-07)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74		
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0		
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3		
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8		
Total BTEX	<0.300	0.300	07/29/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	07/29/2024	ND	464	116	400	7.14		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 95.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: NSW - 2 (H244486-08)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74		
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0		
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3		
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8		
Total BTEX	<0.300	0.300	07/29/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	07/29/2024	ND	464	116	400	7.14		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 99.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SSW - 2 (H244486-09)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	07/29/2024	ND	464	116	400	7.14	

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: ISW - 1 (H244486-10)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	0.124	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	07/30/2024	ND	448	112	400	7.41		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 95.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 22 (H244486-11)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	07/30/2024	ND	448	112	400	7.41	

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 80.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 23 (H244486-12)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	07/30/2024	ND	448	112	400	7.41	

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 74.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 24 (H244486-13)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74		
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0		
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3		
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8		
Total BTEX	<0.300	0.300	07/29/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/30/2024	ND	448	112	400	7.41		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 84.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 27 (H244486-14)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	07/30/2024	ND	448	112	400	7.41	

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 89.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 28 (H244486-15)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74		
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0		
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3		
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8		
Total BTEX	<0.300	0.300	07/29/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	07/30/2024	ND	448	112	400	7.41		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 29 (H244486-16)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74		
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0		
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3		
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8		
Total BTEX	<0.300	0.300	07/29/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/30/2024	ND	448	112	400	7.41		

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	07/29/2024	ND	205	102	200	0.695	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	186	93.2	200	3.09	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 94.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 30 (H244486-17)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74		
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0		
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3		
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8		
Total BTEX	<0.300	0.300	07/29/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/30/2024	ND	448	112	400	7.41		

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	07/29/2024	ND	220	110	200	2.35	
DRO >C10-C28*	<10.0	10.0	07/29/2024	ND	190	94.9	200	4.02	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 97.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/29/2024
 Reported: 07/30/2024
 Project Name: WEST BRUSHY 8 FED SWD #1
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/26/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS - 31 (H244486-18)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/29/2024	ND	2.18	109	2.00	9.74	
Toluene*	<0.050	0.050	07/29/2024	ND	2.53	126	2.00	13.0	
Ethylbenzene*	<0.050	0.050	07/29/2024	ND	2.54	127	2.00	14.3	
Total Xylenes*	<0.150	0.150	07/29/2024	ND	7.95	132	6.00	14.8	
Total BTEX	<0.300	0.300	07/29/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/30/2024	ND	448	112	400	7.41		

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	07/29/2024	ND	220	110	200	2.35	
DRO >C10-C28*	10.4	10.0	07/29/2024	ND	190	94.9	200	4.02	
EXT DRO >C28-C36	<10.0	10.0	07/29/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- BS1 Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
- 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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

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

Company Name: <u>Logco Halls / TeleTech</u> Project Manager: <u>Sam Abbott + Brittany Long</u> Address: City: State: <u>NM</u> Zip: Phone #: Fax #: Project #: <u>212-MD-0247</u> Project Owner: Project Name: <u>West Brisky & Federal Blvd HCU</u> Project Location: <u>Edley Canyon</u> Sampler Name: <u>Andrew Garcia</u>		BILL TO P.O. #: Company: <u>Corcoran Phillips</u> Attn: <u>Sam Abbott / TeleTech</u> Address: City: State: <u>NM</u> Zip: Phone #: Fax #:	
FOR LAB USE ONLY Lab I.D. Sample I.D. <u>184480</u> <u>ESW-4</u> <u>WSW-4</u> <u>ES-14</u> <u>ES-15</u> <u>ES-14</u> <u>WSW-3(1)</u> <u>WSW-2</u> <u>SSW-2</u> <u>ISW-1</u>		MATRIX (G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL <input checked="" type="checkbox"/> OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:	PRESERV DATE <u>7/26</u> TIME ANALYSIS REQUEST
Relinquished By: <u>Andrew Garcia 7/26/21</u> Relinquished Date: <u>7/26/21</u> Relinquished Time: <u>0951</u> Received By: <u>Stocking</u> Received Date: Received Time: Delivered By: (Circle One) Sample - UPS - Bus - Other: Observed Temp. °C <u>30.0</u> Corrected Temp. °C Sample Condition Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Checked By: <u>SP</u> Turnaround Time: Thermometer ID #140 Correction Factor 0°C Standard <u>215</u> Bacteria (only) Sample Condition Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C Corrected Temp. °C		REMARKS: Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: All Results are emailed. Please provide Email address: BT EX 80213 BT EX 82603 TPI + 8015M (GRD-DRO-DRU-MRO) Chloride	

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



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

August 01, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WEST BRUSHY 8 FED SWD #1R

Enclosed are the results of analyses for samples received by the laboratory on 07/31/24 16:58.

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.

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". The signature is written in a cursive, flowing style.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: NSW - 3 (H244569-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45	
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	3.92		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 87.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: NSW - 4 (H244569-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45	
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: NSW - 5 (H244569-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45		
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: SSW - 3 (H244569-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45		
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: SSW - 4 (H244569-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45		
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99		
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65		
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND						

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/31/2024
 Reported: 08/01/2024
 Project Name: WEST BRUSHY 8 FED SWD #1R
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/31/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: WSW - 5 (H244569-06)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45	
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41	

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: ESW - 5 (H244569-07)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45		
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 18 (H244569-08)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45	
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 19 (H244569-09)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45		
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 20 (H244569-10)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45		
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	227	113	200	2.99	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	214	107	200	1.65	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 21 (H244569-11)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	1.87	93.3	2.00	4.45		
Toluene*	<0.050	0.050	08/01/2024	ND	1.83	91.5	2.00	3.68		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	1.94	97.0	2.00	3.34		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 87.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 32 (H244569-12)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41		
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65		
Total BTEx	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 92.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 33 (H244569-13)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41		
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 89.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 34 (H244569-14)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41	
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41	

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 92.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 35 (H244569-15)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41		
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 89.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 36 (H244569-16)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41		
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 91.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 37 (H244569-17)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41		
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 90.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 38 (H244569-18)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41	
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65	
Total BTX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/01/2024	ND	416	104	400	7.41	

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 39 (H244569-19)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41		
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 40 (H244569-20)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41	
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 99.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 41 (H244569-21)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.08	104	2.00	6.41		
Toluene*	<0.050	0.050	08/01/2024	ND	2.27	114	2.00	4.35		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.43	122	2.00	4.24		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.28	121	6.00	3.65		
Total BTEx	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/01/2024	ND	416	104	400	7.41		

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	08/01/2024	ND	220	110	200	3.02	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	202	101	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 42 (H244569-22)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44		
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 43 (H244569-23)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44	
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 44 (H244569-24)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44		
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 97.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 45 (H244569-25)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44	
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 46 (H244569-26)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44		
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20		
Total BTEx	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 128 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 81.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 47 (H244569-27)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44		
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20		
Total BTEx	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1490	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/31/2024
 Reported: 08/01/2024
 Project Name: WEST BRUSHY 8 FED SWD #1R
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/31/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS - 48 (H244569-28)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44	
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1100	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 07/31/2024
 Reported: 08/01/2024
 Project Name: WEST BRUSHY 8 FED SWD #1R
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 07/31/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS - 49 (H244569-29)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44	
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 50 (H244569-30)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44		
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19		
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02		
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20		
Total BTEX	<0.300	0.300	08/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1170	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 93.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	07/31/2024	Sampling Date:	07/31/2024
Reported:	08/01/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 51 (H244569-31)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2024	ND	2.11	105	2.00	5.44	
Toluene*	<0.050	0.050	08/01/2024	ND	2.42	121	2.00	5.19	
Ethylbenzene*	<0.050	0.050	08/01/2024	ND	2.57	129	2.00	5.02	
Total Xylenes*	<0.150	0.150	08/01/2024	ND	7.83	130	6.00	5.20	
Total BTEX	<0.300	0.300	08/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	08/01/2024	ND	432	108	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	08/01/2024	ND	209	104	200	0.225	
DRO >C10-C28*	<10.0	10.0	08/01/2024	ND	215	108	200	0.984	
EXT DRO >C28-C36	<10.0	10.0	08/01/2024	ND					

Surrogate: 1-Chlorooctane 94.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager




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

Notes and Definitions

- BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
- BS1 Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
- 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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



Page 1 of 4

Page 34 of 37



Page 2 of 4

Page 35 of 37



Page 3 of 4

Page 36 of 37



Page 4 of 4

Page 37 of 37



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

August 05, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WEST BRUSHY 8 FED SWD #1R

Enclosed are the results of analyses for samples received by the laboratory on 08/02/24 9:27.

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.

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". The signature is fluid and cursive, with the first name "Celey" being more prominent.

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:	08/02/2024	Sampling Date:	08/01/2024
Reported:	08/05/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: ISW - 2 (H244634-01)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/02/2024	ND	2.03	102	2.00	1.02	
Toluene*	<0.050	0.050	08/02/2024	ND	2.18	109	2.00	0.147	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	2.29	115	2.00	0.347	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	7.03	117	6.00	0.191	
Total BTEX	<0.300	0.300	08/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	08/05/2024	ND	416	104	400	3.77	

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	08/02/2024	ND	223	112	200	4.15	
DRO >C10-C28*	12.1	10.0	08/02/2024	ND	217	108	200	14.7	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 88.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	08/02/2024	Sampling Date:	08/01/2024
Reported:	08/05/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: ISW - 3 (H244634-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/02/2024	ND	2.03	102	2.00	1.02		
Toluene*	<0.050	0.050	08/02/2024	ND	2.18	109	2.00	0.147		
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	2.29	115	2.00	0.347		
Total Xylenes*	<0.150	0.150	08/02/2024	ND	7.03	117	6.00	0.191		
Total BTEX	<0.300	0.300	08/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	720	16.0	08/05/2024	ND	416	104	400	3.77		

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	08/02/2024	ND	223	112	200	4.15	
DRO >C10-C28*	17.2	10.0	08/02/2024	ND	217	108	200	14.7	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W. Wall Street, Ste. 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3948

Client Name:

Conoco Phillips

Site Manager:

Sam Abbott

Project Name:

West Brushy & Federal SUD #001 R

Project Location:

Eddy County, NM

Project #:

212C-MD-02997

Invoice to:

Attn: Sam. Abbott@tetratech.com

Receiving Laboratory:

Cardinal Labs

Sampler Signature:

Andrew Garcia

Comments:

Include: Andrew.Garcia@tetratech.com

SAMPLE IDENTIFICATION

LAB #

172441034

(LAB USE ONLY)

SAMPLING

DATE

TIME

WATER

SOIL

HCL

HNO₃

ICE

CONTAINERS

FILTERED (Y/N)

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1/2024

1230

X

X

X

X

X

ISW-2

ISW-3

8/1/2024

1200

8/1



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

August 06, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WEST BRUSHY 8 FED SWD #1R

Enclosed are the results of analyses for samples received by the laboratory on 08/05/24 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.

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". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

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:	08/05/2024	Sampling Date:	08/05/2024
Reported:	08/06/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: ISW - 2 (1') (H244695-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/05/2024	ND	1.94	97.1	2.00	0.552	
Toluene*	<0.050	0.050	08/05/2024	ND	1.89	94.6	2.00	0.971	
Ethylbenzene*	<0.050	0.050	08/05/2024	ND	1.99	99.4	2.00	1.38	
Total Xylenes*	<0.150	0.150	08/05/2024	ND	5.88	98.0	6.00	1.05	
Total BTEX	<0.300	0.300	08/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/06/2024	ND	432	108	400	3.64	

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	08/05/2024	ND	210	105	200	2.65	
DRO >C10-C28*	<10.0	10.0	08/05/2024	ND	217	109	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	08/05/2024	ND					

Surrogate: 1-Chlorooctane 84.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 08/05/2024
 Reported: 08/06/2024
 Project Name: WEST BRUSHY 8 FED SWD #1R
 Project Number: 212C - MD - 02997
 Project Location: COP- EDDY COUNTY, NM

Sampling Date: 08/05/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: ISW - 3 (1') (H244695-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/05/2024	ND	1.94	97.1	2.00	0.552	
Toluene*	<0.050	0.050	08/05/2024	ND	1.89	94.6	2.00	0.971	
Ethylbenzene*	<0.050	0.050	08/05/2024	ND	1.99	99.4	2.00	1.38	
Total Xylenes*	<0.150	0.150	08/05/2024	ND	5.88	98.0	6.00	1.05	
Total BTEX	<0.300	0.300	08/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/06/2024	ND	432	108	400	3.64	

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	08/05/2024	ND	210	105	200	2.65	
DRO >C10-C28*	<10.0	10.0	08/05/2024	ND	217	109	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	08/05/2024	ND					

Surrogate: 1-Chlorooctane 87.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	08/05/2024	Sampling Date:	08/05/2024
Reported:	08/06/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 25 (H244695-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/05/2024	ND	2.06	103	2.00	12.3	
Toluene*	<0.050	0.050	08/05/2024	ND	2.17	109	2.00	12.8	
Ethylbenzene*	<0.050	0.050	08/05/2024	ND	2.29	115	2.00	12.7	
Total Xylenes*	<0.150	0.150	08/05/2024	ND	7.02	117	6.00	12.9	
Total BTEX	<0.300	0.300	08/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	08/06/2024	ND	432	108	400	3.64	

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	08/05/2024	ND	210	105	200	2.65	
DRO >C10-C28*	<10.0	10.0	08/05/2024	ND	217	109	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	08/05/2024	ND					

Surrogate: 1-Chlorooctane 80.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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:	08/05/2024	Sampling Date:	08/05/2024
Reported:	08/06/2024	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FED SWD #1R	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02997	Sample Received By:	Alyssa Parras
Project Location:	COP- EDDY COUNTY, NM		

Sample ID: FS - 26 (H244695-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/05/2024	ND	2.06	103	2.00	12.3		
Toluene*	<0.050	0.050	08/05/2024	ND	2.17	109	2.00	12.8		
Ethylbenzene*	<0.050	0.050	08/05/2024	ND	2.29	115	2.00	12.7		
Total Xylenes*	<0.150	0.150	08/05/2024	ND	7.02	117	6.00	12.9		
Total BTEX	<0.300	0.300	08/05/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	08/06/2024	ND	432	108	400	3.64		

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	08/05/2024	ND	210	105	200	2.65	
DRO >C10-C28*	<10.0	10.0	08/05/2024	ND	217	109	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	08/05/2024	ND					

Surrogate: 1-Chlorooctane 72.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "C. D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 7 of 7



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

12

13

ANALYTICAL REPORT

PREPARED FOR

Attn: Luis Rivera
R360 ES Holdings Inc
507 N Marienfield
Midland, Texas 79701

Generated 7/26/2024 8:29:26 AM

JOB DESCRIPTION

R360 -backfill

JOB NUMBER

890-6947-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

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
7/26/2024 8:29:26 AM

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

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

Laboratory Job ID: 890-6947-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	10
QC Association Summary	12
Lab Chronicle	14
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Checklists	24



Definitions/Glossary

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

Job ID: 890-6947-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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: 890-6947-1

Job ID: 890-6947-1

Eurofins Carlsbad

Job Narrative 890-6947-1

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 7/22/2024 11:07 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 3.0°C.

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-86374 and analytical batch 880-86423 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#88

Lab Sample ID: 890-6947-1

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	155		5.04	0.398	mg/Kg			07/26/24 00:36	1

Client Sample ID: E#89

Lab Sample ID: 890-6947-2

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.6		5.03	0.397	mg/Kg			07/26/24 00:52	1

Client Sample ID: E#90

Lab Sample ID: 890-6947-3

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.7		4.99	0.394	mg/Kg			07/26/24 00:57	1

Client Sample ID: E#91

Lab Sample ID: 890-6947-4

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.0		4.98	0.393	mg/Kg			07/26/24 01:13	1

Client Sample ID: E#92

Lab Sample ID: 890-6947-5

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.6		5.00	0.395	mg/Kg			07/26/24 01:18	1

Client Sample ID: E#93

Lab Sample ID: 890-6947-6

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.8		5.00	0.395	mg/Kg			07/26/24 01:23	1

Client Sample ID: E#94

Lab Sample ID: 890-6947-7

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		4.99	0.394	mg/Kg			07/26/24 01:28	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#95
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-8
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.0		5.04	0.398	mg/Kg			07/26/24 01:34	1

Client Sample ID: E#96
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-9
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.6		5.02	0.397	mg/Kg			07/26/24 01:39	1

Client Sample ID: E#97
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-10
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.4		4.98	0.393	mg/Kg			07/26/24 01:44	1

Client Sample ID: E#98
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-11
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.5		4.96	0.392	mg/Kg			07/25/24 17:16	1

Client Sample ID: E#99
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-12
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.2		4.98	0.393	mg/Kg			07/25/24 17:32	1

Client Sample ID: E#100
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-13
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.7		4.99	0.394	mg/Kg			07/25/24 17:37	1

Client Sample ID: E#101
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-14
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.3		5.02	0.397	mg/Kg			07/25/24 17:42	1

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#102

Lab Sample ID: 890-6947-15

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.01	0.396	mg/Kg			07/25/24 17:47	1

Client Sample ID: E#103

Lab Sample ID: 890-6947-16

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	159		5.01	0.396	mg/Kg			07/25/24 18:03	1

Client Sample ID: E#104

Lab Sample ID: 890-6947-17

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221		5.04	0.398	mg/Kg			07/25/24 18:08	1

Client Sample ID: E#105

Lab Sample ID: 890-6947-18

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	274		5.03	0.397	mg/Kg			07/25/24 18:14	1

Client Sample ID: E#106

Lab Sample ID: 890-6947-19

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	161		5.05	0.399	mg/Kg			07/25/24 18:19	1

Client Sample ID: E#107

Lab Sample ID: 890-6947-20

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	197		4.99	0.394	mg/Kg			07/25/24 18:24	1

Client Sample ID: E#108

Lab Sample ID: 890-6947-21

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	263	F1	4.96	0.392	mg/Kg			07/25/24 18:30	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#109
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-22
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	284		4.97	0.393	mg/Kg			07/25/24 18:45	1

Client Sample ID: E#110
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-23
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		4.95	0.391	mg/Kg			07/25/24 18:50	1

Client Sample ID: E#111
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-24
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	198		4.99	0.394	mg/Kg			07/25/24 19:06	1

QC Sample Results

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

Job ID: 890-6947-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-86373/1-A

Matrix: Solid

Analysis Batch: 86421

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			07/25/24 23:07	1

Lab Sample ID: LCS 880-86373/2-A

Matrix: Solid

Analysis Batch: 86421

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.2		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-86373/3-A

Matrix: Solid

Analysis Batch: 86421

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	255.4		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-6947-1 MS

Matrix: Solid

Analysis Batch: 86421

Client Sample ID: E#88

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	155		252	398.4		mg/Kg		97	90 - 110

Lab Sample ID: 890-6947-1 MSD

Matrix: Solid

Analysis Batch: 86421

Client Sample ID: E#88

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	155		252	398.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: MB 880-86374/1-A

Matrix: Solid

Analysis Batch: 86423

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			07/25/24 17:00	1

Lab Sample ID: LCS 880-86374/2-A

Matrix: Solid

Analysis Batch: 86423

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	248.7		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-86374/3-A

Matrix: Solid

Analysis Batch: 86423

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	250.8		mg/Kg		100	90 - 110	1	20

Eurofins Carlsbad

QC Sample Results

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

Job ID: 890-6947-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-6947-11 MS											Client Sample ID: E#98		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits				
Chloride	14.5		248	272.7		mg/Kg		104	90 - 110				
Lab Sample ID: 890-6947-11 MSD											Client Sample ID: E#98		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	14.5		248	273.0		mg/Kg		104	90 - 110	0	20		
Lab Sample ID: 890-6947-21 MS											Client Sample ID: E#108		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits				
Chloride	263	F1	248	539.4	F1	mg/Kg		111	90 - 110				
Lab Sample ID: 890-6947-21 MSD											Client Sample ID: E#108		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	263	F1	248	541.1	F1	mg/Kg		112	90 - 110	0	20		

QC Association Summary

Client: R360 ES Holdings Inc

Project/Site: R360 -backfill

Job ID: 890-6947-1

HPLC/IC

Leach Batch: 86373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-1	E#88	Soluble	Solid	DI Leach	
890-6947-2	E#89	Soluble	Solid	DI Leach	
890-6947-3	E#90	Soluble	Solid	DI Leach	
890-6947-4	E#91	Soluble	Solid	DI Leach	
890-6947-5	E#92	Soluble	Solid	DI Leach	
890-6947-6	E#93	Soluble	Solid	DI Leach	
890-6947-7	E#94	Soluble	Solid	DI Leach	
890-6947-8	E#95	Soluble	Solid	DI Leach	
890-6947-9	E#96	Soluble	Solid	DI Leach	
890-6947-10	E#97	Soluble	Solid	DI Leach	
MB 880-86373/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-86373/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-86373/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6947-1 MS	E#88	Soluble	Solid	DI Leach	
890-6947-1 MSD	E#88	Soluble	Solid	DI Leach	

Leach Batch: 86374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-11	E#98	Soluble	Solid	DI Leach	
890-6947-12	E#99	Soluble	Solid	DI Leach	
890-6947-13	E#100	Soluble	Solid	DI Leach	
890-6947-14	E#101	Soluble	Solid	DI Leach	
890-6947-15	E#102	Soluble	Solid	DI Leach	
890-6947-16	E#103	Soluble	Solid	DI Leach	
890-6947-17	E#104	Soluble	Solid	DI Leach	
890-6947-18	E#105	Soluble	Solid	DI Leach	
890-6947-19	E#106	Soluble	Solid	DI Leach	
890-6947-20	E#107	Soluble	Solid	DI Leach	
890-6947-21	E#108	Soluble	Solid	DI Leach	
890-6947-22	E#109	Soluble	Solid	DI Leach	
890-6947-23	E#110	Soluble	Solid	DI Leach	
890-6947-24	E#111	Soluble	Solid	DI Leach	
MB 880-86374/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-86374/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-86374/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6947-11 MS	E#98	Soluble	Solid	DI Leach	
890-6947-11 MSD	E#98	Soluble	Solid	DI Leach	
890-6947-21 MS	E#108	Soluble	Solid	DI Leach	
890-6947-21 MSD	E#108	Soluble	Solid	DI Leach	

Analysis Batch: 86421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-1	E#88	Soluble	Solid	300.0	86373
890-6947-2	E#89	Soluble	Solid	300.0	86373
890-6947-3	E#90	Soluble	Solid	300.0	86373
890-6947-4	E#91	Soluble	Solid	300.0	86373
890-6947-5	E#92	Soluble	Solid	300.0	86373
890-6947-6	E#93	Soluble	Solid	300.0	86373
890-6947-7	E#94	Soluble	Solid	300.0	86373
890-6947-8	E#95	Soluble	Solid	300.0	86373
890-6947-9	E#96	Soluble	Solid	300.0	86373

Eurofins Carlsbad

QC Association Summary

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

Job ID: 890-6947-1

HPLC/IC (Continued)

Analysis Batch: 86421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-10	E#97	Soluble	Solid	300.0	86373
MB 880-86373/1-A	Method Blank	Soluble	Solid	300.0	86373
LCS 880-86373/2-A	Lab Control Sample	Soluble	Solid	300.0	86373
LCSD 880-86373/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	86373
890-6947-1 MS	E#88	Soluble	Solid	300.0	86373
890-6947-1 MSD	E#88	Soluble	Solid	300.0	86373

Analysis Batch: 86423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-11	E#98	Soluble	Solid	300.0	86374
890-6947-12	E#99	Soluble	Solid	300.0	86374
890-6947-13	E#100	Soluble	Solid	300.0	86374
890-6947-14	E#101	Soluble	Solid	300.0	86374
890-6947-15	E#102	Soluble	Solid	300.0	86374
890-6947-16	E#103	Soluble	Solid	300.0	86374
890-6947-17	E#104	Soluble	Solid	300.0	86374
890-6947-18	E#105	Soluble	Solid	300.0	86374
890-6947-19	E#106	Soluble	Solid	300.0	86374
890-6947-20	E#107	Soluble	Solid	300.0	86374
890-6947-21	E#108	Soluble	Solid	300.0	86374
890-6947-22	E#109	Soluble	Solid	300.0	86374
890-6947-23	E#110	Soluble	Solid	300.0	86374
890-6947-24	E#111	Soluble	Solid	300.0	86374
MB 880-86374/1-A	Method Blank	Soluble	Solid	300.0	86374
LCS 880-86374/2-A	Lab Control Sample	Soluble	Solid	300.0	86374
LCSD 880-86374/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	86374
890-6947-11 MS	E#98	Soluble	Solid	300.0	86374
890-6947-11 MSD	E#98	Soluble	Solid	300.0	86374
890-6947-21 MS	E#108	Soluble	Solid	300.0	86374
890-6947-21 MSD	E#108	Soluble	Solid	300.0	86374

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#88
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-1
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			4.96 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 00:36	CH	EET MID

Client Sample ID: E#89
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-2
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			4.97 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 00:52	CH	EET MID

Client Sample ID: E#90
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-3
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			5.01 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 00:57	CH	EET MID

Client Sample ID: E#91
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-4
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			5.02 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:13	CH	EET MID

Client Sample ID: E#92
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-5
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			5.00 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:18	CH	EET MID

Client Sample ID: E#93
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-6
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			5.00 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:23	CH	EET MID

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#94
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-7
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			5.01 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:28	CH	EET MID

Client Sample ID: E#95
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-8
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	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:34	CH	EET MID

Client Sample ID: E#96
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-9
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	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:39	CH	EET MID

Client Sample ID: E#97
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-10
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	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:44	CH	EET MID

Client Sample ID: E#98
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-11
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:16	CH	EET MID

Client Sample ID: E#99
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-12
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:32	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#100
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-13
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			5.01 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:37	CH	EET MID

Client Sample ID: E#101
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-14
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:42	CH	EET MID

Client Sample ID: E#102
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-15
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:47	CH	EET MID

Client Sample ID: E#103
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-16
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:03	CH	EET MID

Client Sample ID: E#104
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-17
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:08	CH	EET MID

Client Sample ID: E#105
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-18
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			4.97 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:14	CH	EET MID

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#106
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-19
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:19	CH	EET MID

Client Sample ID: E#107
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-20
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			5.01 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:24	CH	EET MID

Client Sample ID: E#108
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-21
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:30	CH	EET MID

Client Sample ID: E#109
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-22
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:45	CH	EET MID

Client Sample ID: E#110
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-23
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			5.05 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:50	CH	EET MID

Client Sample ID: E#111
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-24
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			5.01 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 19:06	CH	EET MID

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

Accreditation/Certification Summary

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

Job ID: 890-6947-1

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

Method Summary

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

Job ID: 890-6947-1

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

Sample Summary

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

Job ID: 890-6947-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6947-1	E#88	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-2	E#89	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-3	E#90	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-4	E#91	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-5	E#92	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-6	E#93	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-7	E#94	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-8	E#95	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-9	E#96	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-10	E#97	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-11	E#98	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-12	E#99	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-13	E#100	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-14	E#101	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-15	E#102	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-16	E#103	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-17	E#104	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-18	E#105	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-19	E#106	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-20	E#107	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-21	E#108	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-22	E#109	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-23	E#110	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-24	E#111	Solid	07/22/24 07:00	07/22/24 11:07

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



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) 794-1286
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco

Work Order No:

Project Manager: Luis Rivera						Bill to: (if different)					
Company Name: RSC Environmental Solutions						Company Name:					
Address: 5053 US Hwy 285						Address:					
City, State ZIP: Orla TX 79770						City, State ZIP:					
Phone: (405) 351-2694						Email: luisr@rscenv.com					
Project Name: Backfill						Turn Around <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush					
Project Number:						Pres. Code					
Project Location:											
Sampler's Name:						Due Date: TAT starts the day received by the lab, if received by 4:30pm					
PO #:											
SAMPLE RECEIPT											
Samples Received Intact:		Temp Blank:		Yes No		Wet Ice:		Yes No			
Cooler Custody Seals:		Thermometer ID:		N/A		Correction Factor:		+0.2			
Sample Custody Seals:		Temperature Reading:		N/A		Corrected Temperature:		3.2			
Total Containers:		Grab/Comp		# of Cont							
Sample Identification						Parameters					
Matrix		Date Sampled		Time Sampled		Depth					
E#88		7/24/24		7:00AM				X			
E#89								X			
E#90								X			
E#91								X			
E#92								X			
E#93								X			
E#94								X			
E#95								X			
E#96								X			
E#97								X			
Total 200.7 / 6010 200.8 / 6020:						8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn					
Circle Method(s) and Metal(s) to be analyzed						TCPL / SPLP6010 : 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) 				Received by: (Signature) 				Date/Time 7/24/24			
1				2				4			
								6			

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 of

Project Manager:	Luis Rivera	Bill to: (if different)	
Company Name:	R360 Environmental Solutions	Company Name:	
Address:	5050 US Hwy 285	Address:	
City, State ZIP:	Orla TX 77720	City, State ZIP:	
Phone:	(405) 351-2694	Email:	luis@r360es.com

Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	Backfill	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST										Preservative Codes										
Project Number:		Due Date:														None: NO DI Water: H ₂ O										
Project Location:		TAT starts the day received by the lab, if received by 4:30pm														Cool: Cool MeOH: Me										
Sampler's Name:																HCL: HC HNO ₃ : HN										
PO #:																H ₂ SO ₄ : H ₂ NaOH: Na										
SAMPLE RECEIPT		Temp Blank:	Yes No	Wet Ice:	Yes No											H ₃ PO ₄ : HP										
Samples Received Intact:		Yes No		Thermometer ID:												NaHSO ₄ : NABIS										
Cooler Custody Seals:		Yes No N/A		Correction Factor:												Na ₂ S ₂ O ₃ : NaSO ₃										
Sample Custody Seals:		Yes No N/A		Temperature Reading:												Zn Acetate+NaOH: Zn										
Total Containers:				Corrected Temperature:												NaOH+Ascorbic Acid: SAPC										
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont											Sample Comments									
E#98		7/23/24	7:24 AM			1																				
E#99						1																				
E#100						1																				
E#101						1																				
E#102						1																				
E#103						1																				
E#104						1																				
E#105						1																				
E#106						1																				
E#107						1																				

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti 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)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/23/24			

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 _____ of _____

Project Manager:	Luis Rivera	Bill to: (if different)	
Company Name:	360 Environmental Solutions	Company Name:	
Address:	5033 US Hwy 285	Address:	
City, State ZIP:	Orla TX 79775	City, State ZIP:	
Phone:	(409) 351-2894	Email:	luis@360es.com

Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

ANALYSIS REQUEST				Preservative Codes							
Project Name:	Turn Around	Pres. Code									
Project Number:	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			None: NO	DI Water: H ₂ 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 ₃ : HN						
P.O. #:				H ₂ SO ₄ : H ₂	NaOH: Na						
SAMPLE RECEIPT				H ₃ PO ₄ : HP							
Samples Received Intact:	Temp Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		NaHSO ₄ : NABIS							
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Thermometer ID:		Na ₂ S ₂ O ₃ : NaSO ₃							
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:		Zn Acetate+NaOH: Zn							
Total Containers:		Temperature Reading:		NaOH+Ascorbic Acid: SACP							
		Corrected Temperature:									
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters				Sample Comments
E108		7/29/24	7:41 AM			X	Chlorides				
E#109						X					
E#110						X					
E#111						X					

Total 200.7/6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti 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)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	2	7/29/24			
3	4				
5	6				

Revised Date: 08/25/2020 Rev. 2020.2

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

Login Sample Receipt Checklist

Client: R360 ES Holdings Inc

Job Number: 890-6947-1

Login Number: 6947

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	

Login Sample Receipt Checklist

Client: R360 ES Holdings Inc

Job Number: 890-6947-1

Login Number: 6947

List Source: Eurofins Midland

List Number: 2

List Creation: 07/23/24 08:17 AM

Creator: Vasquez, Julisa

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	



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

12

13

ANALYTICAL REPORT

PREPARED FOR

Attn: Luis Rivera
R360 ES Holdings Inc
507 N Marienfield
Midland, Texas 79701

Generated 7/26/2024 8:29:26 AM

JOB DESCRIPTION

R360 -backfill

JOB NUMBER

890-6947-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.
Released to Imaging: 9/10/2024 10:21:30 AM

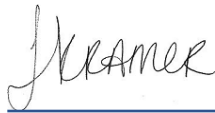
Eurofins Carlsbad

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
7/26/2024 8:29:26 AM

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

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

Laboratory Job ID: 890-6947-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	10
QC Association Summary	12
Lab Chronicle	14
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Checklists	24

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

Definitions/Glossary

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

Job ID: 890-6947-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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: 890-6947-1

Job ID: 890-6947-1

Eurofins Carlsbad

Job Narrative 890-6947-1

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 7/22/2024 11:07 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 3.0°C.

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-86374 and analytical batch 880-86423 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#88

Lab Sample ID: 890-6947-1

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	155		5.04	0.398	mg/Kg			07/26/24 00:36	1

Client Sample ID: E#89

Lab Sample ID: 890-6947-2

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.6		5.03	0.397	mg/Kg			07/26/24 00:52	1

Client Sample ID: E#90

Lab Sample ID: 890-6947-3

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.7		4.99	0.394	mg/Kg			07/26/24 00:57	1

Client Sample ID: E#91

Lab Sample ID: 890-6947-4

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.0		4.98	0.393	mg/Kg			07/26/24 01:13	1

Client Sample ID: E#92

Lab Sample ID: 890-6947-5

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.6		5.00	0.395	mg/Kg			07/26/24 01:18	1

Client Sample ID: E#93

Lab Sample ID: 890-6947-6

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.8		5.00	0.395	mg/Kg			07/26/24 01:23	1

Client Sample ID: E#94

Lab Sample ID: 890-6947-7

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		4.99	0.394	mg/Kg			07/26/24 01:28	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#95

Lab Sample ID: 890-6947-8

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.0		5.04	0.398	mg/Kg			07/26/24 01:34	1

Client Sample ID: E#96

Lab Sample ID: 890-6947-9

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.6		5.02	0.397	mg/Kg			07/26/24 01:39	1

Client Sample ID: E#97

Lab Sample ID: 890-6947-10

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.4		4.98	0.393	mg/Kg			07/26/24 01:44	1

Client Sample ID: E#98

Lab Sample ID: 890-6947-11

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.5		4.96	0.392	mg/Kg			07/25/24 17:16	1

Client Sample ID: E#99

Lab Sample ID: 890-6947-12

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.2		4.98	0.393	mg/Kg			07/25/24 17:32	1

Client Sample ID: E#100

Lab Sample ID: 890-6947-13

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.7		4.99	0.394	mg/Kg			07/25/24 17:37	1

Client Sample ID: E#101

Lab Sample ID: 890-6947-14

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.3		5.02	0.397	mg/Kg			07/25/24 17:42	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#102

Lab Sample ID: 890-6947-15

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.01	0.396	mg/Kg			07/25/24 17:47	1

Client Sample ID: E#103

Lab Sample ID: 890-6947-16

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	159		5.01	0.396	mg/Kg			07/25/24 18:03	1

Client Sample ID: E#104

Lab Sample ID: 890-6947-17

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221		5.04	0.398	mg/Kg			07/25/24 18:08	1

Client Sample ID: E#105

Lab Sample ID: 890-6947-18

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	274		5.03	0.397	mg/Kg			07/25/24 18:14	1

Client Sample ID: E#106

Lab Sample ID: 890-6947-19

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	161		5.05	0.399	mg/Kg			07/25/24 18:19	1

Client Sample ID: E#107

Lab Sample ID: 890-6947-20

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	197		4.99	0.394	mg/Kg			07/25/24 18:24	1

Client Sample ID: E#108

Lab Sample ID: 890-6947-21

Date Collected: 07/22/24 07:00

Matrix: Solid

Date Received: 07/22/24 11:07

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	263	F1	4.96	0.392	mg/Kg			07/25/24 18:30	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-6947-1

Client Sample ID: E#109
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-22
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	284		4.97	0.393	mg/Kg			07/25/24 18:45	1

Client Sample ID: E#110
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-23
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		4.95	0.391	mg/Kg			07/25/24 18:50	1

Client Sample ID: E#111
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-24
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	198		4.99	0.394	mg/Kg			07/25/24 19:06	1

QC Sample Results

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

Job ID: 890-6947-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-86373/1-A

Matrix: Solid

Analysis Batch: 86421

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			07/25/24 23:07	1

Lab Sample ID: LCS 880-86373/2-A

Matrix: Solid

Analysis Batch: 86421

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.2		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-86373/3-A

Matrix: Solid

Analysis Batch: 86421

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	255.4		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-6947-1 MS

Matrix: Solid

Analysis Batch: 86421

Client Sample ID: E#88

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	155		252	398.4		mg/Kg		97	90 - 110

Lab Sample ID: 890-6947-1 MSD

Matrix: Solid

Analysis Batch: 86421

Client Sample ID: E#88

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	155		252	398.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: MB 880-86374/1-A

Matrix: Solid

Analysis Batch: 86423

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			07/25/24 17:00	1

Lab Sample ID: LCS 880-86374/2-A

Matrix: Solid

Analysis Batch: 86423

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	248.7		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-86374/3-A

Matrix: Solid

Analysis Batch: 86423

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	250.8		mg/Kg		100	90 - 110	1	20

Eurofins Carlsbad

QC Sample Results

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

Job ID: 890-6947-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-6947-11 MS											Client Sample ID: E#98		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits				
Chloride	14.5		248	272.7		mg/Kg		104	90 - 110				

Lab Sample ID: 890-6947-11 MSD											Client Sample ID: E#98		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	14.5		248	273.0		mg/Kg		104	90 - 110	0	20		

Lab Sample ID: 890-6947-21 MS											Client Sample ID: E#108		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits				
Chloride	263	F1	248	539.4	F1	mg/Kg		111	90 - 110				

Lab Sample ID: 890-6947-21 MSD											Client Sample ID: E#108		
Matrix: Solid											Prep Type: Soluble		
Analysis Batch: 86423													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	263	F1	248	541.1	F1	mg/Kg		112	90 - 110	0	20		

QC Association Summary

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

Job ID: 890-6947-1

HPLC/IC

Leach Batch: 86373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-1	E#88	Soluble	Solid	DI Leach	
890-6947-2	E#89	Soluble	Solid	DI Leach	
890-6947-3	E#90	Soluble	Solid	DI Leach	
890-6947-4	E#91	Soluble	Solid	DI Leach	
890-6947-5	E#92	Soluble	Solid	DI Leach	
890-6947-6	E#93	Soluble	Solid	DI Leach	
890-6947-7	E#94	Soluble	Solid	DI Leach	
890-6947-8	E#95	Soluble	Solid	DI Leach	
890-6947-9	E#96	Soluble	Solid	DI Leach	
890-6947-10	E#97	Soluble	Solid	DI Leach	
MB 880-86373/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-86373/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-86373/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6947-1 MS	E#88	Soluble	Solid	DI Leach	
890-6947-1 MSD	E#88	Soluble	Solid	DI Leach	

Leach Batch: 86374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-11	E#98	Soluble	Solid	DI Leach	
890-6947-12	E#99	Soluble	Solid	DI Leach	
890-6947-13	E#100	Soluble	Solid	DI Leach	
890-6947-14	E#101	Soluble	Solid	DI Leach	
890-6947-15	E#102	Soluble	Solid	DI Leach	
890-6947-16	E#103	Soluble	Solid	DI Leach	
890-6947-17	E#104	Soluble	Solid	DI Leach	
890-6947-18	E#105	Soluble	Solid	DI Leach	
890-6947-19	E#106	Soluble	Solid	DI Leach	
890-6947-20	E#107	Soluble	Solid	DI Leach	
890-6947-21	E#108	Soluble	Solid	DI Leach	
890-6947-22	E#109	Soluble	Solid	DI Leach	
890-6947-23	E#110	Soluble	Solid	DI Leach	
890-6947-24	E#111	Soluble	Solid	DI Leach	
MB 880-86374/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-86374/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-86374/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6947-11 MS	E#98	Soluble	Solid	DI Leach	
890-6947-11 MSD	E#98	Soluble	Solid	DI Leach	
890-6947-21 MS	E#108	Soluble	Solid	DI Leach	
890-6947-21 MSD	E#108	Soluble	Solid	DI Leach	

Analysis Batch: 86421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-1	E#88	Soluble	Solid	300.0	86373
890-6947-2	E#89	Soluble	Solid	300.0	86373
890-6947-3	E#90	Soluble	Solid	300.0	86373
890-6947-4	E#91	Soluble	Solid	300.0	86373
890-6947-5	E#92	Soluble	Solid	300.0	86373
890-6947-6	E#93	Soluble	Solid	300.0	86373
890-6947-7	E#94	Soluble	Solid	300.0	86373
890-6947-8	E#95	Soluble	Solid	300.0	86373
890-6947-9	E#96	Soluble	Solid	300.0	86373

Eurofins Carlsbad

QC Association Summary

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

Job ID: 890-6947-1

HPLC/IC (Continued)

Analysis Batch: 86421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-10	E#97	Soluble	Solid	300.0	86373
MB 880-86373/1-A	Method Blank	Soluble	Solid	300.0	86373
LCS 880-86373/2-A	Lab Control Sample	Soluble	Solid	300.0	86373
LCSD 880-86373/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	86373
890-6947-1 MS	E#88	Soluble	Solid	300.0	86373
890-6947-1 MSD	E#88	Soluble	Solid	300.0	86373

Analysis Batch: 86423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6947-11	E#98	Soluble	Solid	300.0	86374
890-6947-12	E#99	Soluble	Solid	300.0	86374
890-6947-13	E#100	Soluble	Solid	300.0	86374
890-6947-14	E#101	Soluble	Solid	300.0	86374
890-6947-15	E#102	Soluble	Solid	300.0	86374
890-6947-16	E#103	Soluble	Solid	300.0	86374
890-6947-17	E#104	Soluble	Solid	300.0	86374
890-6947-18	E#105	Soluble	Solid	300.0	86374
890-6947-19	E#106	Soluble	Solid	300.0	86374
890-6947-20	E#107	Soluble	Solid	300.0	86374
890-6947-21	E#108	Soluble	Solid	300.0	86374
890-6947-22	E#109	Soluble	Solid	300.0	86374
890-6947-23	E#110	Soluble	Solid	300.0	86374
890-6947-24	E#111	Soluble	Solid	300.0	86374
MB 880-86374/1-A	Method Blank	Soluble	Solid	300.0	86374
LCS 880-86374/2-A	Lab Control Sample	Soluble	Solid	300.0	86374
LCSD 880-86374/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	86374
890-6947-11 MS	E#98	Soluble	Solid	300.0	86374
890-6947-11 MSD	E#98	Soluble	Solid	300.0	86374
890-6947-21 MS	E#108	Soluble	Solid	300.0	86374
890-6947-21 MSD	E#108	Soluble	Solid	300.0	86374

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#88
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-1
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			4.96 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 00:36	CH	EET MID

Client Sample ID: E#89
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-2
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			4.97 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 00:52	CH	EET MID

Client Sample ID: E#90
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-3
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			5.01 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 00:57	CH	EET MID

Client Sample ID: E#91
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-4
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			5.02 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:13	CH	EET MID

Client Sample ID: E#92
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-5
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			5.00 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:18	CH	EET MID

Client Sample ID: E#93
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-6
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			5.00 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:23	CH	EET MID

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#94
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-7
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			5.01 g	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:28	CH	EET MID

Client Sample ID: E#95
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-8
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	50 mL	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:34	CH	EET MID

Client Sample ID: E#96
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-9
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	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:39	CH	EET MID

Client Sample ID: E#97
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-10
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	86373	07/23/24 10:53	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86421	07/26/24 01:44	CH	EET MID

Client Sample ID: E#98
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-11
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:16	CH	EET MID

Client Sample ID: E#99
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-12
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:32	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#100
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-13
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			5.01 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:37	CH	EET MID

Client Sample ID: E#101
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-14
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:42	CH	EET MID

Client Sample ID: E#102
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-15
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 17:47	CH	EET MID

Client Sample ID: E#103
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-16
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:03	CH	EET MID

Client Sample ID: E#104
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-17
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:08	CH	EET MID

Client Sample ID: E#105
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-18
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			4.97 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:14	CH	EET MID

Lab Chronicle

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

Job ID: 890-6947-1

Client Sample ID: E#106
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-19
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	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:19	CH	EET MID

Client Sample ID: E#107
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-20
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			5.01 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:24	CH	EET MID

Client Sample ID: E#108
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-21
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:30	CH	EET MID

Client Sample ID: E#109
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-22
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	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:45	CH	EET MID

Client Sample ID: E#110
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-23
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			5.05 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 18:50	CH	EET MID

Client Sample ID: E#111
Date Collected: 07/22/24 07:00
Date Received: 07/22/24 11:07

Lab Sample ID: 890-6947-24
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			5.01 g	50 mL	86374	07/23/24 10:58	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	86423	07/25/24 19:06	CH	EET MID

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

Accreditation/Certification Summary

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

Job ID: 890-6947-1

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

Method Summary

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

Job ID: 890-6947-1

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

Sample Summary

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

Job ID: 890-6947-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6947-1	E#88	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-2	E#89	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-3	E#90	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-4	E#91	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-5	E#92	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-6	E#93	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-7	E#94	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-8	E#95	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-9	E#96	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-10	E#97	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-11	E#98	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-12	E#99	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-13	E#100	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-14	E#101	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-15	E#102	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-16	E#103	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-17	E#104	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-18	E#105	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-19	E#106	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-20	E#107	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-21	E#108	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-22	E#109	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-23	E#110	Solid	07/22/24 07:00	07/22/24 11:07
890-6947-24	E#111	Solid	07/22/24 07:00	07/22/24 11:07



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) 794-1286
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco

Work Order No:

Project Manager: Luis Rivera		Bill to: (if different)	
Company Name: RSC Environmental Solutions		Company Name:	
Address: 5050 US Hwy 285		Address:	
City, State ZIP: Orla TX 79770		City, State ZIP:	
Phone: (405) 351-2694		Email: LuisR@RSCes.com	

Project Name: Backfill		Turn Around		Pres. Code	
Project Number:		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			
Project Location:		Due Date:			
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm			
PO #:					

SAMPLE RECEIPT		Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Samples Received Intact:		Thermometer ID: TMM402			
Cooler Custody Seals: Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A		Correction Factor: -0.2			
Sample Custody Seals: Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A		Temperature Reading: 3.2			
Total Containers:		Corrected Temperature: 3.0			

Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Grab/Comp		# of Cont	
E#88				7/24/24		7:00AM						1	
E#89												1	
E#90												1	
E#91												1	
E#92												1	
E#93												1	
E#94												1	
E#95												1	
E#96												1	
E#97												1	

ANALYSIS REQUEST		PRESERVATIVE CODES	
		None: NO	
		DI Water: H ₂ O	
		Cool: Cool	
		MeOH: Me	
		HCL: HC	
		HNO ₃ : HN	
		H ₂ SO ₄ : H ₂	
		NaOH: Na	
		H ₃ PO ₄ : HP	
		NaHSO ₄ : NABIS	
		Na ₂ S ₂ O ₃ : NaSO ₃	
		Zn Acetate+NaOH: Zn	
		NaOH+Ascorbic Acid: SAPC	
Sample Comments			

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti U		Hg: 1631 / 245.1 / 7470 / 7471	

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
1. [Signature]		[Signature]		7/24/24	

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.

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 of

Project Manager:	Luis Rivera	Bill to: (if different)	
Company Name:	R360 Environmental Solutions	Company Name:	
Address:	5050 US Hwy 285	Address:	
City, State ZIP:	Orla TX 77720	City, State ZIP:	
Phone:	(405) 351-2694	Email:	luis@r360es.com

Work Order Comments	
Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	Backfill	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST										Preservative Codes										
Project Number:		Due Date:														None: NO DI Water: H ₂ O										
Project Location:		TAT starts the day received by the lab, if received by 4:30pm														Cool: Cool MeOH: Me										
Sampler's Name:																HCL: HC HNO ₃ : HN										
PO #:																H ₂ SO ₄ : H ₂ NaOH: Na										
SAMPLE RECEIPT		Temp Blank:	Yes No	Wet Ice:	Yes No											H ₃ PO ₄ : HP										
Samples Received Intact:		Yes No		Thermometer ID:												NaHSO ₄ : NABIS										
Cooler Custody Seals:		Yes No N/A		Correction Factor:												Na ₂ S ₂ O ₃ : NaSO ₃										
Sample Custody Seals:		Yes No N/A		Temperature Reading:												Zn Acetate+NaOH: Zn										
Total Containers:				Corrected Temperature:												NaOH+Ascorbic Acid: SARC										
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont											Sample Comments									
E#98		7/23/24	7:24 AM			1																				
E#99						1																				
E#100						1																				
E#101						1																				
E#102						1																				
E#103						1																				
E#104						1																				
E#105						1																				
E#106						1																				
E#107						1																				

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti 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)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/23/24			

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 _____ of _____

Project Manager:	Luis Rivera	Bill to: (if different)	
Company Name:	360 Environmental Solutions	Company Name:	
Address:	5033 US Hwy 285	Address:	
City, State ZIP:	Orlando TX 79775	City, State ZIP:	
Phone:	(405) 351-2844	Email:	luis@360es.com

Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: _____

SAMPLE RECEIPT				ANALYSIS REQUEST				Preservative Codes			
Project Name:	Backfill	Turn Around						None: NO	DI Water: H ₂ O		
Project Number:		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush						Cool: Cool	MeOH: Me		
Project Location:		Due Date:						HCL: HC	HNO ₃ : HN		
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm						H ₂ SO ₄ : H ₂	NaOH: Na		
P.O. #:		Temp Blank:	Yes No	Wet Ice:	Yes No			H ₃ PO ₄ : HP			
Samples Received Intact:		Thermometer ID:						NaHSO ₄ : NABIS			
Cooler Custody Seals:		Correction Factor:						Na ₂ S ₂ O ₃ : NaSO ₃			
Sample Custody Seals:		Temperature Reading:						Zn Acetate+NaOH: Zn			
Total Containers:		Corrected Temperature:						NaOH+Ascorbic Acid: SACP			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont			Sample Comments		
E108		7/26/24	7:41 AM		X	X					
E#109					X	X					
E#110					X	X					
E#111					X	X					

Total 200.7/6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti 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)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Date/Time
				7/26/24	

Revised Date: 08/25/2020 Rev. 2020.2



Login Sample Receipt Checklist

Client: R360 ES Holdings Inc

Job Number: 890-6947-1

Login Number: 6947

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	

Login Sample Receipt Checklist

Client: R360 ES Holdings Inc

Job Number: 890-6947-1

Login Number: 6947

List Source: Eurofins Midland

List Number: 2

List Creation: 07/23/24 08:17 AM

Creator: Vasquez, Julisa

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	

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

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

QUESTIONS

Action 378455

QUESTIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:
	229137
	Action Number:
	378455
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAB1529948530
Incident Name	NAB1529948530 WEST BRUSHY 8 FEDERAL SWD #001 @ 30-015-31675
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received
Incident Well	[30-015-31675] WEST BRUSHY 8 FEDERAL SWD #001

Location of Release Source	
Please answer all the questions in this group.	
Site Name	WEST BRUSHY 8 FEDERAL SWD #001
Date Release Discovered	09/13/2015
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
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

Nature and Volume of Release	
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.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Produced Water Released: 30 BBL Recovered: 3 BBL Lost: 27 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
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.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 378455

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:
	229137
	Action Number:
	378455
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
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.	

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

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: 08/27/2024
--	--

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

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

QUESTIONS, Page 3

Action 378455

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:
	229137
	Action Number:
	378455
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Site Characterization	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (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
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (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	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>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.</i>	
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)	4280
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	211
GRO+DRO (EPA SW-846 Method 8015M)	211
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>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>	
On what estimated date will the remediation commence	06/30/2024
On what date will (or did) the final sampling or liner inspection occur	07/26/2024
On what date will (or was) the remediation complete(d)	07/29/2024
What is the estimated surface area (in square feet) that will be reclaimed	20700
What is the estimated volume (in cubic yards) that will be reclaimed	1920
What is the estimated surface area (in square feet) that will be remediated	20700
What is the estimated volume (in cubic yards) that will be remediated	1920
<i>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.</i>	
<i>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.</i>	

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

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

QUESTIONS, Page 4
Action 378455

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:	229137
	Action Number:	378455
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	OWL LANDFILL JAL [fJEG1635837366]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site 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
<i>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>	
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: 08/27/2024
<i>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.</i>	

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

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

QUESTIONS, Page 5

Action 378455

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 378455
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
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.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 6

Action 378455

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:
	229137
	Action Number:
	378455
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	367768
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/31/2024
What was the (estimated) number of samples that were to be gathered	75
What was the sampling surface area in square feet	20865

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	19890
What was the total volume (cubic yards) remediated	1850
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	19890
What was the total volume (in cubic yards) reclaimed	1850
Summarize any additional remediation activities not included by answers (above)	All excavated material was transported offsite for proper disposal. Approximately 1,850 cubic yards of material were transported to the R360 Red Bluff Facility in Orla, Texas.

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	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 08/27/2024
--	---

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 7

Action 378455

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:	229137
	Action Number:	378455
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS**Reclamation Report**

Only answer the questions in this group if all reclamation steps have been completed.

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	19890
What was the total volume of replacement material (in cubic yards) for this site	1850

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.

Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseedling commence(d)	08/07/2024

Summarize any additional reclamation activities not included by answers (above)	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 SM4500CI-B. The analytical results were directly compared to the reclamation requirements and established Site RRALs to demonstrate compliance.
---	---

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 reseedling plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 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	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetrattech.com Date: 08/27/2024
--	--

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

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

QUESTIONS, Page 8

Action 378455

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:
	229137
	Action Number:
	378455
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.	
Requesting a restoration complete approval with this submission	No
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.	

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

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

CONDITIONS

Action 378455

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:
	229137
	Action Number:
	378455
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.	9/6/2024
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.	9/6/2024
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 reseeded activities, inspections, and final pictures when revegetation is achieved.	9/6/2024
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.	9/6/2024